

# \$625,434,968 Government National Mortgage Association GINNIE MAE®

# Guaranteed REMIC Pass-Through Securities and MX Securities Ginnie Mae REMIC Trust 2023-117

#### The Securities

The Trust will issue the Classes of Securities listed on the front cover of this offering circular supplement.

# The Ginnie Mae Guaranty

Ginnie Mae will guarantee the timely payment of principal and interest on the securities. The Ginnie Mae Guaranty is backed by the full faith and credit of the United States of America.

#### The Trust and its Assets

The Trust will own (1) Ginnie Mae Certificates and (2) certain previously issued certificates.

The securities may not be suitable investments for you. You should consider carefully the risks of investing in them.

See "Risk Factors" beginning on page S-9 which highlights some of these risks.

The Sponsor and the Co-Sponsor will offer the securities from time to time in negotiated transactions at varying prices. We expect the closing date to be August 30, 2023.

You should read the Base Offering Circular as well as this Supplement.

The securities are exempt from registration under the Securities Act of 1933 and are "exempted securities" under the Securities Exchange Act of 1934.

Class of REMIC Securities	Original Principal Balance(2)	Interest Rate	Principal Type(3)	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
Security Group 1						
FA	\$100,000,000	(5)	PT	FLT	38384CFB0	August 2053
SA	100,000,000	(5)	NTL(PT)	INV/IO	38384CFC8	August 2053
Security Group 2						
IM	1,620,500	6.0%	NTL(SEQ)	FIX/IO	38384CFD6	August 2053
MA	50,554,000	6.0	SEQ	FIX	38384CFE4	November 204
VM(1)	8,740,000	5.5 5.5	SEQ/AD	FIX FIX/Z	38384CFF1	July 2034
ZM(1)	10,706,000	3.3	SEQ	FIX/Z	38384CFG9	August 2053
Security Group 3	20,000,000		area	EDIT.	2020465515	0 . 1 . 2040
JA	30,000,000	6.0 6.0	SEQ	FIX FIX	38384CFH7	October 2049
JB	11,602,273	0.0	SEQ	FIX	38384CFJ3	August 2053
Security Group 4	75 000 000		D. CU.D.	EIV.	2020 400077	
KA	75,000,000	6.0	PAC/AD	FIX	38384CFK0	August 2053
KF(1)	37,500,000 7,401,405	(5) 6.5	PAC/AD SUP	FLT FIX/Z	38384CFL8 38384CFM6	August 2053 August 2053
SJ(1)	37,500,000	(5)	NTL(PAC/AD)	INV/IO	38384CFN4	August 2053 August 2053
SK(1)	37,500,000	(5)	NTL(PAC/AD)	INV/IO	38384CFP9	August 2053 August 2053
SM(1)	37,500,000	(5)	NTL(PAC/AD)	INV/IO	38384CFQ7	August 2053
Security Group 5	,,	(-)	, , ,			
PA	3,127,410	5.0	PAC/AD	FIX	38384CFR5	July 2039
PC	11,000,000	5.0	PAC/AD	FIX	38384CFS3	July 2053
PZ	32,186	5.0	PAC/AD	FIX/Z	38384CFT1	August 2053
ZP	1,591,870	5.0	SUP	FIX/Z	38384CFU8	August 2053
Security Group 6						
UA(1)	23,639,744	2.5	SC/SEQ	FIX	38384CFV6	March 2052
ŪJ(Ì)	11,115,346	2.5	SC/SEQ	FIX	38384CFW4	March 2052
UK(1)	4,985,750	2.5	SC/SEQ	FIX	38384CFX2	March 2052
UL(1)	4,526,134	2.5	SC/SEQ	FIX	38384CFY0	March 2052
UM(1)	4,140,877	2.5	SC/SEQ	FIX	38384CFZ7	March 2052
Security Group 7						
GF(1)	109,771,973	(5)	SC/PT	FLT	38384CGA1	May 2053
S(1)	109,771,973	(5)	NTL(SC/PT)	INV/IO	38384CGB9	May 2053
SH(1)	109,771,973	(5)	NTL(SC/PT)	INV/IO	38384CGC7	May 2053
SY(1)	109,771,973 109,771,973	(5) (5)	NTL(SC/PT) NTL(SC/PT)	INV/IO INV/IO	38384CGD5 38384CGE3	May 2053 May 2053
YS(1)	109,771,973	(3)	NIL(SC/FI)	114 1/10	36364CGE3	Way 2055
Security Group 8	40.000.000	. m	nm.		202019990	
FN	10,000,000	(5)	PT PT	FLT FLT	38384CGF0	August 2053 August 2053
NFNS	10,000,000 10,000,000	(5) (5)	NTL(PT)	INV/IO	38384CGG8 38384CGH6	August 2053 August 2053
SN	10,000,000	(5)	NTL(PT)	INV/IO INV/IO	38384CGJ2	August 2053 August 2053
	10,000,000	(5)	1112(11)	1111110	505010002	Tragast 2000
Security Group 9 AF	50,000,000	(5)	PT	FLT	38384CGK9	August 2053
AS	50,000,000	(5)	NTL(PT)	INV/IO	38384CGL7	August 2053 August 2053
LA	43,175,990	6.0	SEQ/AD	FIX	38384CGM5	October 2045
LZ	6,824,010	6.0	SEQ	FIX/Z	38384CGN3	August 2053
Residual	-,- ,					
RR	0	0.0	NPR	NPR	38384CGP8	August 2053

- (1) These Securities may be exchanged for MX Securities described in Schedule I to this Supplement.
- (2) Subject to increase as described under "Increase in Size" in this Supplement. The amount shown for each Notional Class (indicated by "NTL" under Principal Type) is its original Class Notional Balance and does not represent principal that will be paid.
- (3) As defined under "Class Types" in Appendix I to the Base Offering Circular. The Class Notional Balance of each Notional Class will be reduced as shown under "Terms Sheet — Notional Classes" in this Supplement.
- (4) See "Yield, Maturity and Prepayment Considerations—Final Distribution Date" in this Supplement.
- (5) See "Terms Sheet—Interest Rates" in this Supplement.

# **Wells Fargo Securities**

# Mischler Financial Group, Inc.

#### **AVAILABLE INFORMATION**

You should purchase the securities only if you have read and understood the following documents:

- this Offering Circular Supplement (this "Supplement"),
- the Base Offering Circular and
- in the case of the Group 6 and 7 securities, each disclosure document relating to the Underlying Certificates (the "Underlying Certificate Disclosure Documents").

The Base Offering Circular and the Underlying Certificate Disclosure Documents are available on Ginnie Mae's website located at http://www.ginniemae.gov ("ginniemae.gov").

If you do not have access to the internet, call BNY Mellon, which will act as information agent for the Trust, at (800) 234-GNMA, to order copies of the Base Offering Circular. In addition, you can obtain copies of any other document listed above by contacting BNY Mellon at the telephone number listed above.

Please consult the standard abbreviations of Class Types included in the Base Offering Circular as Appendix I and the glossary included in the Base Offering Circular as Appendix II for definitions of capitalized terms.

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#### **TERMS SHEET**

This terms sheet contains selected information for quick reference only. You should read this Supplement, particularly "Risk Factors," and each of the other documents listed under "Available Information."

**Sponsor**: Wells Fargo Bank, N.A.

**Co-Sponsor**: Mischler Financial Group, Inc.

Trustee: U.S. Bank National Association

**Tax Administrator**: The Trustee **Closing Date**: August 30, 2023

**Distribution Date**: The 20th day of each month or, if the 20th day is not a Business Day, the first Business Day thereafter, commencing in September 2023.

# **Trust Assets:**

Trust Asset Type	Certificate Rate	To Maturity (in years)
Ginnie Mae II	6.50%	30
Ginnie Mae II	6.00%	30
Ginnie Mae II	6.00%	30
Ginnie Mae II	6.50%	30
Ginnie Mae II	5.00%	30
Underlying Certificate	(1)	(1)
Underlying Certificate	(1)	(1)
Ginnie Mae II	6.50%	30
Ginnie Mae II	6.50%	30
	Ginnie Mae II Underlying Certificate Underlying Certificate Ginnie Mae II	Ginnie Mae II 6.50% Ginnie Mae II 6.00% Ginnie Mae II 6.00% Ginnie Mae II 6.50% Ginnie Mae II 5.00% Underlying Certificate Underlying Certificate Ginnie Mae II 6.50%

<sup>(1)</sup> Certain information regarding the Underlying Certificates is set forth in Exhibit A to this Supplement.

**Security Groups:** This series of Securities consists of multiple Security Groups (each, a "Group"), as shown on the front cover of this Supplement and on Schedule I to this Supplement. Payments on each Group will be based solely on payments on the Trust Asset Group with the same numerical designation.

Assumed Characteristics of the Mortgage Loans Underlying the Group 1 through 5, 8 and 9 Trust Assets<sup>(1)</sup>:

Principal Balance	Weighted Average Remaining Term to Maturity (in months)	Weighted Average Loan Age (in months)	Weighted Average Mortgage Rate <sup>(2)</sup>
<b>Group 1 Trust Assets</b>			
\$100,000,000	358	1	7.044%
Group 2 Trust Assets \$70,000,000	357	2	6.569%
<b>Group 3 Trust Assets</b> \$41,602,273	358	1	6.588%
<b>Group 4 Trust Assets</b> \$119,901,405	357	1	7.039%
<b>Group 5 Trust Assets</b> \$15,751,466 <sup>(3)</sup>	356	3	5.570%
Group 8 Trust Assets \$20,000,000	359	1	7.048%
<b>Group 9 Trust Assets</b> \$100,000,000	359	0	7.042%

<sup>(1)</sup> As of August 1, 2023.

The actual remaining terms to maturity, loan ages and Mortgage Rates of many of the Mortgage Loans underlying the Group 1 through 5, 8 and 9 Trust Assets will differ from the weighted averages shown above, perhaps significantly. See "The Trust Assets — The Mortgage Loans" in this Supplement.

**Characteristics of the Group 6 and 7 Trust Assets:** See Exhibit A to this Supplement for certain information regarding the characteristics of the related Underlying Certificates.

**Issuance of Securities:** The Securities, other than the Residual Securities, will initially be issued in book-entry form through the book-entry system of the U.S. Federal Reserve Banks (the "Fedwire Book-Entry System"). The Residual Securities will be issued in fully registered, certificated form. *See "Description of the Securities — Form of Securities" in this Supplement.* 

**Modification and Exchange:** If you own exchangeable Securities you will be able, upon notice and payment of an exchange fee, to exchange them for a proportionate interest in the related Securities shown on Schedule I to this Supplement. See "Description of the Securities — Modification and Exchange" in this Supplement.

**Increased Minimum Denomination Classes:** Each Class that constitutes an Interest Only Class. *See "Description of the Securities" in this Supplement.* 

The Mortgage Loans underlying the Group 1 through 5, 8 and 9 Trust Assets may bear interest at rates ranging from 0.25% to 1.50% per annum above the related Certificate Rate.

More than 10% of the Mortgage Loans underlying the Group 5 Trust Assets may be higher balance Mortgage Loans. See "Risk Factors" in this Supplement.

**Interest Rates:** The Interest Rates for the Fixed Rate Classes are shown on the front cover of this Supplement or on Schedule I to this Supplement.

The Floating Rate and Inverse Floating Rate Classes will bear interest at per annum rates based on a 30-day compounded average of the Secured Overnight Financing Rate ("SOFR") (hereinafter referred to as "30-day Average SOFR") as follows:

Class	Interest Rate Formula(1)	Initial Interest Rate(2)	Minimum Rate	Maximum Rate	Delay (in days)	30-day Average SOFR for Minimum Interest Rate
Security Group 1						
FA	30-day Average SOFR + 1.25%	6.40000%	1.25%	6.500%	0	0.0000%
SA	5.25% – 30-day Average SOFR	0.10000%	0.00%	5.250%	0	5.2500%
Security Group 4						
FJ	30-day Average SOFR + 0.85%	5.91000%	0.85%	7.500%	0	0.0000%
JF	30-day Average SOFR + 0.80%	5.86000%	0.80%	7.500%	0	0.0000%
JS	6.70% - 30-day Average SOFR	1.64000%	0.00%	6.700%	0	6.7000%
KF	30-day Average SOFR + 0.75%	5.81000%	0.75%	7.500%	0	0.0000%
KS	6.75% – 30-day Average SOFR	1.69000%	0.00%	6.750%	0	6.7500%
SJ	6.65% – 30-day Average SOFR	1.59000%	0.00%	6.650%	0	6.6500%
SK	6.70% – 30-day Average SOFR	0.05000%	0.00%	0.050%	0	6.7000%
SM	6.75% – 30-day Average SOFR	0.05000%	0.00%	0.050%	0	6.7500%
Security Group 7						
F	30-day Average SOFR + 0.95%	6.18805%	0.95%	6.500%	0	0.0000%
FG	30-day Average SOFR + 0.80%	6.03805%	0.80%	6.500%	0	0.0000%
FH	30-day Average SOFR + 0.90%	6.13805%	0.90%	6.500%	0	0.0000%
GF	30-day Average SOFR + 0.75%	5.98805%	0.75%	6.500%	0	0.0000%
GS	5.75% – 30-day Average SOFR	0.20000%	0.00%	0.200%	0	5.7500%
HF	30-day Average SOFR + 0.85%	6.08805%	0.85%	6.500%	0	0.0000%
HS	5.65% – 30-day Average SOFR	0.10000%	0.00%	0.100%	0	5.6500%
S	5.65% - 30-day Average SOFR	0.05000%	0.00%	0.050%	0	5.6500%
SG	5.70% – 30-day Average SOFR	0.15000%	0.00%	0.150%	0	5.7000%
SH	5.60% - 30-day Average SOFR	0.05000%	0.00%	0.050%	0	5.6000%
SY	5.75% - 30-day Average SOFR	0.05000%	0.00%	0.050%	0	5.7500%
YS	5.70% - 30-day Average SOFR	0.05000%	0.00%	0.050%	0	5.7000%
Security Group 8						
FN	30-day Average SOFR + 1.55%	6.50000%	1.55%	6.500%	0	0.0000%
NF	30-day Average SOFR + 1.60%	6.50000%	1.60%	6.500%	0	0.0000%
NS	4.90% - 30-day Average SOFR	0.00000%	0.00%	4.900%	0	4.9000%
SN	4.95% - 30-day Average SOFR	0.00000%	0.00%	4.950%	0	4.9500%
Security Group 9						
AF	30-day Average SOFR + 1.25%	6.45000%	1.25%	7.000%	0	0.0000%
AS	5.75% - 30-day Average SOFR	0.55000%	0.00%	5.750%	0	5.7500%

<sup>(1) 30-</sup>day Average SOFR will be established as described under "Description of the Securities — Interest Distributions — Floating Rate and Inverse Floating Rate Classes" in this Supplement.

<sup>(2)</sup> The initial Interest Rate will be in effect during the first Accrual Period; the Interest Rate will adjust monthly thereafter.

**Allocation of Principal:** On each Distribution Date for a Security Group, the following distributions will be made to the related Securities:

#### **SECURITY GROUP 1**

The Group 1 Principal Distribution Amount will be allocated to FA, until retired

#### **SECURITY GROUP 2**

The Group 2 Principal Distribution Amount and the ZM Accrual Amount will be allocated as follows:

- The ZM Accrual Amount, sequentially, to VM and ZM, in that order, until retired
- The Group 2 Principal Distribution Amount, sequentially, to MA, VM and ZM, in that order, until retired

#### **SECURITY GROUP 3**

The Group 3 Principal Distribution Amount will be allocated, sequentially, to JA and JB, in that order, until retired

#### **SECURITY GROUP 4**

The Group 4 Principal Distribution Amount and the KZ Accrual Amount will be allocated in the following order of priority:

- 1. Concurrently, to KA and KF, pro rata, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
  - 2. To KZ, until retired
- 3. Concurrently, to KA and KF, pro rata, without regard to their Aggregate Scheduled Principal Balance, until retired

#### **SECURITY GROUP 5**

The Group 5 Principal Distribution Amount, the PZ Accrual Amount and the ZP Accrual Amount will be allocated as follows:

- The PZ Accrual Amount, sequentially, to PC and PZ, in that order, until retired
- The Group 5 Principal Distribution Amount and the ZP Accrual Amount in the following order of priority:
- 1. Sequentially, to PA, PC and PZ, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
  - 2. To ZP, until retired
- 3. Sequentially, to PA, PC and PZ, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired

#### **SECURITY GROUP 6**

The Group 6 Principal Distribution Amount will be allocated, sequentially, to UA, UK, UL, UM and UJ, in that order, until retired

#### **SECURITY GROUP 7**

The Group 7 Principal Distribution Amount will be allocated to GF, until retired

#### **SECURITY GROUP 8**

The Group 8 Principal Distribution Amount will be allocated, concurrently, to FN and NF, pro rata, until retired

#### **SECURITY GROUP 9**

The Group 9 Principal Distribution Amount and the LZ Accrual Amount will be allocated as follows:

- The LZ Accrual Amount, sequentially, to LA and LZ, in that order, until retired
- The Group 9 Principal Distribution Amount, concurrently, as follows:
  - 1. 50%, sequentially, to LA and LZ, in that order, until retired
  - 2. 50% to AF, until retired

**Scheduled Principal Balances:** The Aggregate Scheduled Principal Balances for the Classes listed below are included in Schedule II to this Supplement. They were calculated using among other things the following Structuring Ranges:

Security Group	PAC Classes	Structuring Ranges
4	KA and KF (in the aggregate)	300% PSA through 375% PSA
5	PA, PC and PZ (in the aggregate)	125% PSA through 200% PSA

**Accrual Classes:** Interest will accrue on each Accrual Class identified on the front cover of this Supplement at the per annum rate set forth on that page. However, no interest will be distributed to the Accrual Classes as interest. Interest so accrued on each Accrual Class on each Distribution Date will constitute an Accrual Amount, which will be added to the Class Principal Balance of that Class on each Distribution Date and will be distributable as principal as set forth in this Terms Sheet under "Allocation of Principal."

**Notional Classes:** The Notional Classes will not receive distributions of principal but have Class Notional Balances for convenience in describing their entitlements to interest. The Class Notional Balance of each Notional Class represents the percentage indicated below of, and reduces to that extent with, the Class Principal Balances indicated:

Class	Original Class Notional Balance	Represents Approximately
Security Group 1		
SA	\$100,000,000	100% of FA (PT Class)
<b>Security Group 2</b>		
IM	\$ 1,620,500	8.3333333333% of VM and ZM (in the aggregate) (SEQ Classes)
Security Group 4		
JS	\$ 37,500,000	100% of KF (PAC/AD Class)
KS	37,500,000	100% of KF (PAC/AD Class)
SJ	37,500,000	100% of KF (PAC/AD Class)
SK	37,500,000	100% of KF (PAC/AD Class)
SM	37,500,000	100% of KF (PAC/AD Class)
Security Group 7		
GS		100% of GF (SC/PT Class)
HS	109,771,973	100% of GF (SC/PT Class)
S		100% of GF (SC/PT Class)
SG	, ,	100% of GF (SC/PT Class)
SH	109,771,973	100% of GF (SC/PT Class)
SY		100% of GF (SC/PT Class)
YS	109,771,973	100% of GF (SC/PT Class)
Security Group 8		
NS	\$ 10,000,000	100% of NF (PT Class)
SN	10,000,000	100% of FN (PT Class)
Security Group 9		
AS	\$ 50,000,000	100% of AF (PT Class)

**Tax Status:** Double REMIC Series. See "Certain United States Federal Income Tax Consequences" in this Supplement and in the Base Offering Circular.

**Regular and Residual Classes:** Class RR is a Residual Class and represents the Residual Interest of the Issuing REMIC and the Pooling REMIC. All other Classes of REMIC Securities are Regular Classes.

#### **RISK FACTORS**

You should purchase securities only if you understand and are able to bear the associated risks. The risks applicable to your investment depend on the principal and interest type of your securities. This section highlights certain of these risks.

The rate of principal payments on the underlying mortgage loans will affect the rate of principal payments on your securities. The rate at which you will receive principal payments will depend largely on the rate of principal payments, including prepayments, on the mortgage loans underlying the related trust assets. Any historical data regarding mortgage loan prepayment rates may not be indicative of the rate of future prepayments on the underlying mortgage loans, and no assurances can be given about the rates at which the underlying mortgage loans will prepay. We expect the rate of principal payments on the underlying mortgage loans to vary. Borrowers generally may prepay their mortgage loans at any time without penalty.

The terms of the mortgage loans may be modified to permit, among other things, a partial release of security, which releases a portion of the mortgaged property from the lien securing the related mortgage loan. Partial releases of security may reduce the value of the remaining security and also allow the related borrower to sell the released property and generate proceeds that may be used to prepay the related mortgage loan in whole or in part.

In addition to voluntary prepayments, mortgage loans can be prepaid as a result of governmental mortgage insurance claim payments, loss mitigation arrangements, repurchases or liquidations of defaulted mortgage loans. Although under certain circumstances Ginnie Mae issuers have the option to repurchase defaulted mortgage loans from the related pool underlying a Ginnie Mae MBS certificate, they are not obligated to do so. Defaulted mortgage loans that remain in pools backing Ginnie Mae MBS certificates may be subject to governmental mortgage insurance claim payments, loss mitigation arrangements or foreclosure, which could have the same effect as voluntary prepayments on the cash flow available to pay the securities.

A catastrophic weather event, pandemic or other natural disaster may affect the rate of principal payments, including prepayments, on the underlying mortgage loans. Any such event may damage the related mortgaged properties that secure the mortgage loans or may lead to a general economic downturn in the affected regions, including job losses and declines in real estate values. A general economic downturn may increase the rate of defaults on the mortgage loans in such areas resulting in prepayments on the related securities due to governmental mortgage insurance claim payments, loss mitigation arrangements, repurchases or liquidations of defaulted mortgage loans. Insurance payments on damaged or destroyed homes may also lead to prepayments on the underlying mortgage loans. Further, in connection with presidentially declared major disasters, Ginnie Mae may authorize optional special assistance to issuers, including expanded buyout authority which allows issuers, upon receiving written approval from Ginnie Mae, to repurchase eligible loans from the related pool underlying a Ginnie Mae MBS certificate, even if such loans are not delinquent or do not otherwise meet the standard conditions for removal or repurchase.

No assurances can be given as to the timing or frequency of any governmental mortgage insurance claim payments, issuer repurchases, loss mitigation arrangements or foreclosure proceedings with respect to defaulted mortgage loans and the resulting effect on the timing or rate of principal payments on your securities.

Rates of principal payments can reduce your yield. The yield on your securities probably will be lower than you expect if:

- you bought your securities at a premium (interest only securities, for example) and principal payments are faster than you expected, or
- you bought your securities at a discount and principal payments are slower than you expected.

In addition, if your securities are interest only securities or securities purchased at a significant premium, you could lose money on your investment if prepayments occur at a rapid rate.

Under certain circumstances, a Ginnie Mae issuer has the right to repurchase a defaulted mortgage loan from the related pool of mortgage loans underlying a particular Ginnie Mae MBS certificate, the effect of which would be comparable to a prepayment of such mortgage loan. At its option and without Ginnie Mae's prior consent, a Ginnie Mae issuer may repurchase any mortgage loan at an amount equal to par less any amounts previously advanced by such issuer in connection with its responsibilities as servicer of such mortgage loan to the extent that (i) in the case of a mortgage loan included in a pool of mortgage loans underlying a Ginnie Mae MBS certificate issued on or before December 1, 2002, such mortgage loan has been delinquent for four consecutive months, and at least one delinquent payment remains uncured or (ii) in the case of a mortgage loan included in a pool of mortgage loans underlying a Ginnie Mae MBS certificate issued on or after January 1, 2003, no payment has been made on such mortgage loan for three consecutive months. Any such repurchase will result in prepayment of the principal balance or reduction in the notional balance of the securities ultimately backed by such mortgage loan. No assurances can be given as to the timing or frequency of any such repurchases.

The levels of 30-day Average SOFR will affect the yields on the floating rate and inverse floating rate securities. If 30-day Average SOFR performs differently from what you expect, the yield on the floating rate and inverse floating rate securities may be lower than you expect. Lower levels of such index will generally reduce the yield on the floating rate securities; higher levels of such index will generally reduce the yield on the inverse floating rate securities. You should bear in mind that the timing of changes in the level of such index may affect your yield: generally, the earlier a change, the greater the effect on your yield. It is doubtful that such index will remain constant.

An investment in the securities is subject to significant reinvestment risk. The rate of principal payments on your securities is uncertain. You may be unable to reinvest the payments on your securities at the same returns provided by the securities. Lower prevailing interest rates may result in an unexpected return of principal. In that interest rate climate, higher yielding reinvestment opportunities may be limited. Conversely, higher prevailing interest rates may result in slower returns of principal, and you may not be able to take advantage of higher yielding investment opportunities. The final payment on your security may occur much earlier than the final distribution date.

Support securities will be more sensitive to rates of principal payments than other securities. If principal prepayments result in principal distributions on any distribution date equal to or less than the amount needed to produce scheduled payments on the PAC classes, the related support class will not receive any principal distribution on that date. If prepayments result in principal distributions on any distribution date greater than the amount needed to produce scheduled payments on the PAC classes for that distribution date, this excess will be distributed to the related support class.

The rate of payments on the underlying certificates will directly affect the rate of payments on the group 6 and 7 securities. The underlying certificates will be sensitive in varying degrees to:

- the rate of payments of principal (including prepayments) of the related mortgage loans, and
- the priorities for the distribution of principal among the classes of the related underlying series.

This supplement contains no information as to whether the underlying certificates have performed as originally anticipated. Additional information as to the underlying certificates may be obtained by performing an analysis of current principal factors of the underlying certificates in light of applicable information

contained in the related underlying certificate disclosure documents.

Up to 10% of the mortgage loans underlying the group 1 through 4 and 6 through 9 trust assets and up to 100% of the mortgage loans underlying the group 5 trust assets may be bigher balance mortgage loans. Subject to special pooling parameters set forth in the Ginnie Mae Mortgage-Backed Securities Guide, qualifying federally-insured or guaranteed mortgage loans that exceed certain balance thresholds established by Ginnie Mae ("higher balance mortgage loans") may be included in Ginnie Mae guaranteed pools. There are no historical performance data regarding the prepayment rates for higher balance mortgage loans. If the higher balance mortgage loans prepay faster or slower than expected, the weighted average lives and yields of the related securities are likely to be affected, perhaps significantly. Furthermore, higher balance mortgage loans tend to be concentrated in certain geographic areas, which may experience relatively higher rates of defaults in the event of adverse economic conditions. No assurances can be given about the prepayment experience or performance of the higher balance mortgage loans.

An investment in the floating rate and inverse floating rate securities entails risks not associated with an investment in conventional fixed rate securities or securities linked to established market indices. The Federal Reserve Bank of New York began to publish SOFR in April 2018 and compounded averages of SOFR in March 2020. Although the Federal Reserve Bank of New York has also published historical indicative SOFR from August 2014 to March 2018, such pre-publication data necessarily involves assumptions, estimates and approximations. You should not rely on any historical changes or trends in SOFR as an indicator of future changes in SOFR. Daily shifts in SOFR have been, and may in the future be, greater than those in comparable market indices. Because the interest rate applicable to any accrual period for securities with an interest rate based on SOFR will be calculated by reference to

the daily rates of SOFR during an approximate 30-day period commencing and ending before the related accrual period as described under "Description of the Securities — Interest Distributions — Floating Rate and Inverse Floating Rate Classes" in this supplement, the return on and value of the floating rate and inverse floating rate securities may fluctuate more than debt securities linked to less volatile indices.

30-day Average SOFR is a relatively new market index, and the floating rate and inverse floating rate securities will likely have no established trading market when issued, and an established trading market may never develop or, if developed, may not be liquid. Market terms for securities indexed to 30-day Average SOFR may evolve over time, and trading prices of some securities indexed to 30-day Average SOFR may be lower than those of later-issued securities as a result. Similarly, if 30-day Average SOFR does not prove to be widely used in similar securities, the trading price of related SOFR-Based Classes may be lower than those of securities linked to indices that are more widely used. Investors in SOFR-Based Classes may not be able to sell their securities at all or may not be able to sell their securities at prices that will provide them with a yield comparable to similar investments that have a developed secondary market, and may consequently suffer from increased pricing volatility and market risk.

You should consult your own financial and legal advisors about the risks associated with an investment in the floating rate and inverse floating rate securities and the suitability of investing in the floating rate and inverse floating rate securities in light of your particular circumstances.

Interest on the floating rate and inverse floating rate securities will be determined using a replacement rate if 30-day Average SOFR is no longer available, which could adversely affect the value of your investment in the floating rate and inverse floating rate securities. 30-day Average SOFR is published by the Federal Reserve Bank of New York based on data received from other sources, and neither Ginnie Mae nor the trustee has any

control over its determination, calculation or publication. The activities of the Federal Reserve Bank of New York may directly affect prevailing 30-day Average SOFR in unpredictable ways. There can be no guarantee that 30-day Average SOFR will not be discontinued or fundamentally altered in a manner that is materially adverse to the interests of holders of securities indexed to 30-day Average SOFR. If the manner in which 30-day Average SOFR is calculated is changed or if 30-day Average SOFR is discontinued, that change or discontinuance may result in a reduction of the amount of interest payable on applicable SOFR-Based Classes and the trading prices of such Classes.

The Federal Reserve Bank of New York has noted that it may alter the methods of calculation, publication schedule, rate revision practices or availability of 30-day Average SOFR at any time without notice. There can be no assurance that 30-day Average SOFR will not be discontinued or fundamentally altered in a manner that is materially adverse to the interests of investors in the floating rate and inverse floating rate securities.

If 30-day Average SOFR is no longer published or cannot be used, the amount of interest payable on the floating rate and inverse floating rate securities will be determined using a replacement rate, as described under "Description of the Securities — Interest Rate Indices — Benchmark Replacement" in the base offering circular. Ginnie Mae will have the sole discretion to make conforming changes in connection with any replacement rate without the consent of security holders or any other party, as described under "Description of the Securities - Interest Rate Indices — Benchmark Replacement" in the base offering circular. This could reduce the amount of interest payable on the floating rate and inverse floating rate securities, which could adversely affect the return on, value of, and market for, the floating rate and inverse floating rate securities. Furthermore, there can be no assurance that the characteristics of any replacement rate will be similar to 30-day Average SOFR or that any replacement rate will produce the economic equivalent of 30-day Average SOFR.

The securities may not be a suitable investment for you. The securities, especially the group 6 and 7 securities and, in particular, the support, interest only, accrual and residual classes, are not suitable investments for all investors.

In addition, although the sponsor intends to make a market for the purchase and sale of the securities after their initial issuance, it has no obligation to do so. There is no assurance that a secondary market will develop, that any secondary market will continue, or that the price at which you can sell an investment in any class will enable you to realize a desired yield on that investment.

You will bear the market risks of your investment. The market values of the classes are likely to fluctuate. These fluctuations may be significant and could result in significant losses to you.

The secondary markets for mortgage-related securities have experienced periods of illiquidity and can be expected to do so in the future. Illiquidity can have a severely adverse effect on the prices of classes that are especially sensitive to prepayment or interest rate risk or that have been structured to meet the investment requirements of limited categories of investors.

The residual securities may experience significant adverse tax timing consequences. Accordingly, you are urged to consult tax advisors and to consider the after-tax effect of ownership of a residual security and the suitability of the residual securities to your investment objectives. See "Certain United States Federal Income Tax Consequences" in this supplement and in the base offering circular.

You are encouraged to consult advisors regarding the financial, legal, tax and other aspects of an investment in the securities. You should not purchase the securities of any class unless you understand and are able to bear the prepayment, yield, liquidity and market risks associated with that class.

The actual characteristics of the underlying mortgage loans will affect the weighted average lives and yields of your securities. The yield and decrement tables in this supplement are based on assumed characteristics which are likely to be different from the actual characteristics. As a result, the yields on your securities could be lower than you expected, even

if the mortgage loans prepay at the constant prepayment rates set forth in the applicable table.

It is highly unlikely that the underlying mortgage loans will prepay at any of the prepayment rates assumed in this supplement, or at any constant prepayment rate.

#### THE TRUST ASSETS

#### General

The Sponsor intends to acquire the Trust Assets in privately negotiated transactions on or prior to the Closing Date and to sell them to the Trust according to the terms of a Trust Agreement between the Sponsor and the Trustee. The Sponsor will make certain representations and warranties with respect to the Trust Assets. All Trust Assets, regardless of whether the assets consist of Trust MBS or the Underlying Certificates, will evidence, directly or indirectly, Ginnie Mae Certificates.

# The Trust MBS (Groups 1 through 5, 8 and 9)

The Trust MBS are either:

- 1. Ginnie Mae II MBS Certificates guaranteed by Ginnie Mae, or
- 2. Ginnie Mae Platinum Certificates backed by Ginnie Mae II MBS Certificates and guaranteed by Ginnie Mae.

Each Mortgage Loan underlying a Ginnie Mae II MBS Certificate issued prior to July 1, 2003 bears interest at a Mortgage Rate 0.50% to 1.50% per annum greater than the related Certificate Rate. Each Mortgage Loan underlying a Ginnie Mae II MBS Certificate issued on or after July 1, 2003 bears interest at a Mortgage Rate 0.25% to 0.75% per annum greater than the related Certificate Rate. Ginnie Mae receives a fee (the "Ginnie Mae Certificate Guaranty Fee") for its guaranty of each Ginnie Mae II MBS Certificate of 0.06% per annum of the outstanding principal balance of each related Mortgage Loan. The difference between (a) the Mortgage Rate and (b) the sum of the Certificate Rate and the rate of the Ginnie Mae Certificate Guaranty Fee is used to pay the related servicers of the Mortgage Loans a monthly servicing fee

#### The Underlying Certificates (Groups 6 and 7)

The Group 6 and 7 Trust Assets are Underlying Certificates that represent beneficial ownership interests in one or more separate trusts, the assets of which evidence direct or indirect beneficial ownership interests in certain Ginnie Mae Certificates. Each Underlying Certificate constitutes all or a portion of a class of a separate Series of certificates described in the related Underlying Certificate Disclosure Document. Each Underlying Certificate Disclosure Document may be obtained from the Information Agent as described under "Available Information" in this Supplement or on ginniemae.gov. Investors are cautioned that material changes in facts and circumstances may have occurred since the date of each Underlying Certificate Disclosure Document, including changes in prepayment rates, prevailing interest rates and other economic factors, which may limit the usefulness of, and be directly contrary to the assumptions used in preparing the information included in, the offering document. See "Underlying Certificates" in the Base Offering Circular.

Each Underlying Certificate provides for monthly distributions and is further described in the table contained in Exhibit A to this Supplement.

# The Mortgage Loans

The Mortgage Loans underlying the Group 1 through 5, 8 and 9 Trust Assets are expected to have, on a weighted average basis, the characteristics set forth in the Terms Sheet under "Assumed Characteristics of the Mortgage Loans Underlying the Group 1 through 5, 8 and 9 Trust Assets" and the general characteristics described in the Base Offering Circular. The Mortgage Loans will consist of first lien, single-family, fixed rate, residential mortgage loans that are insured or guaranteed by the Federal Housing Administration, the United States Department of Veterans Affairs, Rural Development (formerly the Rural Housing Service) or the United States Department of Housing and Urban Development ("HUD"). See "The Ginnie Mae Certificates — General" in the Base Offering Circular.

Specific information regarding the characteristics of the Mortgage Loans underlying the Trust MBS is not available. For purposes of this Supplement, certain assumptions have been made regarding the remaining terms to maturity, loan ages and Mortgage Rates of the Mortgage Loans underlying the Trust MBS. However, the actual remaining terms to maturity, loan ages and Mortgage Rates of many of the Mortgage Loans will differ from the characteristics assumed, perhaps significantly. This will be the case even if the weighted average characteristics of the Mortgage Loans are the same as the assumed characteristics. Small differences in the characteristics of the Mortgage Loans can have a significant effect on the Weighted Average Lives and yields of the Securities. See "Risk Factors" and "Yield, Maturity and Prepayment Considerations" in this Supplement.

#### The Trustee Fee

The Sponsor will contribute certain Ginnie Mae Certificates in respect of the Trustee Fee. On each Distribution Date, the Trustee will retain all principal and interest distributions received on such Ginnie Mae Certificates in payment of the Trustee Fee.

#### **GINNIE MAE GUARANTY**

The Government National Mortgage Association ("Ginnie Mae"), a wholly-owned corporate instrumentality of the United States of America within HUD, guarantees the timely payment of principal and interest on the Securities. The General Counsel of HUD has provided an opinion to the effect that Ginnie Mae has the authority to guarantee multiclass securities and that Ginnie Mae guaranties will constitute general obligations of the United States, for which the full faith and credit of the United States is pledged. See "Ginnie Mae Guaranty" in the Base Offering Circular.

#### **DESCRIPTION OF THE SECURITIES**

#### General

The description of the Securities contained in this Supplement is not complete and is subject to, and is qualified in its entirety by reference to, all of the provisions of the Trust Agreement. See "Description of the Securities" in the Base Offering Circular.

#### **Form of Securities**

Each Class of Securities other than the Residual Securities initially will be issued and maintained, and may be transferred only on the Fedwire Book-Entry System. Beneficial Owners of Book-Entry Securities

will ordinarily hold these Securities through one or more financial intermediaries, such as banks, brokerage firms and securities clearing organizations that are eligible to maintain book-entry accounts on the Fedwire Book-Entry System. By request accompanied by the payment of a transfer fee of \$25,000 per Certificated Security to be issued, a Beneficial Owner may receive a Regular Security in certificated form.

The Residual Securities will not be issued in book-entry form but will be issued in fully registered, certificated form and may be transferred or exchanged, subject to the transfer restrictions applicable to Residual Securities set forth in the Trust Agreement, at the Corporate Trust Office of the Trustee. See "Description of the Securities — Forms of Securities; Book-Entry Procedures" in the Base Offering Circular.

Each Regular and MX Class (other than the Increased Minimum Denomination Classes) will be issued in minimum dollar denominations of initial principal balance of \$1,000 and integral multiples of \$1 in excess of \$1,000. The Increased Minimum Denomination Classes will be issued in minimum denominations that equal \$100,000 in initial notional balance.

#### **Distributions**

Distributions on the Securities will be made on each Distribution Date as specified under "Terms Sheet — Distribution Date" in this Supplement. On each Distribution Date for a Security, or in the case of the Certificated Securities, on the first Business Day after the related Distribution Date, the Distribution Amount will be distributed to the Holders of record as of the related Record Date. Beneficial Owners of Book-Entry Securities will receive distributions through credits to accounts maintained for their benefit on the books and records of the appropriate financial intermediaries. Holders of Certificated Securities will receive distributions by check or, subject to the restrictions set forth in the Base Offering Circular, by wire transfer. See "Description of the Securities — Distributions" and "— Method of Distributions" in the Base Offering Circular.

#### **Interest Distributions**

The Interest Distribution Amount will be distributed on each Distribution Date to the Holders of all Classes of Securities entitled to distributions of interest.

- Interest will be calculated on the basis of a 360-day year consisting of twelve 30-day months.
- Interest distributable (or accrued in the case of an Accrual Class) on any Class for any Distribution Date will consist of 30 days' interest on its Class Principal Balance (or Class Notional Balance) as of the related Record Date.
- Investors can calculate the amount of interest to be distributed (or accrued in the case of an Accrual Class) on each Class of Securities for any Distribution Date by using the Class Factors published in the preceding month. See "— Class Factors" below.

# Categories of Classes

For purposes of interest distributions, the Classes will be categorized as shown under "Interest Type" on the front cover of this Supplement and on Schedule I to this Supplement. The abbreviations used in this Supplement to describe the interest entitlements of the Classes are explained under "Class Types" in Appendix I to the Base Offering Circular.

#### Accrual Periods

The Accrual Period for each Regular and MX Class is set forth in the table below:

Class	Accrual Period
Fixed Rate Classes	The calendar month preceding the related Distribution Date
Floating Rate and Inverse Floating Rate	From the 20th day of the month preceding the month of the
Classes	related Distribution Date through the 19th day of the month
	of that Distribution Date

#### Fixed Rate Classes

Each Fixed Rate Class will bear interest at the per annum Interest Rate shown on the front cover of this Supplement or on Schedule I to this Supplement.

#### Floating Rate and Inverse Floating Rate Classes

The Floating Rate and Inverse Floating Rate Classes will bear interest as shown under "Terms Sheet — Interest Rates" in this Supplement. The Interest Rates for the Floating Rate and Inverse Floating Rate Classes will be based on 30-day Average SOFR as described below.

The Interest Rate for Floating Rate and Inverse Floating Rate Classes will be based on 30-day Average SOFR. The Trustee or its agent will determine 30-day Average SOFR as described under "Description of the Securities — Interest Rate Indices — Determination of 30-day Average SOFR" in the Base Offering Circular. In the case of the Group 7 Securities, the Trustee or its agent will use the same values of 30-day Average SOFR as are used for the Underlying Certificate.

If 30-day Average SOFR ceases to be available or is no longer representative, a replacement rate will be selected, as described under "Description of the Securities — Interest Rate Indices — Benchmark Replacement" in the Base Offering Circular.

The Trustee's determination of 30-day Average SOFR and its calculation of the Interest Rates will be final except in the case of clear error. Investors can obtain 30-day Average SOFR levels and Interest Rates for the current and preceding Accrual Periods on ginniemae.gov or by calling the Information Agent at (800) 234-GNMA.

#### Accrual Classes

Each of Classes KZ, LZ, PZ, ZM and ZP is an Accrual Class. Interest will accrue on the Accrual Classes and be distributed as described under "Terms Sheet — Accrual Classes" in this Supplement.

# **Principal Distributions**

The Principal Distribution Amount for each Group and each Accrual Amount will be distributed to the Holders entitled thereto as described under "Terms Sheet — Allocation of Principal" in this Supplement. Investors can calculate the amount of principal to be distributed with respect to any Distribution Date by using the Class Factors published in the preceding and current months. See "— Class Factors" below.

# Categories of Classes

For purposes of principal distributions, the Classes will be categorized as shown under "Principal Type" on the front cover of this Supplement and on Schedule I to this Supplement. The abbreviations

used in this Supplement to describe the principal entitlements of the Classes are explained under "Class Types" in Appendix I to the Base Offering Circular.

#### Notional Classes

The Notional Classes will not receive principal distributions. For convenience in describing interest distributions, the Notional Classes will have the original Class Notional Balances shown on the front cover of this Supplement and on Schedule I to this Supplement. The Class Notional Balances will be reduced as shown under "Terms Sheet — Notional Classes" in this Supplement.

#### **Residual Securities**

The Residual Securities will represent the beneficial ownership of the Residual Interest in the Trust REMICs, as described in "Certain United States Federal Income Tax Consequences" in this Supplement and the Base Offering Circular. The Residual Securities have no Class Principal Balance and do not accrue interest. The Residual Securities will be entitled to receive the proceeds of the disposition of any assets remaining in the Trust REMICs after the Class Principal Balance or Class Notional Balance of each Class of Regular Securities has been reduced to zero. However, any remaining proceeds are not likely to be significant. The Residual Securities may not be transferred to a Plan Investor, a Non-U.S. Person or a Disqualified Organization.

#### **Class Factors**

The Trustee will calculate and make available for each Class of Securities, no later than the day preceding the Distribution Date, the factor (carried out to eight decimal places) that when multiplied by the Original Class Principal Balance (or original Class Notional Balance) of that Class, determines the Class Principal Balance (or Class Notional Balance) after giving effect to the distribution of principal to be made on the Securities (and any addition to the Class Principal Balance of an Accrual Class) or any reduction of Class Notional Balance on that Distribution Date (each, a "Class Factor").

- The Class Factor for any Class of Securities for each month following the issuance of the Securities will reflect its remaining Class Principal Balance (or Class Notional Balance) after giving effect to any principal distribution (or addition to principal) to be made or any reduction of Class Notional Balance on the Distribution Date occurring in that month.
- The Class Factor for each Class for the month of issuance is 1.00000000.
- The Class Factors for the MX Classes and the Classes of REMIC Securities that are exchangeable for the MX Classes will be calculated assuming that the maximum possible amount of each Class is outstanding at all times, regardless of any exchanges that may occur.
- Based on the Class Factors published in the preceding and current months (and Interest Rates), investors in any Class (other than an Accrual Class) can calculate the amount of principal and interest to be distributed to that Class and investors in an Accrual Class can calculate the total amount of principal to be distributed to (or interest to be added to the Class Principal Balance of) that Class on the Distribution Date in the current month.
- Investors may obtain current Class Factors on ginniemae.gov.

See "Description of the Securities — Distributions" in the Base Offering Circular.

#### **Termination**

The Trustee, at its option, may purchase or cause the sale of the Trust Assets and thereby terminate the Trust on any Distribution Date on which the aggregate of the Class Principal Balances of the

Securities is less than 1% of the aggregate Original Class Principal Balances of the Securities. The exercise of this option will be influenced by a number of factors, including but not limited to, the value of the Trust Assets then remaining in the Trust and general market conditions. The Trustee will be entitled to retain sale proceeds in excess of the termination price payable to the Securities under the Trust Agreement.

On any Distribution Date upon the Trustee's determination that the REMIC status of any Trust REMIC has been lost or that a substantial risk exists that this status will be lost for the then current taxable year, the Trustee will terminate the Trust and retire the Securities.

Upon any termination of the Trust, the Holder of any outstanding Security (other than a Residual or Notional Class Security) will be entitled to receive that Holder's allocable share of the Class Principal Balance of that Class plus any accrued and unpaid interest thereon at the applicable Interest Rate, and any Holder of any outstanding Notional Class Security will be entitled to receive that Holder's allocable share of any accrued and unpaid interest thereon at the applicable Interest Rate. The Residual Holders will be entitled to their pro rata share of any assets remaining in the Trust REMICs after payment in full of the amounts described in the foregoing sentence. However, any remaining assets are not likely to be significant.

# **Modification and Exchange**

All or a portion of the Classes of REMIC Securities specified on the front cover may be exchanged for a proportionate interest in the related MX Class shown on Schedule I to this Supplement. Similarly, all or a portion of the related MX Class may be exchanged for proportionate interests in the related Classes of REMIC Securities. This process may occur repeatedly.

Each exchange may be effected only in proportions that result in the principal and interest entitlements of the Securities received being equal to the entitlements of the Securities surrendered.

A Beneficial Owner proposing to effect an exchange must notify the Trustee through the Beneficial Owner's Book-Entry Depository participant. This notice must be received by the Trustee not later than two Business Days before the proposed exchange date. The exchange date can be any Business Day other than the last Business Day of the month. The notice must contain the outstanding principal or notional balances of the Securities to be included in the exchange and the proposed exchange date. The notice is required to be delivered to the Trustee by email to USBGNMATeam@usbank.com or in writing at its Corporate Trust Office at U.S. Bank National Association, One Federal Street, 3rd Floor, Boston, Massachusetts, 02110, Attention: Ginnie Mae 2023-117. The Trustee may be contacted by telephone at (617) 603-6451 and by fax at (617) 603-6644.

A fee will be payable to the Trustee in connection with each exchange equal to 1/32 of 1% of the outstanding principal balance (or notional balance) of the Securities surrendered for exchange (but not less than \$2,000 or more than \$25,000); provided, however, that no fee will be payable in respect of an interest only security unless all securities involved in the exchange are interest only securities. If the notional balance of the interest only securities surrendered exceeds that of the interest only securities received, the fee will be based on the latter. The fee must be paid concurrently with the exchange.

The first distribution on a REMIC Security or an MX Security received in an exchange will be made on the Distribution Date in the month following the month of the exchange. The distribution will be made to the Holder of record as of the Record Date in the month of exchange.

See "Description of the Securities — Modification and Exchange" in the Base Offering Circular.

#### YIELD, MATURITY AND PREPAYMENT CONSIDERATIONS

#### General

The prepayment experience of the Mortgage Loans will affect the Weighted Average Lives of and the yields realized by investors in the related Securities.

- The Mortgage Loans do not contain "due-on-sale" provisions, and any Mortgage Loan may be prepaid in full or in part at any time without penalty.
- The rate of payments (including prepayments and payments in respect of liquidations) on the Mortgage Loans is dependent on a variety of economic, geographic, social and other factors, including prevailing market interest rates and general economic factors.

The rate of prepayments with respect to single-family mortgage loans has fluctuated significantly in recent years. Although there is no assurance that prepayment patterns for the Mortgage Loans will conform to patterns for more traditional types of conventional fixed rate mortgage loans, generally:

- if mortgage interest rates fall materially below the Mortgage Rates on any of the Mortgage Loans (giving consideration to the cost of refinancing), the rate of prepayment of those Mortgage Loans would be expected to increase; and
- if mortgage interest rates rise materially above the Mortgage Rates on any of the Mortgage Loans, the rate of prepayment of those Mortgage Loans would be expected to decrease.

In addition, following any Mortgage Loan default and the subsequent liquidation of the underlying Mortgaged Property, the principal balance of the Mortgage Loan will be distributed through a combination of liquidation proceeds, advances from the related Ginnie Mae Issuer and, to the extent necessary, proceeds of Ginnie Mae's guaranty of the Ginnie Mae Certificates. As a result, defaults experienced on the Mortgage Loans will accelerate the distribution of principal of the Securities.

The terms of the Mortgage Loans may be modified to permit, among other things, a partial release of security, which releases a portion of the mortgaged property from the lien securing the related Mortgage Loan. Partial releases of security may allow the related borrower to sell the released property and generate proceeds that may be used to prepay the related Mortgage Loan in whole or in part.

Under certain circumstances, the Trustee has the option to purchase the Trust Assets, thereby effecting early retirement of the Securities. See "Description of the Securities — Termination" in this Supplement.

Investors in the Group 6 and 7 Securities are urged to review the discussion under "Risk Factors — The rate of payments on the underlying certificates will directly affect the rate of payments on the group 6 and 7 securities" in this Supplement.

#### **Accretion Directed Classes**

Classes KA, KF, LA, PA, PC, PZ and VM are Accretion Directed Classes. The related Accrual Amounts will be applied to making principal distributions on those Classes as described in this Supplement. Each of Classes SJ, SK and SM is a Notional Class whose Class Notional Balance is determined by reference to the Class Principal Balance of Class KF shown under "Terms Sheet — Notional Classes" in this Supplement.

Each of the Accretion Directed Classes has the AD designation in the suffix position, rather than the prefix position, in its class principal type because it does not have principal payment stability through the applicable pricing prepayment assumption. Class VM will have principal payment stability only

through the prepayment rate shown in the table below. The remaining Accretion Directed Classes are not listed in the table below because, although they are entitled to receive payments from the related Accrual Amounts, they do not have principal payment stability through any prepayment rate significantly higher than 0% PSA, except within any applicable Effective Ranges.

Class VM is entitled to principal payments in an amount equal to interest accrued on the related Accrual Class. The Weighted Average Life of Class VM cannot exceed its Weighted Average Life as shown in the following table under any prepayment scenario, even a scenario where there are no prepayments.

- Moreover, based on the Modeling Assumptions, if the related Mortgage Loans prepay at any
  constant rate at or below the rate for Class VM shown in the table below, the Class Principal
  Balance of such Class would be reduced to zero on, but not before, its Final Distribution Date,
  and the Weighted Average Life of such Class would equal its maximum Weighted Average Life
  shown in the table below.
- However, the Weighted Average Life of Class VM will be reduced at prepayment speeds higher than the constant rates shown in the table below. See "Yield, Maturity and Prepayment Considerations Decrement Tables" in this Supplement.

#### **Accretion Directed Class**

Security Group	Class	Maximum Weighted Average Life (in years)(1)	Final Distribution Date	Prepayment Rate at or below
2	$\overline{\mathrm{VM}}$	6.0	July 2034	176% PSA

<sup>(1)</sup> The maximum Weighted Average Life for Class VM is based on the Modeling Assumptions and the assumption that the related Mortgage Loans prepay at any constant rate at or below the rate shown in the table for such Class.

The Mortgage Loans will have characteristics that differ from those of the Modeling Assumptions. Therefore, even if the related Mortgage Loans prepay at a rate at or somewhat below the "at or below" rate shown for Class VM, the Class Principal Balance of such Class could be reduced to zero before its Final Distribution Date, and its Weighted Average Life could be shortened.

#### Securities that Receive Principal on the Basis of Schedules

As described in this Supplement, each PAC Class will receive principal payments in accordance with a schedule calculated on the basis of, among other things, a Structuring Range. See "Terms Sheet — Scheduled Principal Balances." However, whether any such Class will adhere to its schedule and receive "Scheduled Payments" on a Distribution Date will largely depend on the level of prepayments experienced by the related Mortgage Loans.

Each PAC Class exhibits an Effective Range of constant prepayment rates at which such Class will receive Scheduled Payments. That range may differ from the Structuring Range used to create the related principal balance schedule. Based on the Modeling Assumptions, the *initial* Effective Ranges for the PAC Classes are as follows:

Security Group	PAC Classes	Initial Effective Ranges
4	KA and KF (in the aggregate)	300% PSA through 375% PSA
5	PA, PC and PZ (in the aggregate)	125% PSA through 200% PSA

• The principal payment stability of the PAC Classes will be supported by the related Support Class.

If the Class supporting a given Class is retired before the Class being supported is retired, the outstanding Class will no longer have an Effective Range and will become more sensitive to prepayments on the related Mortgage Loans.

There is no assurance that the related Mortgage Loans will have the characteristics assumed in the Modeling Assumptions, which were used to determine the initial Effective Ranges. If the initial Effective Ranges were calculated using the actual characteristics of the related Mortgage Loans, the initial Effective Ranges could differ from those shown in the above table. Therefore, even if the Mortgage Loans were to prepay at a constant rate within the initial Effective Range shown for any Class in the above table, that Class could fail to receive Scheduled Payments.

Moreover, the related Mortgage Loans will not prepay at any *constant* rate. Non-constant prepayment rates can cause any PAC Class not to receive Scheduled Payments, even if prepayment rates remain within the initial Effective Range for that Class. Further, the Effective Range for any PAC Class can narrow, shift over time or cease to exist depending on the actual characteristics of the related Mortgage Loans.

If the related Mortgage Loans prepay at rates that are generally below the Effective Range for any PAC Class, the amount available to pay principal on the Securities may be insufficient to produce Scheduled Payments on such related PAC Class, and its Weighted Average Life may be extended, perhaps significantly.

If the related Mortgage Loans prepay at rates that are generally above the Effective Range for any PAC Class, its supporting Class may be retired earlier than that PAC Class, and its Weighted Average Life may be shortened, perhaps significantly.

#### **Assumability**

Each Mortgage Loan may be assumed, subject to HUD review and approval, upon the sale of the related Mortgaged Property. See "Yield, Maturity and Prepayment Considerations — Assumability of Government Loans" in the Base Offering Circular.

# **Final Distribution Date**

The Final Distribution Date for each Class, which is set forth on the front cover of this Supplement or on Schedule I to this Supplement, is the latest date on which the related Class Principal Balance or Class Notional Balance will be reduced to zero.

• The actual retirement of any Class may occur earlier than its Final Distribution Date.

• According to the terms of the Ginnie Mae Guaranty, Ginnie Mae will guarantee payment in full of the Class Principal Balance of each Class of Securities no later than its Final Distribution Date.

# **Modeling Assumptions**

Unless otherwise indicated, the tables that follow have been prepared on the basis of the characteristics of the Underlying Certificates, the priorities of distributions on the Underlying Certificates and the following assumptions (the "Modeling Assumptions"), among others:

- 1. The Mortgage Loans underlying the Group 1 through 5, 8 and 9 Trust Assets have the assumed characteristics shown under "Assumed Characteristics of the Mortgage Loans Underlying the Group 1 through 5, 8 and 9 Trust Assets" in the Terms Sheet, except in the case of information set forth under the 0% PSA Prepayment Assumption Rate, for which each Mortgage Loan underlying a Group 1 through 5, 8 or 9 Trust Asset is assumed to have an original and a remaining term to maturity of 360 months and a Mortgage Rate of 1.50% per annum higher than the related Certificate Rate.
- 2. The Mortgage Loans prepay at the constant percentages of PSA (described below) shown in the related table.
- 3. Distributions on the Securities are always received on the 20th day of the month, whether or not a Business Day, commencing in September 2023.
  - 4. A termination of the Trust or the Underlying Trusts does not occur.
  - 5. The Closing Date for the Securities is August 30, 2023.
- 6. No expenses or fees are paid by the Trust other than the Trustee Fee, which is paid as described under "The Trust Assets The Trustee Fee" in this Supplement.
- 7. Distributions on the Underlying Certificates are made as described in the related Underlying Certificate Disclosure Documents.
  - 8. Each Class is held from the Closing Date and is not exchanged in whole or in part.

When reading the tables and the related text, investors should bear in mind that the Modeling Assumptions, like any other stated assumptions, are unlikely to be entirely consistent with actual experience.

- For example, most of the Mortgage Loans will not have the characteristics assumed, many Distribution Dates will occur on a Business Day after the 20th day of the month, and the Trustee may cause a termination of the Trust as described under "Description of the Securities Termination" in this Supplement.
- In addition, distributions on the Securities are based on Certificate Factors and Calculated Certificate Factors, as applicable, which may not reflect actual receipts on the Trust Assets.

See "Description of the Securities — Distributions" in the Base Offering Circular.

#### **Decrement Tables**

Prepayments of mortgage loans are commonly measured by a prepayment standard or model. The model used in this Supplement, Prepayment Speed Assumption ("PSA"), is the standard prepayment assumption model of The Securities Industry and Financial Markets Association. PSA represents an

assumed rate of prepayment each month relative to the then outstanding principal balance of the Mortgage Loans to which the model is applied. See "Yield, Maturity and Prepayment Considerations — Standard Prepayment Assumption Models" in the Base Offering Circular.

The decrement tables set forth below are based on the assumption that the Mortgage Loans prepay at the indicated percentages of PSA (the "PSA Prepayment Assumption Rates"). As used in the tables, each of the PSA Prepayment Assumption Rates reflects a percentage of the 100% PSA assumed prepayment rate. The Mortgage Loans will not prepay at any of the PSA Prepayment Assumption Rates, and the timing of changes in the rate of prepayments actually experienced on the Mortgage Loans will not follow the pattern described for the PSA assumption.

The decrement tables set forth below illustrate the percentage of the Original Class Principal Balance (or, in the case of a Notional Class, the original Class Notional Balance) that would remain outstanding following the distribution made each specified month for each Regular or MX Class, based on the assumption that the related Mortgage Loans prepay at the PSA Prepayment Assumption Rates. The percentages set forth in the following decrement tables have been rounded to the nearest whole percentage (including rounding down to zero).

The decrement tables also indicate the Weighted Average Life of each Class under each PSA Prepayment Assumption Rate. The Weighted Average Life of each Class is calculated by:

- (a) multiplying the net reduction, if any, of the Class Principal Balance (or the net reduction of the Class Notional Balance, in the case of a Notional Class) from one Distribution Date to the next Distribution Date by the number of years from the date of issuance thereof to the related Distribution Date,
- (b) summing the results, and
- (c) dividing the sum by the aggregate amount of the assumed net reductions in principal balance or notional balance, as applicable, referred to in clause (a).

The information shown for each Notional Class is for illustrative purposes only, as a Notional Class is not entitled to distributions of principal and has no Weighted Average Life. The Weighted Average Life shown for each Notional Class has been calculated on the assumption that a reduction in the Class Notional Balance thereof is a distribution of principal.

The Weighted Average Lives are likely to vary, perhaps significantly, from those set forth in the tables below due to the differences between the actual characteristics of the Mortgage Loans underlying the related Trust Assets and the Modeling Assumptions.

# Percentages of Original Class Principal (or Class Notional) Balances and Weighted Average Lives

Security Group 1 PSA Prepayment Assumption Rates

	Classes FA and SA											
Distribution Date	0%	100%	250%	400%	500%							
Initial Percent	100	100	100	100	100							
August 2024	99	97	95	93	91							
August 2025	98	93	85	78	73							
August 2026	97	86	72	59	51							
August 2027	96	80	60	44	35							
August 2028	95	74	50	33	24							
August 2029	94	69	42	25	17							
August 2030	92	63	35	18	12							
August 2031	91	58	29	14	8							
August 2032	89	54	25	10	5							
August 2033	88	50	20	8	4							
August 2034	86	45	17	6	3							
August 2035	84	42	14	4	2							
August 2036	82	38	12	3	1							
August 2037	79	35	9	2	1							
August 2038	77	31	8	2	1							
August 2039	74	28	6	1	0							
August 2040	71	25	5	1	0							
August 2041	68	23	4	1	0							
August 2042	64	20	3	0	0							
August 2043	60	18	3	0	0							
August 2044	56	15	2	0	0							
August 2045	52	13	2	0	0							
August 2046	47	11	1	0	0							
August 2047	42	9	1	0	0							
August 2048	36	7	1	0	0							
August 2049	30	6	0	0	0							
August 2050	23	4	0	0	0							
August 2051	16	3	0	0	0							
August 2052	8	1	0	0	0							
August 2053	0	0	0	0	0							
Weighted Average												
Life (years)	20.5	11.5	6.5	4.5	3.8							

Security Group 2 PSA Prepayment Assumption Rates

	For Frepayment Assumption Rates																			
		Classe	es IM ar	nd WM		Class MA				Class VM					Class ZM					
Distribution Date	0%	100%	240%	400%	500%	0%	100%	240%	400%	500%	0%	100%	240%	400%	500%	0%	100%	240%	400%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2024	100	100	100	100	100	99	96	93	89	87	93	93	93	93	93	106	106	106	106	106
August 2025	100	100	100	100	100	97	89	78	67	60	86	86	86	86	86	112	112	112	112	112
August 2026	100	100	100	100	100	96	80	61	41	30	78	78	78	78	78	118	118	118	118	118
August 2027	100	100	100	100	100	94	71	45	21	9	70	70	70	70	70	125	125	125	125	125
August 2028	100	100	100	100	84	93	63	32	6	0	61	61	61	61	27	132	132	132	132	132
August 2029	100	100	100	86	58	91	55	21	0	0	52	52	52	22	0	139	139	139	139	106
August 2030	100	100	100	65	40	89	48	11	0	0	43	43	43	0	0	147	147	147	117	73
August 2031	100	100	100	48	27	87	41	3	0	0	32	32	32	0	0	155	155	155	87	50
August 2032	100	100	91	36	19	84	35	0	0	0	22	22	2	0	0	164	164	164	65	34
August 2033	100	100	76	27	13	82	29	0	0	0	10	10	0	0	0	173	173	138	48	23
August 2034	100	100	64	20	9	79	23	0	0	0	0	0	0	0	0	182	182	115	36	16
August 2035	100	100	53	15	6	76	18	0	0	0	0	0	0	0	0	182	182	96	26	11
August 2036	100	100	44	11	4	73	13	0	0	0	0	0	0	0	0	182	182	80	19	7
August 2037	100	100	36	8	3	70	8	0	0	0	0	0	0	0	0	182	182	66	14	5
August 2038	100	100	30	6	2	66	4	0	0	0	0	0	0	0	0	182	182	54	10	3
August 2039	100	99	25	4	1	62	0	0	0	0	0	0	0	0	0	182	180	45	8	2
August 2040	100	89	20	3	1	58	0	0	0	0	0	0	0	0	0	182	161	36	6	1
August 2041	100	79	16	2	1	53	0	0	0	0	0	0	0	0	0	182	144	29	4	1
August 2042	100	70	13	2	0	48	0	0	0	0	0	0	0	0	0	182	127	24	3	1
August 2043	100	61	10	1	0	43	0	0	0	0	0	0	0	0	0	182	112	19	2	0
August 2044	100	53	8	1	0	37	0	0	0	0	0	0	0	0	0	182	97	15	1	0
August 2045	100	46	6	1	0	31	0	0	0	0	0	0	0	0	0	182	83	12	1	0
August 2046	100	39	5	0	0	25	0	0	0	0	0	0	0	0	0	182	70	9	1	0
August 2047	100	32	4	0	0	18	0	0	0	0	0	0	0	0	0	182	58	7	0	0
August 2048	100	26	3	0	0	10	0	0	0	0	0	0	0	0	0	182	46	5	0	0
August 2049	100	20	2	0	0	2	0	0	0	0	0	0	0	0	0	182	35	3	0	0
August 2050	81	14	1	0	0	0	0	0	0	0	0	0	0	0	0	147	25	2	0	0
August 2051	56	9	1	0	0	0	0	0	0	0	0	0	0	0	0	102	16	1	0	0
August 2052	29	4	0	0	0	0	0	0	0	0	0	0	0	0	0	53	6	0	0	0
August 2053	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average	20.2	24.0			= 0		= 0	/ 0	a =	2 /				,,	/ 4	20.2	24.0			
Life (years)	28.2	21.9	13.6	8.9	7.2	17.1	7.3	4.0	2.7	2.4	6.0	6.0	5.7	4.6	4.1	28.2	21.9	14.1	9.7	8.0

Security Group 3 PSA Prepayment Assumption Rates

			Class JA					Class JB		
Distribution Date	0%	100%	262%	450%	600%	0%	100%	262%	450%	600%
Initial Percent	100	100	100	100	100	10	0 100	100	100	100
August 2024	99	96	93	89	86	10	0 100	100	100	100
August 2025	97	90	78	65	56	10	0 100	100	100	100
August 2026	96	81	59	37	22	10	0 100	100	100	100
August 2027	94	72	42	16	0	10	0 100	100	100	99
August 2028	93	64	29	1	0	10	0 100	100	100	62
August 2029	91	56	17	0	0	10	0 100	100	73	39
August 2030	89	49	8	0	0	10	0 100	100	52	25
August 2031	87	42	0	0	0	10	0 100	99	37	15
August 2032	84	35	0	0	0	10	0 100	81	27	10
August 2033	82	29	0	0	0	10	0 100	67	19	6
August 2034	79	24	0	0	0	10	0 100	55	14	4
August 2035	76	18	0	0	0	10	0 100	45	10	2
August 2036	73	13	0	0	0	10	0 100	37	7	1
August 2037	70	8	0	0	0	10	0 100	30	5	1
August 2038	66	4	0	0	0	10	0 100	24	3	1
August 2039	62	0	0	0	0	10	99	20	2	0
August 2040	58	0	0	0	0	10		16	2	0
August 2041	53	0	0	0	0	10	79	13	1	0
August 2042	48	0	0	0	0	10		10	1	0
August 2043	43	0	0	0	0	10	0 62	8	1	0
August 2044	37	0	0	0	0	10	54	6	0	0
August 2045	31	0	0	0	0	10	0 46	5	0	0
August 2046	25	0	0	0	0	10	39	4	0	0
August 2047	17	0	0	0	0	10		3	0	0
August 2048	10	0	0	0	0	10		2	0	0
August 2049	1	Ŏ	Õ	Õ	Õ	10		1	Õ	Ŏ
August 2050	0	0	0	0	0	8	1 14	1	0	0
August 2051	0	0	0	0	0	5	5 9	0	0	0
August 2052	Ŏ	Ŏ	Õ	Õ	Õ	2		Õ	Õ	Ŏ
August 2053	Õ	0	0	Õ	Õ		0 0	0	Õ	0
Weighted Average	~	_	_	~	~		-	,	~	-
Life (years)	17.1	7.3	3.8	2.6	2.2	28.	2 22.0	12.8	8.0	6.1

Security Group 4
PSA Prepayment Assumption Rates

	Classe	s FJ, JF, JS	KA, KF, I	KS, SJ, SK	and SM			Class KZ		
Distribution Date	0%	300%	335%	375%	700%	0%	300%	335%	375%	700%
Initial Percent	100	100	100	100	100	100	100	100	100	100
August 2024	99	94	94	94	94	107	107	98	88	9
August 2025	97	80	80	80	68	114	114	86	54	0
August 2026	96	64	64	64	40	121	121	72	17	0
August 2027	94	49	49	49	23	130	130	68	2	0
August 2028	92	38	38	38	13	138	137	70	0	0
August 2029	90	29	29	29	7	148	136	69	0	0
August 2030	88	22	22	22	4	157	129	64	0	0
August 2031	86	17	17	17	2	168	119	58	0	0
August 2032	84	13	13	13	1	179	107	52	0	0
August 2033	81	10	10	10	1	191	94	45	0	0
August 2034	78	7	7	7	0	204	82	38	0	0
August 2035	75	5	5	5	0	218	70	32	0	0
August 2036	72	4	4	4	0	232	59	27	0	0
August 2037	68	3	3	3	0	248	50	22	0	0
August 2038	64	2	2	2	0	264	41	18	0	0
August 2039	60	2	2	2	0	282	34	15	0	0
August 2040	56	1	1	1	0	301	28	12	0	0
August 2041	51	1	1	1	0	321	23	10	0	0
August 2042	46	1	1	1	0	343	18	8	0	0
August 2043	40	0	0	0	Õ	366	14	6	Ŏ	Ŏ
August 2044	34	0	0	0	0	390	11	4	0	0
August 2045	28	0	0	0	0	416	9	3	0	0
August 2046	21	0	0	0	0	444	6	3	0	0
August 2047	13	0	0	0	0	474	5	2	0	0
August 2048	5	0	0	0	0	506	3	1	0	0
August 2049	Ó	Õ	Õ	Õ	Õ	486	2	1	Õ	Ŏ
August 2050	0	0	0	0	0	379	1	1	0	0
August 2051	0	0	0	0	0	263	1	0	0	0
August 2052	Ŏ	Õ	Ŏ	Õ	Õ	137	0	Õ	Ŏ	Õ
August 2053	0	0	Õ	0	0	0	Õ	0	0	0
Weighted Average		~	~	~	~	~	~			
Life (years)	16.7	4.9	4.9	4.9	3.0	28.0	13.1	9.2	2.1	0.7

Security Group 5 PSA Prepayment Assumption Rates

•		(	Class PA	1			(	Class Po	3			(	Class PZ	<u> </u>			(	Class ZF	,	
Distribution Date	0%	125%	160%	200%	400%	0%	125%	160%	200%	400%	0%	125%	160%	200%	400%	0%	125%	160%	200%	400%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2024	92	79	79	79	79	100	100	100	100	100	105	105	105	105	105	105	105	99	91	54
August 2025	83	43	43	43	21	100	100	100	100	100	110	110	110	110	110	110	110	90	68	0
August 2026	74	0	0	0	0	100	100	100	100	79	116	116	116	116	116	116	116	80	40	0
August 2027	64	0	0	0	0	100	89	89	89	59	122	122	122	122	122	122	122	73	20	0
August 2028	53	0	0	0	0	100	78	78	78	44	128	128	128	128	128	128	128	70	8	0
August 2029	42	0	0	0	0	100	68	68	68	33	135	135	135	135	135	135	135	69	1	0
August 2030	30	0	0	0	0	100	59	59	59	24	142	142	142	142	142	142	142	71	0	0
August 2031	18	0	0	0	0	100	50	50	50	18	149	149	149	149	149	149	146	72	0	0
August 2032	5	0	0	0	0	100	43	43	43	13	157	157	157	157	157	157	147	72	0	0
August 2033	0	0	0	0	0	97	37	37	37	10	165	165	165	165	165	165	146	70	0	0
August 2034	0	0	0	0	0	93	31	31	31	7	173	173	173	173	173	173	142	68	0	0
August 2035	0	0	0	0	0	88	27	27	27	5	182	182	182	182	182	182	137	65	0	0
August 2036	0	0	0	0	0	83	23	23	23	3	191	191	191	191	191	191	131	61	0	0
August 2037	0	0	0	0	0	78	19	19	19	2	201	201	201	201	201	201	123	56	0	0
August 2038	0	0	0	0	0	73	16	16	16	2	211	211	211	211	211	211	115	52	0	0
August 2039	0	0	0	0	0	67	13	13	13	1	222	222	222	222	222	222	106	48	0	0
August 2040	0	0	0	0	0	61	11	11	11	0	234	234	234	234	234	234	98	43	0	0
August 2041	0	0	0	0	0	54	9	9	9	0	246	246	246	246	246	246	89	39	0	0
August 2042	0	0	0	0	0	47	7	7	7	0	258	258	258	258	195	258	80	34	0	0
August 2043	0	0	0	0	0	40	6	6	6	0	271	271	271	271	138	271	71	30	0	0
August 2044	0	0	0	0	0	32	4	4	4	0	285	285	285	285	97	285	62	26	0	0
August 2045	0	0	0	0	0	23	3	3	3	0	300	300	300	300	67	300	54	22	0	0
August 2046	0	0	0	0	0	14	2	2	2	0	315	315	315	315	45	315	45	18	0	0
August 2047	0	0	0	0	0	5	2	2	2	0	331	331	331	331	30	331	38	15	0	0
August 2048	0	0	0	0	0	1	1	1	1	0	348	348	348	348	19	307	30	12	0	0
August 2049	0	0	0	0	0	0	0	0	0	0	366	366	366	366	12	254	23	9	0	0
August 2050	0	0	0	0	0	0	0	0	0	0	301	301	301	301	7	198	16	6	0	0
August 2051	0	0	0	0	0	0	0	0	0	0	170	170	170	170	3	137	10	4	0	0
August 2052	0	0	0	0	0	0	0	0	0	0	61	61	61	61	1	71	4	1	0	0
August 2053	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average																				
Life (years)	5.1	1.8	1.8	1.8	1.5	18.1	9.5	9.5	9.5	5.5	27.9	27.9	27.9	27.9	21.0	27.4	19.8	14.0	2.8	1.0

Security Group 6 PSA Prepayment Assumption Rates

•			Class U	Г			(	Class U	A			(	Class UI	3			(	lass UC	2	
Distribution Date	0%	50%	122%	300%	400%	0%	50%	122%	300%	400%	0%	50%	122%	300%	400%	0%	50%	122%	300%	400%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2024	98	95	92	83	78	96	90	83	65	55	100	100	100	100	100	96	92	86	71	63
August 2025	96	90	83	66	58	91	80	65	31	14	100	100	100	100	100	93	84	71	43	29
August 2026	93	86	75	53	43	86	70	49	4	0	100	100	100	100	84	89	76	58	21	4
August 2027	91	81	68	42	32	81	61	34	0	0	100	100	100	83	62	85	68	46	3	0
August 2028	88	76	61	34	24	76	51	21	0	0	100	100	100	66	46	80	60	34	0	0
August 2029	86	72	55	27	17	71	42	8	0	0	100	100	100	53	34	76	52	24	0	0
August 2030	83	68	49	21	13	66	34	0	0	0	100	100	97	42	25	72	45	15	0	0
August 2031	80	63	44	17	9	60	25	0	0	0	100	100	87	33	18	67	38	6	0	0
August 2032	78	59	40	13	7	54	17	0	0	0	100	100	78	26	13	62	31	0	0	0
August 2033	75	55	35	11	5	48	9	0	0	0	100	100	69	21	10	57	25	0	0	0
August 2034	72	52	31	8	4	42	1	0	0	0	100	100	61	16	7	52	18	0	0	0
August 2035	69	48	28	7	3	36	0	0	0	0	100	93	55	13	5	47	12	0	0	0
August 2036	65	44	25	5	2	29	0	0	0	0	100	86	48	10	4	41	6	0	0	0
August 2037	62	41	22	4	1	22	0	0	0	0	100	80	42	8	3	36	0	0	0	0
August 2038	59	37	19	3	1	15	0	0	0	0	100	73	37	6	2	30	0	0	0	0
August 2039	55	34	17	2	1	8	0	0	0	0	100	66	32	5	1	24	0	0	0	0
August 2040	51	31	14	2	1	0	0	0	0	0	100	60	28	4	1	18	0	0	0	0
August 2041	48	28	12	1	0	0	0	0	0	0	93	54	24	3	1	11	0	0	0	0
August 2042	44	25	10	1	0	0	0	0	0	0	85	48	20	2	0	5	0	0	0	0
August 2043	40	22	9	1	0	0	0	0	0	0	77	42	17	2	0	0	0	0	0	0
August 2044	35	19	/	1	0	0	0	0	0	0	69	37	14	1	0	0	0	0	0	0
August 2045	31	16	0	0	0	0	0	0	0	0	61	31	12	1	0	0	0	0	0	0
August 2046	27	13	2	0	0	0	0	0	0	0	52	26	9	1	0	0	0	0	0	0
August 2047	22	11	4	0	0	0	0	0	0	0	43	21	_	0	0	0	0	0	0	0
August 2048	17 12	8	2	0	0	0	0	0	0	0	33 24	16 11	3	0	0	0	0	0	0	0
August 2049	12	0		0	0	0	0	0	0	0	14	6	2	0	0	0	0	0	0	0
August 2050	2	2	1	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0
August 2051	2	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
August 2052	U	U	0	0	U	0	U	0	0	U	0	U	0	0	U	0	U	U	0	U
Weighted Average Life (years)	16.3	12.3	8.7	4.5	3.5	9.3	5.3	3.1	1.5	1.2	23.0	19.0	14.0	7.5	5.7	10.9	6.6	3.9	1.9	1.4

Security Group 6 PSA Prepayment Assumption Rates

		(	Class UI	D			(	Class UI	Е			(	lass UC	÷			C	lass UF	I	
Distribution Date	0%	50%	122%	300%	400%	0%	50%	122%	300%	400%	0%	50%	122%	300%	400%	0%	50%	122%	300%	400%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2024	100	100	100	100	100	97	93	88	75	68	100	100	100	100	100	97	94	89	78	71
August 2025	100	100	100	100	100	94	86	75	51	39	100	100	100	100	100	94	88	78	56	45
August 2026	100	100	100	100	100	90	79	64	32	17	100	100	100	100	100	91	81	68	39	26
August 2027	100	100	100	100	78	87	72	53	16	0	100	100	100	100	100	88	75	58	25	11
August 2028	100	100	100	83	58	83	65	43	3	0	100	100	100	100	75	85	69	50	14	1
August 2029	100	100	100	66	42	79	59	34	0	0	100	100	100	86	55	82	63	42	5	0
August 2030	100	100	100	52	31	75	53	26	0	0	100	100	100	68	41	78	58	34	0	0
August 2031	100	100	100	42	23	71	47	19	0	0	100	100	100	54	30	75	52	28	0	0
August 2032	100	100	97	33	17	67	41	12	0	0	100	100	100	43	22	71	47	22	0	0
August 2033	100	100	87	26	12	63	35	6	0	0	100	100	100	34	16	67	42	16	0	0
August 2034	100	100	77	20	9	59	29	0	0	0	100	100	100	27	12	63	37	11	0	0
August 2035	100	100	68	16	7	54	24	0	0	0	100	100	88	21	8	59	32	6	0	0
August 2036	100	100	60	13	5	49	19	0	0	0	100	100	78	16	6	55	28	2	0	0
August 2037	100	100	53	10	3	45	13	0	0	0	100	100	69	13	4	51	23	0	0	0
August 2038	100	91	46	8	2	40	8	0	0	0	100	100	60	10	3	46	19	0	0	0
August 2039	100	83	40	6	2	34	4	0	0	0	100	100	52	8	2	42	14	0	0	0
August 2040	100	75	35	4	1	29	0	0	0	0	100	98	45	6	2	37	10	0	0	0
August 2041	100	68	30	3	1	23	0	0	0	0	100	88	39	4	1	32	6	0	0	0
August 2042	100	60	25	3	1	18	0	0	0	0	100	78	33	3	1	27	2	0	0	0
August 2043	97	53	21	2	0	12	0	0	0	0	100	69	28	2	1	22	0	0	0	0
August 2044	86	46	18	1	0	6	0	0	0	0	100	59	23	2	0	16	0	0	0	0
August 2045	76	39	14	1	0	0	0	0	0	0	98	51	19	1	0	10	0	0	0	0
August 2046	65	32	11	1	0	0	0	0	0	0	84	42	15	1	0	5	0	0	0	0
August 2047	53	26	9	0	0	0	0	0	0	0	69	34	11	1	0	0	0	0	0	0
August 2048	42	20	6	0	0	0	0	0	0	0	54	25	8	0	0	0	0	0	0	0
August 2049	30	13	4	0	0	0	0	0	0	0	38	17	5	0	0	0	0	0	0	0
August 2050	17	8	2	0	0	0	0	0	0	0	22	10	3	0	0	0	0	0	0	0
August 2051	4	2	0	0	0	0	0	0	0	0	5	2	1	0	0	0	0	0	0	0
August 2052	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average	2/2	20 -	15/	0 /		10.3	<b>-</b> c	/ -	0.0		25.2	22.0	17.0	0 -	<b>=</b> 2	12 /	0.6		o =	2.0
Life (years)	24.2	20.7	15.6	8.4	6.4	12.3	7.8	4.7	2.3	1.7	25.2	22.2	17.3	9.5	7.3	13.4	8.9	5.5	2.7	2.0

PSA	Prepayment Assumption	on Rates

		(	Class U	Ī			(	lass UI				(	Class UI	Ĺ			C	lass UN	1	
Distribution Date	0%	50%	122%	300%	400%	0%	50%	122%	300%	400%	0%	50%	122%	300%	400%	0%	50%	122%	300%	400%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2024	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2025	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2026	100	100	100	100	100	100	100	100	100	20	100	100	100	100	100	100	100	100	100	100
August 2027	100	100	100	100	100	100	100	100	16	0	100	100	100	100	3	100	100	100	100	100
August 2028	100	100	100	100	100	100	100	100	0	0	100	100	100	25	0	100	100	100	100	6
August 2029	100	100	100	100	76	100	100	100	0	0	100	100	100	0	0	100	100	100	47	0
August 2030	100	100	100	93	56	100	100	84	0	0	100	100	100	0	0	100	100	100	0	0
August 2031	100	100	100	74	41	100	100	34	0	0	100	100	100	0	0	100	100	100	0	0
August 2032	100	100	100	59	30	100	100	0	0	0	100	100	87	0	0	100	100	100	0	0
August 2033	100	100	100	46	22	100	100	0	0	0	100	100	41	0	0	100	100	100	0	0
August 2034	100	100	100	36	16	100	100	0	0	0	100	100	0	0	0	100	100	99	0	0
August 2035	100	100	100	29	12	100	68	0	0	0	100	100	0	0	0	100	100	58	0	0
August 2036	100	100	100	22	8	100	32	0	0	0	100	100	0	0	0	100	100	20	0	0
August 2037	100	100	94	17	6	100	0	0	0	0	100	98	0	0	0	100	100	0	0	0
August 2038	100	100	83	13	4	100	0	0	0	0	100	62	0	0	0	100	100	0	0	0
August 2039	100	100	72	10	3	100	0	0	0	0	100	26	0	0	0	100	100	0	0	0
August 2040	100	100	62	8	2	100	0	0	0	0	100	0	0	0	0	100	91	0	0	0
August 2041	100	100	53	6	2	65	0	0	0	0	100	0	0	0	0	100	54	0	0	0
August 2042	100	100	45	5	1	27	0	0	0	0	100	0	0	0	0	100	19	0	0	0
August 2043	100	94	38	3	1	0	0	0	0	0	86	0	0	0	0	100	0	0	0	0
August 2044	100	82	32	2	1	0	0	0	0	0	41	0	0	0	0	100	0	0	0	0
August 2045	100	69	26	2	0	0	0	0	0	0	0	0	0	0	0	94	0	0	0	0
August 2046	100	58	20	1	0	0	0	0	0	0	0	0	0	0	0	41	0	0	0	0
August 2047	95	46	16	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
August 2048	74	35	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
August 2049	53	24	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
August 2050	30	13	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
August 2051	7	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
August 2052	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average						/									- /					, _
Life (years)	26.1	23.8	19.2	10.8	8.3	18.4	12.5	7.7	3.7	2.8	20.8	15.3	9.8	4.7	3.6	22.8	18.1	12.2	6.0	4.5

Security Group 7
PSA Prepayment Assumption Rates

	Classes	F, FG, FH, GF	G, GS, HF, HS,	S, SG, SH, S	and YS
Distribution Date	0%	100%	236%	400%	500%
Initial Percent	100	100	100	100	100
August 2024	99	96	93	89	86
August 2025	98	91	81	71	64
August 2026	96	84	69	53	44
August 2027	95	78	58	40	31
August 2028	93	72	49	30	21
August 2029	92	66	41	22	15
August 2030	90	61	35	17	10
August 2031	88	56	29	12	7
August 2032	86	52	25	9	5
August 2033	84	48	21	7	5 3 2
August 2034	82	44	17	5	2
August 2035	80	40	14	4	1
August 2036	77	36	12	3	1
August 2037	74	33	10	2	1
August 2038	72	30	8	1	0
August 2039	68	27	7	1	0
August 2040	65	24	5	1	0
August 2041	62	21	4	1	0
August 2042	58	19	4	0	0
August 2043	54	16	3	0	0
August 2044	50	14	2	0	0
August 2045	45	12	2	0	0
August 2046	40	10	1	0	0
August 2047	35	8	1	0	0
August 2048	29	7	1	0	0
August 2049	23	5	0	0	0
August 2050	17	3	0	0	0
August 2051	10	2	0	0	0
August 2052	3	0	0	0	0
August 2053	0	0	0	0	0
Weighted Average Life (years)	19.2	11.1	6.5	4.2	3.4

Security Group 8
PSA Prepayment Assumption Rates

		Classes	s FN, NF, NS	and SN	
Distribution Date	0%	100%	250%	400%	500%
Initial Percent	100	100	100	100	100
August 2024	99	97	95	93	91
August 2025	98	93	85	78	73
August 2026	97	86	72	59	51
August 2027	96	80	60	44	35
August 2028	95	74	50	33	24
August 2029	94	69	42	25	17
August 2030	92	63	35	18	12
August 2031	91	59	29	14	8
August 2032	89	54	25	10	5
August 2033	88	50	20	8	4
August 2034	86	46	17	6	3
August 2035	84	42	14	4	2
August 2036	82	38	12	3	1
August 2037	79	35	10	2	1
August 2038	77	31	8	2	1
August 2039	74	28	6	1	0
August 2040	71	25	5	1	0
August 2041	68	23	4	1	0
August 2042	64	20	3	0	0
August 2043	60	18	3	0	0
August 2044	56	16	2	0	0
August 2045	52	13	2	0	0
August 2046	47	11	1	0	0
August 2047	42	9	1	0	0
August 2048	36	8	1	0	0
August 2049	30	6	0	0	0
August 2050	23	4	0	0	0
August 2051	16	3	0	0	0
August 2052	8	1	0	0	0
August 2053	0	0	0	0	0
Weighted Average					
Life (years)	20.5	11.5	6.6	4.5	3.8

Security Group 9 PSA Prepayment Assumption Rates Classes AF and AS Class LZ Class LA 0% 150% 295% 450% 600% 295% 450% 600% 150% 295% 600% Distribution Date 0% 150% 0% 450% Initial Percent . . . . . 100 100 100 100 100 100 100 100 100 100 100 100 100 100 99 98 97 93 77 56 96 87 76 91 71 46 93 79 61 91 70 45 August 2024 . 106 106 91 82 74 66 59 53 47 42 84 69 96 94 August 2025 August 2026 34 120 120 120 120 120 96 95 94 29 18 11 91 89 86 27 12 2 13 0 0 127 132 65 55 46 37 29 22 45 31 August 2027 56 45 37 30 24 19 135 August 2028 29 21 135 135 135 83 52 33 21 August 2029 20 143 143 143 143 92 91 89 0 0 0 152 161 August 2030 83 80 76 73 69 65 10 110 79 56 40 29 20 0 0 0 August 2031 August 2032 161 171 11 2 161 171 142 88 86 84 38 33 30 16 114 92 74 59 47 37 29 23 18 13 8 5 August 2033 0  $\begin{matrix} 0 \\ 0 \\ 0 \end{matrix}$  $\begin{matrix} 0 \\ 0 \\ 0 \end{matrix}$ August 2034 13 10 193 193 August 2035 ŏ 205 205 26 23 20 8 6 5 60 55 50 14 10 7 0 August 2036 82 79 77 74 71 68 0  $\begin{matrix} 0 \\ 0 \\ 0 \end{matrix}$ August 2037 0 231 168 August 2038 Õ Õ Õ Õ 245 148 261 277 0 0 0 129 112 August 2039 45 39 32 25 18 10 0 0 0  $_{0}^{1}$ August 2040 15 13 0 August 2041 0 0 0 Õ Õ 294 64 60 56 August 2042 0 0 0 0  $\begin{matrix} 0 \\ 0 \\ 0 \end{matrix}$ 2 0 331 351 August 2043 10 11 August 2044 0 Õ Õ Õ 0 8 August 2045 0 0 0 0 373 345 50 41  $\begin{matrix} 0 \\ 0 \\ 0 \end{matrix}$ 1  $\begin{matrix} 0 \\ 0 \\ 0 \end{matrix}$ August 2046 August 2047 0 0 Õ 307 33 August 2048 0 0 0 0 265 26 19 0 August 2049 220 August 2050 August 2051 0 0 0 August 2052 62

#### **Yield Considerations**

August 2053 . . . . Weighted Average Life (years) . . . .

An investor seeking to maximize yield should make a decision whether to invest in any Regular or MX Class based on:

13.9

5.9

3.9

3.0

2.5

26.5

18.6

12.7

7.1

9.2

• the anticipated yield of that Class resulting from its purchase price,

4.2

3.3

5.8

9.3

- the investor's own projection of Mortgage Loan prepayment rates under a variety of scenarios,
- in the case of the Group 6 and 7 Securities, the investor's own projection of payment rates on the Underlying Certificates under a variety of scenarios and
- in the case of a Floating Rate or an Inverse Floating Rate Class, the investor's own projection of levels of 30-day Average SOFR under a variety of scenarios.

No representation is made regarding Mortgage Loan prepayment rates, Underlying Certificate payment rates, 30-day Average SOFR levels or the yield of any Class.

Prepayments: Effect on Yields

The yields to investors will be sensitive in varying degrees to the rate of prepayments on the related Mortgage Loans.

- In the case of Regular Securities or MX Securities purchased at a premium (especially the Interest Only Classes), faster than anticipated rates of principal payments could result in actual yields to investors that are lower than the anticipated yields.
- Investors in the Interest Only Classes should also consider the risk that rapid rates of principal payments could result in the failure of investors to recover fully their investments.

In the case of Regular Securities or MX Securities purchased at a discount, slower than anticipated rates of principal payments could result in actual yields to investors that are lower than the anticipated yields.

See "Risk Factors — Rates of principal payments can reduce your yield" in this Supplement.

Rapid rates of prepayments on the Mortgage Loans are likely to coincide with periods of low prevailing interest rates.

During periods of low prevailing interest rates, the yields at which an investor may be able to reinvest amounts received as principal payments on the investor's Class of Securities may be lower than the yield on that Class.

Slow rates of prepayments on the Mortgage Loans are likely to coincide with periods of high prevailing interest rates.

During periods of high prevailing interest rates, the amount of principal payments available to an investor for reinvestment at those high rates may be relatively low.

The Mortgage Loans will not prepay at any constant rate until maturity, nor will all of the Mortgage Loans underlying any Trust Asset Group prepay at the same rate at any one time. The timing of changes in the rate of prepayments may affect the actual yield to an investor, even if the average rate of principal prepayments is consistent with the investor's expectation. In general, the earlier a prepayment of principal on the Mortgage Loans, the greater the effect on an investor's yield. As a result, the effect on an investor's yield of principal prepayments occurring at a rate higher (or lower) than the rate anticipated by the investor during the period immediately following the Closing Date is not likely to be offset by a later equivalent reduction (or increase) in the rate of principal prepayments.

30-Day Average SOFR: Effect on Yields of the Floating Rate and Inverse Floating Rate Classes

Low levels of 30-Day Average SOFR can reduce the yield of the Floating Rate Classes. High levels of 30-day Average SOFR can significantly reduce the yield of the Inverse Floating Rate Classes. In addition, the Floating Rate Classes will not necessarily benefit from a higher yield at high levels of 30-Day Average SOFR and certain Inverse Floating Rate Classes may not benefit from particularly low levels of 30-day Average SOFR because the rate on such Classes is capped at a maximum rate described under "Terms Sheet — Interest Rates."

Payment Delay: Effect on Yields of the Fixed Rate Classes

The effective yield on any Fixed Rate Class will be less than the yield otherwise produced by its Interest Rate and purchase price because, on each Distribution Date, 30 days' interest will be payable on (or added to the principal amount of) that Class even though interest began to accrue approximately 50 days earlier.

#### **Yield Tables**

The following tables show the pre-tax yields to maturity on a corporate bond equivalent basis of specified Classes at various constant percentages of PSA and, in the case of the Inverse Floating Rate Classes, at various constant levels of 30-day Average SOFR.

The Mortgage Loans will not prepay at any constant rate until maturity, and it is unlikely that 30-day Average SOFR will remain constant. Moreover, it is likely that the Mortgage Loans will experi-

ence actual prepayment rates that differ from those of the Modeling Assumptions. Therefore, the actual pre-tax yield of any Class may differ from those shown in the applicable table below for that Class even if the Class is purchased at the assumed price shown.

The yields were calculated by

- determining the monthly discount rates that, when applied to the applicable assumed streams
  of cash flows to be paid on the applicable Class, would cause the discounted present value of
  the assumed streams of cash flows to equal the assumed purchase price of that Class plus
  accrued interest, and
- 2. converting the monthly rates to corporate bond equivalent rates.

These calculations do not take into account variations that may occur in the interest rates at which investors may be able to reinvest funds received by them as distributions on their Securities and consequently do not purport to reflect the return on any investment in any Class when those reinvestment rates are considered.

The information set forth in the following tables was prepared on the basis of the Modeling Assumptions and the assumptions that (1) the Interest Rate applicable to each Inverse Floating Rate Class for each Accrual Period following the first Accrual Period will be based on the indicated level of 30-day Average SOFR and (2) the purchase price of each Class (expressed as a percentage of original Class Notional Balance) plus accrued interest is as indicated in the related table. **The assumed purchase price is not necessarily that at which actual sales will occur.** 

# **SECURITY GROUP 1**

# Sensitivity of Class SA to Prepayments Assumed Price 1.9997%\*

	PS.	A Prepayment	Assumption Ra	ates
30-day Average SOFR	100%	250%	400%	500%
4.15%	54.0%	47.1%	40.2%	35.5%
5.15%	(5.6)%	(14.1)%	(23.1)%	(29.3)%
5.20%	(10.8)%	(19.3)%	(28.2)%	(34.5)%
5.25% and above	**	**	**	**

#### **SECURITY GROUP 2**

# Sensitivity of Class IM to Prepayments Assumed Price 33.25%\*

	PSA Prepa	yment Assumptio	on Rates	
100%	240%	400%	500%	652%
18.0%	15.6%	10.6%	6.7%	0.0%

# **SECURITY GROUP 4**

# Sensitivity of Class JS to Prepayments Assumed Price 2.75%\*

	PSA	Prepayment	Assumption	Rates
30-day Average SOFR	300%	335%	375%	700%
4.06%	99.3%	99.3%	99.3%	89.6%
5.06%	50.6%	50.6%	50.6%	38.0%
5.88%	12.7%	12.7%	12.7%	(3.7)%
6.70% and above	**	**	**	**

# Sensitivity of Class KS to Prepayments Assumed Price 3.5%\*

30-day Average SOFR	PSA Prepayment Assumption Rates			
	300%	335%	375%	700%
4.060%	72.6%	72.6%	72.6%	61.5%
5.060%	35.7%	35.7%	35.7%	21.8%
5.905%	5.4%	5.4%	5.4%	(12.0)%
6.750% and above	**	**	**	非非

<sup>\*</sup> The price does not include accrued interest. Accrued interest has been added to the price in calculating the yields set forth in the table.

<sup>\*\*</sup> Indicates that investors will suffer a loss of virtually all of their investment.

# Sensitivity of Class SJ to Prepayments Assumed Price 2.0%\*

30-day Average SOFR	PSA Prepayment Assumption Rates			
	300%	335%	375%	700%
4.060%	149.5%	149.5%	149.5%	141.8%
5.060%	77.9%	77.9%	77.9%	67.2%
5.855%	25.8%	25.8%	25.8%	10.9%
6.650% and above	**	**	**	**

# Sensitivity of Class SK to Prepayments Assumed Price 0.75%\*

	PSA Prepayment Assumption Rates			
30-day Average SOFR	300%	335%	375%	700%
6.650% and below	(18.3)%	(18.3)%	(18.3)%	(38.9)%
6.675%	(24.4)%	(24.4)%	(24.4)%	(45.4)%
6.700% and above	**	3636	***	**

# Sensitivity of Class SM to Prepayments Assumed Price 0.75%\*

	PSA Prepayment Assumption Rates			
30-day Average SOFR	300%	335%	375%	700%
6.700% and below	(18.3)%	(18.3)%	(18.3)%	(38.9)%
6.725%	(24.4)%	(24.4)%	(24.4)%	(45.4)%
6.750% and above	**	**	**	**

# SECURITY GROUP 7 Sensitivity of Class GS to Prepayments Assumed Price 1.0%\*

	PSA Prepayment Assumption Rates			
30-day Average SOFR	100%	236%	400%	500%
5.55% and below	13.2%	5.3%	(4.7)%	(10.9)%
5.65%	1.3%	(6.7)%	(16.8)%	(23.2)%
5.75% and above	**	**	**	**

# Sensitivity of Class HS to Prepayments Assumed Price 0.5%\*

30-day Average SOFR	PSA Prepayment Assumption Rates			
	100%	236%	400%	500%
5.55% and below	13.2%	5.3%	(4.7)%	(10.9)%
5.60%	1.3%	(6.7)%	(16.8)%	(23.2)%
5.65% and above	**	**	排標	**

<sup>\*</sup> The price does not include accrued interest. Accrued interest has been added to the price in calculating the yields set forth in the table.

<sup>\*\*</sup> Indicates that investors will suffer a loss of virtually all of their investment.

# Sensitivity of Class S to Prepayments Assumed Price 0.25%\*

30-day Average SOFR	PSA Prepayment Assumption Rates			
	100%	236%	400%	500%
5.600% and below	13.2%	5.3%	(4.7)%	(10.9)%
5.625%	1.3%	(6.7)%	(16.8)%	(23.2)%
5.650% and above	**	**	**	**

# Sensitivity of Class SG to Prepayments Assumed Price 0.75%\*

30-day Average SOFR	PSA Prepayment Assumption Rates			
	100%	236%	400%	500%
5.550% and below	13.2%	5.3%	(4.7)%	(10.9)%
5.625%	1.3%	(6.7)%	(16.8)%	(23.2)%
5.700% and above	**	**	**	排車

# Sensitivity of Class SH to Prepayments Assumed Price 0.25%\*

30-day Average SOFR	PSA Prepayment Assumption Rates			
	100%	236%	400%	500%
5.550% and below	13.2%	5.3%	(4.7)%	(10.9)%
5.575%	1.3%	(6.7)%	(16.8)%	(23.2)%
5.600% and above	**	**	**	**

# Sensitivity of Class SY to Prepayments Assumed Price 0.25%\*

	PSA Prepayment Assumption Rates			
30-day Average SOFR	100%	236%	400%	500%
5.700% and below	13.2%	5.3%	(4.7)%	(10.9)%
5.725%	1.3%	(6.7)%	(16.8)%	(23.2)%
5.750% and above	**	**	**	**

# Sensitivity of Class YS to Prepayments Assumed Price 0.25%\*

30-day Average SOFR	PSA Prepayment Assumption Rates			
	100%	236%	400%	500%
5.650% and below	13.2%	5.3%	(4.7)%	(10.9)%
5.675%	1.3%	(6.7)%	(16.8)%	(23.2)%
5.700% and above	**	**	**	**

<sup>\*</sup> The price does not include accrued interest. Accrued interest has been added to the price in calculating the yields set forth in the table.

<sup>\*\*</sup> Indicates that investors will suffer a loss of virtually all of their investment.

#### **SECURITY GROUP 8**

# Sensitivity of Class NS to Prepayments Assumed Price 1.5272%

30-day Average SOFR	PSA Prepayment Assumption Rates			
	100%	250%	400%	500%
1.150%	341.8%	336.3%	330.6%	326.8%
2.150%	228.0%	222.5%	216.9%	213.2%
3.525%	97.3%	91.2%	85.0%	80.9%
4.900% and above	**	**	**	**

# Sensitivity of Class SN to Prepayments Assumed Price 1.5272%

30-day Average SOFR	PSA Prepayment Assumption Rates			
	100%	250%	400%	500%
1.15%	348.0%	342.4%	336.7%	332.9%
2.15%	233.3%	227.8%	222.2%	218.5%
3.55%	99.5%	93.4%	87.2%	83.1%
4.95% and above	**	***	**	**

#### **SECURITY GROUP 9**

# Sensitivity of Class AS to Prepayments Assumed Price 3.1819%\*

30-day Average SOFR	PSA Prepayment Assumption Rates				
	150%	295%	450%	600%	
4.200%	44.8%	38.3%	31.3%	24.4%	
5.200%	8.1%	0.2%	(8.4)%	(17.1)%	
5.475%	(2.7)%	(10.9)%	(20.1)%	(29.4)%	
5.750% and above	**	**	**	**	

<sup>\*</sup> The price does not include accrued interest. Accrued interest has been added to the price in calculating the yields set forth in the table.

# CERTAIN UNITED STATES FEDERAL INCOME TAX CONSEQUENCES

The following tax discussion, when read in conjunction with the discussion of "Certain United States Federal Income Tax Consequences" in the Base Offering Circular, describes the material United States federal income tax considerations for investors in the Securities. However, these two tax discussions do not purport to deal with all United States federal tax consequences applicable to all categories of investors, some of which may be subject to special rules.

#### **REMIC Elections**

In the opinion of K&L Gates LLP, the Trust will constitute a Double REMIC Series for United States federal income tax purposes. Separate REMIC elections will be made for the Pooling REMIC and the Issuing REMIC.

<sup>\*\*</sup> Indicates that investors will suffer a loss of virtually all of their investment.

# **Regular Securities**

The Regular Securities will be treated as debt instruments issued by the Issuing REMIC for United States federal income tax purposes. Income on the Regular Securities must be reported under an accrual method of accounting.

The Notional and Accrual Classes of Regular Securities will be issued with original issue discount ("OID"), and certain other Classes of Regular Securities may be issued with OID. See "Certain United States Federal Income Tax Consequences — Tax Treatment of Regular Securities — Original Issue Discount," "— Variable Rate Securities" and "— Interest Weighted Securities and Non-VRDI Securities" in the Base Offering Circular.

The prepayment assumption that should be used in determining the rates of accrual of OID, if any, on the Regular Securities (as described in "Yield, Maturity and Prepayment Considerations" in this Supplement) is as follows:

Group(s)	<u>PSA</u>
1 and 8	250%
2	240%
3	262%
4	335%
5	160%
6	122%
7	236%
9	295%

In the case of the Floating Rate and Inverse Floating Rate Classes, the interest rate values to be used for these determinations are the initial Interest Rates as set forth in the Terms Sheet under "Interest Rates." No representation is made, however, about the rate at which prepayments on the Mortgage Loans underlying any Group of Trust Assets actually will occur or the level of 30-day Average SOFR at any time after the date of this Supplement. See "Certain United States Federal Income Tax Consequences" in the Base Offering Circular.

The Regular Securities generally will be treated as "regular interests" in a REMIC for domestic building and loan associations and "real estate assets" for real estate investment trusts ("REITs") as described in "Certain United States Federal Income Tax Consequences" in the Base Offering Circular. Similarly, interest on the Regular Securities will be considered "interest on obligations secured by mortgages on real property" for REITs as described in "Certain United States Federal Income Tax Consequences" in the Base Offering Circular.

#### **Residual Securities**

The Class RR Securities will represent the beneficial ownership of the Residual Interest in the Pooling REMIC and the beneficial ownership of the Residual Interest in the Issuing REMIC.

The Residual Securities generally will be treated as "residual interests" in a REMIC for domestic building and loan associations and as "real estate assets" for REITs, as described in "Certain United States Federal Income Tax Consequences" in the Base Offering Circular, but will not be treated as debt for United States federal income tax purposes. Instead, the Holders of the Residual Securities will be required to report, and will be taxed on, their pro rata shares of the taxable income or loss of the Trust REMICs, and these requirements will continue until there are no outstanding regular interests in the

respective Trust REMICs. Thus, Residual Holders will have taxable income attributable to the Residual Securities even though they will not receive principal or interest distributions with respect to the Residual Securities, which could result in a negative after-tax return for the Residual Holders. Even though the Holders of the Residual Securities are not entitled to any stated principal or interest payments on the Residual Securities, the Trust REMICs may have substantial taxable income in certain periods, and offsetting tax losses may not occur until much later periods. Accordingly, the Holders of the Residual Securities may experience substantial adverse tax timing consequences. Prospective investors are urged to consult their own tax advisors and consider the after-tax effect of ownership of the Residual Securities and the suitability of the Residual Securities to their investment objectives.

Prospective Holders of Residual Securities should be aware that, at issuance, based on the expected prices of the Regular and Residual Securities and the prepayment assumption described above, the residual interests represented by the Residual Securities will be treated as "noneconomic residual interests" as that term is defined in Treasury regulations.

OID accruals on the Underlying Certificates will be computed using the same prepayment assumption as set forth under "Certain United States Federal Income Tax Consequences — Regular Securities" in this Supplement.

### **MX Securities**

For a discussion of certain United States federal income tax consequences applicable to the MX Classes, see "Certain United States Federal Income Tax Consequences — Tax Treatment of MX Securities", "— Exchanges of MX Classes and Regular Classes" and "— Taxation of Foreign Holders of REMIC Securities and MX Securities" in the Base Offering Circular.

Investors should consult their own tax advisors in determining the United States federal, state, local, foreign and any other tax consequences to them of the purchase, ownership and disposition of the Securities.

### **ERISA MATTERS**

Ginnie Mae guarantees distributions of principal and interest with respect to the Securities. The Ginnie Mae Guaranty is supported by the full faith and credit of the United States of America. The Regular and MX Securities will qualify as "guaranteed governmental mortgage pool certificates" within the meaning of a Department of Labor regulation, the effect of which is to provide that mortgage loans and participations therein underlying a "guaranteed governmental mortgage pool certificate" will not be considered assets of an employee benefit plan subject to the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), or subject to Section 4975 of the Code (each, a "Plan"), solely by reason of the Plan's purchase and holding of that certificate.

Prospective Plan Investors should consult with their advisors to determine whether the purchase, holding or resale of a Security could give rise to a transaction that is prohibited or is not otherwise permissible under either ERISA or the Code.

Governmental plans and certain church plans, while not subject to the fiduciary responsibility provisions of ERISA or the prohibited transaction provisions of ERISA and the Code, may nevertheless be subject to local, state or other federal laws that are substantially similar to the foregoing provisions of ERISA and the Code ("Similar Law").

Fiduciaries of any such Plans or governmental or church plans subject to Similar Law should consult with their counsel before purchasing any of the Securities.

See "ERISA Considerations" in the Base Offering Circular.

The Residual Securities are not offered to, and may not be transferred to, a Plan Investor.

### LEGAL INVESTMENT CONSIDERATIONS

Institutions whose investment activities are subject to legal investment laws and regulations or to review by certain regulatory authorities may be subject to restrictions on investment in the Securities. No representation is made about the proper characterization of any Class for legal investment or other purposes, or about the permissibility of the purchase by particular investors of any Class under applicable legal investment restrictions.

Investors should consult their own legal advisors regarding applicable investment restrictions and the effect of any restrictions on the liquidity of the Securities prior to investing in the Securities.

See "Legal Investment Considerations" in the Base Offering Circular.

### PLAN OF DISTRIBUTION

Subject to the terms and conditions of the Sponsor Agreement, the Sponsor has agreed to purchase all of the Securities if any are sold and purchased. The Sponsor proposes to offer the Regular and MX Classes to the public from time to time for sale in negotiated transactions at varying prices to be determined at the time of sale, plus accrued interest from (1) August 1, 2023 on the Fixed Rate Classes and (2) August 20, 2023 on the Floating Rate and Inverse Floating Rate Classes. The Sponsor may effect these transactions by sales to or through certain securities dealers. These dealers may receive compensation in the form of discounts, concessions or commissions from the Sponsor and/or commissions from any purchasers for which they act as agents. Some of the Securities may be sold through dealers in relatively small sales. In the usual case, the commission charged on a relatively small sale of securities will be a higher percentage of the sales price than that charged on a large sale of securities.

### **INCREASE IN SIZE**

Before the Closing Date, Ginnie Mae, the Trustee and the Sponsor may agree to increase the size of this offering. In that event, the Securities will have the same characteristics as described in this Supplement, except that (1) the Original Class Principal Balance (or original Class Notional Balance) and (2) the Aggregate Scheduled Principal Balances of each Class receiving principal distributions or interest distributions based upon a notional balance from the same Trust Asset Group will increase by the same proportion. The Trust Agreement, the Final Data Statement, the Final Schedules and the Supplemental Statement, if any, will reflect any increase in the size of the transaction.

### LEGAL MATTERS

Certain legal matters will be passed upon for Ginnie Mae by Hunton Andrews Kurth LLP, for the Trust by K&L Gates LLP, Charlotte, North Carolina, and Marcell Solomon & Associates, P.C., Bowie, Maryland, and for the Trustee by Faegre Drinker Biddle & Reath LLP.

Available Combinations(1)

REMIC Securities	ırities			MX Se	MX Securities			
Class	Original Class Principal Balance or Class Notional Balance	Related MX Class	Maximum Original Class Principal Balance or Class Notional Balance(2)	Principal Type(3)	Interest Rate	Interest Type(3)	CUSIP	Final Distribution Date(4)
Security Group 2 Combination 1								
VM	\$ 8,740,000	WM	\$ 19,446,000	SEQ	5.5%	FIX	38384CGQ6	August 2053
Security Group 4								
KF SM	\$ 37,500,000	JF	\$ 37,500,000	PAC/AD	(5)	FLT	38384CGR4	August 2053
Combination 3	000,000,00							
SJ SK SM	\$ 37,500,000 37,500,000 37,500,000	KS	\$ 37,500,000	NTL(PAC/AD)	<u>©</u>	OI/ANI	38384CGS2	August 2053
Combination 4		ì	1	(	ĺ	]		
KF SK SM	\$ 37,500,000 37,500,000 37,500,000	Ħ	\$ 37,500,000	PAC/AD	<u>(S</u> )	FLT	38384CGT0	August 2053
Combination 5								
SJ SK	\$ 37,500,000 37,500,000	Sí	\$ 37,500,000	NTL(PAC/AD)	(5)	OI/ANI	38384CGU7	August 2053
Security Group 6 Combination 6								
UA UK	\$ 23,639,744 4,985,750	nc	\$ 28,625,494	SC/SEQ	2.5%	FIX	38384CGV5	March 2052
Combination / UA UK UL	\$ 23,639,744 4,985,750 4,526,134	UE	\$ 33,151,628	SC/SEQ	2.5%	FIX	38384CGW3	March 2052

REMIC Securities	urities			MX	MX Securities			
,	Original Class Principal Balance or Class Notional	Related	Maximum Original Class Principal Balance or Class Notional	Principal	Interest	Interest	CUSIP	Final Distribution
Class ——	Balance	MX Class	Balance(2)	Type(3)	Rate	Type(3)	Number	Date(4)
Combination 8								
$\mathbf{U}\mathbf{A}$	\$ 23,639,744	HI	\$ 37,292,505	SC/SEQ	2.5%	FIX	38384CGX1	March 2052
UK	4,985,750							
III	4,526,134							
UM	4,140,877							
Combination 9								
UA	\$ 23,639,744	ח	\$ 48,407,851	SC/PT	2.5%	FIX	38384CGY9	March 2052
ų	11,115,346							
UK	4,985,750							
n	4,526,134							
UM	4,140,877							
Combination 10								
UJ	\$ 11,115,346	UB	\$ 24,768,107	SC/SEQ	2.5%	FIX	38384CGZ6	March 2052
UK	4,985,750			,				
TI O	4.526.134							
NM	4,140,877							
Combination 11								
U	\$ 11,115,346		\$ 19,782,357	SC/SEQ	2.5%	FIX	38384CHA0	March 2052
īn	4,526,134			)				
UM	4,140,877							
Combination 12								
U	\$ 11,115,346	DO	\$ 15,256,223	SC/SEQ	2.5%	FIX	38384CHB8	March 2052
UM	4,140,877							
Security Group 7								
Combination 13								
S	\$109,771,973	CS	\$109,771,973	NTL(SC/PT)	(5)	OI/ANI	38384CHC6	May 2053
SH	109,771,973							
SY	109,771,973							
YS	109,771,973							
Combination 14								
GF	\$109,771,973	FG	\$109,771,973	SC/PT	(5)	FLT	38384CHD4	May 2053
SY	109,771,973							

REMIC Securities				MX S	MX Securities			
	Original Class Principal Balance		Maximum Original Class Principal Balance					Final
Class	or Class Notional Balance	Related MX Class	or Class Notional Balance(2)	Principal Type(3)	Interest Rate	Interest Type(3)	CUSIP Number	Distribution Date(4)
Combination 15								
S	\$109,771,973	SG	\$109,771,973	NTL(SC/PT)	(5)	OI/ANI	38384CHE2	May 2053
m SH	109,771,973							•
YS	109,771,973							
Combination 16								
GF	\$109,771,973	HF	\$109,771,973	SC/PT	(5)	FLT	38384CHF9	May 2053
SY	109,771,973							
YS	109,771,973							
Combination 17								
S	\$109,771,973	HS	\$109,771,973	NTL(SC/PT)	(5)	OI/ANI	38384CHG7	May 2053
SH	109,771,973							
Combination 18								
GF	\$109,771,973	FH	\$109,771,973	SC/PT	(5)	FLT	38384CHH5	May 2053
S	109,771,973							
SY	109,771,973							
YS	109,771,973							
Combination 19								
GF	\$109,771,973	Ц	\$109,771,973	SC/PT	(5)	FLT	38384CHJ1	May 2053
S	109,771,973							
SH	109,771,973							
SY	109,771,973							
YS	109,771,973							

All exchanges must comply with minimum denomination restrictions.

As defined under "Class Types" in Appendix I to the Base Offering Circular.

See "Yield, Maturity and Prepayment Considerations — Final Distribution Date" in this Supplement.  $\odot \odot \odot$ 

The Interest Rate will be calculated as described under "Terms Sheet — Interest Rates" in this Supplement.

The amount shown for each MX Class represents the maximum Original Class Principal Balance (or original Class Notional Balance) of that Class, assuming it were to be issued on the Closing Date. 9

# Schedule II

# SCHEDULED PRINCIPAL BALANCES

Distribution Date	Classes KA and KF (in the aggregate)	Classes PA, PC and PZ (in the aggregate)
Initial Balance	\$112,500,000.00	\$14,159,596.00
September 2023	112,239,944.24	14,122,382.10
October 2023	111,918,784.97	14,081,794.40
November 2023	111,536,576.34	14,037,845.69
December 2023	111,093,464.77	13,990,550.88
January 2024	110,589,689.49	13,939,927.07
February 2024	110,025,582.91	13,885,993.47
March 2024	109,401,570.69	13,828,771.45
April 2024	108,718,171.63	13,768,284.46
May 2024	107,975,997.32	13,704,558.09
June 2024	107,175,751.50	13,637,619.99
July 2024	106,318,229.21	13,567,499.88
August 2024	105,404,315.78	13,494,229.51
September 2024	104,434,985.41	13,417,842.67
October 2024	103,411,299.69	13,338,375.10
November 2024	102,334,405.74	13,255,864.53
December 2024	101,205,534.23	13,170,350.61
January 2025	100,025,997.06	13,081,874.87
February 2025	98,797,184.95	12,990,480.71
March 2025	97,520,564.66	12,896,213.35
April 2025	96,197,676.14	12,799,119.79
May 2025	94,830,129.34	12,699,248.75
June 2025	93,419,600.96	12,596,650.66
July 2025	91,967,830.88	12,491,377.61
August 2025	90,476,618.51	12,383,483.26
September 2025	88,947,818.93	12,273,022.86
October 2025	87,383,338.86	12,160,053.12
November 2025	85,785,132.53	12,044,632.22
December 2025	84,155,197.36	11,929,913.30
January 2026	82,495,569.58	11,815,891.41
February 2026	80,863,117.52	11,702,561.65
March 2026	79,257,379.62	11,589,919.14
April 2026	77,677,901.93	11,477,959.05
May 2026	76,124,238.06	11,366,676.55
June 2026	74,595,949.01	11,256,066.87
July 2026	73,092,603.03	11,146,125.25
August 2026	71,613,775.57	11,036,846.96
September 2026	70,159,049.08	10,928,227.31
October 2026	68,728,012.95	10,820,261.63
November 2026	67,320,263.37	10,712,945.30
December 2026	65,935,403.22	10,606,273.68
January 2027	64,573,041.97	10,500,242.22
February 2027	63,232,795.56	10,394,846.35
March 2027	61,914,286.29	10,290,081.56

Distribution Date	Classes KA and KF (in the aggregate)	Classes PA, PC and PZ (in the aggregate)
April 2027	\$ 60,617,142.73	\$10,185,943.34
May 2027	59,340,999.58	10,082,427.23
June 2027	58,085,497.64	9,979,528.79
July 2027	56,850,283.61	9,877,243.61
August 2027	55,635,010.09	9,775,567.29
September 2027	54,439,335.41	9,674,495.49
October 2027	53,262,923.56	9,574,023.87
November 2027	52,105,444.12	9,474,148.12
December 2027	50,966,572.13	9,374,863.97
January 2028	49,845,988.01	9,276,167.17
February 2028	48,743,377.48	9,178,053.48
March 2028	47,661,619.41	9,080,518.71
April 2028	46,603,472.15	8,983,558.68
May 2028	45,568,426.13	8,887,169.25
June 2028	44,555,982.64	8,791,346.28
July 2028	43,565,653.68	8,696,085.70
August 2028	42,596,961.70	8,601,383.41
September 2028	41,649,439.38	8,507,235.37
October 2028	40,722,629.41	8,413,637.57
November 2028	39,816,084.30	8,320,585.99
December 2028	38,929,366.12	8,228,076.67
January 2029	38,062,046.36	8,136,105.66
February 2029	37,213,705.66	8,044,669.03
March 2029	36,383,933.69	7,953,762.87
April 2029	35,572,328.89	7,863,383.32
May 2029	34,778,498.33	7,773,526.51
June 2029	34,002,057.49	7,684,188.62
July 2029	33,242,630.13	7,595,365.83
August 2029	32,499,848.04	7,507,054.37
September 2029	31,773,350.94	7,419,250.46
October 2029	31,062,786.28	7,331,950.38
November 2029	30,367,809.06	7,245,150.41
December 2029	29,688,081.71	7,158,846.84
January 2030	29,023,273.88	7,073,036.02
February 2030	28,373,062.34	6,987,714.29
March 2030	27,737,130.78	6,902,878.02
April 2030	27,115,169.69	6,818,523.62
May 2030	26,506,876.21	6,734,647.49
June 2030	25,911,954.00	6,651,266.69
July 2030	25,330,113.06	6,568,841.58
August 2030	24,761,069.64	6,487,361.58
September 2030	24,204,546.08	6,406,816.27
October 2030	23,660,270.69	6,327,195.29
November 2030	23,127,977.64	6,248,488.44
December 2030	22,607,406.78	6,170,685.61
January 2031	22,098,303.57	6,093,776.79
February 2031	21,600,418.97	6,017,752.09

Distribution Date	Classes KA and KF (in the aggregate)	Classes PA, PC and PZ (in the aggregate)
March 2031	\$ 21,113,509.25	\$ 5,942,601.74
April 2031	20,637,335.97	5,868,316.04
May 2031	20,171,665.78	5,794,885.44
June 2031	19,716,270.38	5,722,300.46
July 2031	19,270,926.37	5,650,551.74
August 2031	18,835,415.16	5,579,630.01
September 2031	18,409,522.88	5,509,526.10
October 2031	17,993,040.24	5,440,230.96
November 2031	17,585,762.49	5,371,735.62
December 2031	17,187,489.25	5,304,031.20
January 2032	16,798,024.50	5,237,108.95
February 2032	16,417,176.40	5,170,960.18
March 2032	16,044,757.28	5,105,576.30
April 2032	15,680,583.51	5,040,948.84
May 2032	15,324,475.39	4,977,069.39
June 2032	14,976,257.12	4,913,929.64
July 2032	14,635,756.69	4,851,521.39
August 2032	14,302,805.79	4,789,836.50
September 2032	13,977,239.75	4,728,866.95
October 2032	13,658,897.44	4,668,604.77
November 2032	13,347,621.22	4,609,042.10
December 2032	13,043,256.84	4,550,171.17
January 2033	12,745,653.40	4,491,984.29
February 2033	12,454,663.23	4,434,473.84
March 2033	12,170,141.87	4,377,632.29
April 2033	11,891,947.97	4,321,452.20
May 2033	11,619,943.23	4,265,926.21
June 2033	11,353,992.35	4,211,047.03
July 2033	11,093,962.95	4,156,807.46
August 2033	10,839,725.49	4,103,200.38
September 2033	10,591,153.27	4,050,218.72
October 2033	10,348,122.29	3,997,855.52
November 2033	10,110,511.25	3,946,103.89
December 2033	9,878,201.48	3,894,957.01
January 2034	9,651,076.86	3,844,408.12
February 2034	9,429,023.79	3,794,450.56
March 2034	9,211,931.13	3,745,077.72
April 2034	8,999,690.14	3,696,283.08
May 2034	8,792,194.45	3,648,060.18
June 2034	8,589,339.96	3,600,402.63
July 2034	8,391,024.87	3,553,304.11
August 2034	8,197,149.54	3,506,758.39
September 2034	8,007,616.51	3,460,759.27
October 2034	7,822,330.44	3,415,300.65
November 2034	7,641,198.04	3,370,376.47
December 2034	7,464,128.05	3,325,980.76
January 2035	7,291,031.19	3,282,107.61

Distribution Date	asses KA and KF n the aggregate)	Classes PA, PC and PZ (in the aggregate)
February 2035	\$ 7,121,820.10	\$ 3,238,751.17
March 2035	6,956,409.35	3,195,905.64
April 2035	6,794,715.32	3,153,565.31
May 2035	6,636,656.23	3,111,724.51
June 2035	6,482,152.07	3,070,377.64
July 2035	6,331,124.58	3,029,519.18
August 2035	6,183,497.17	2,989,143.64
September 2035	6,039,194.94	2,949,245.60
October 2035	5,898,144.60	2,909,819.71
November 2035	5,760,274.46	2,870,860.66
December 2035	5,625,514.39	2,832,363.22
January 2036	5,493,795.78	2,794,322.20
February 2036	5,365,051.50	2,756,732.48
March 2036	5,239,215.91	2,719,588.97
April 2036	5,116,224.76	2,682,886.68
May 2036	4,996,015.24	2,646,620.62
June 2036	4,878,525.86	2,610,785.91
July 2036	4,763,696.51	2,575,377.68
August 2036	4,651,468.37	2,540,391.14
September 2036	4,541,783.89	2,505,821.54
October 2036	4,434,586.79	2,471,664.17
November 2036	4,329,822.01	2,437,914.41
December 2036	4,227,435.69	2,404,567.65
January 2037	4,127,375.14	2,371,619.36
February 2037	4,029,588.84	2,339,065.03
March 2037	3,934,026.35	2,306,900.23
April 2037	3,840,638.38	2,275,120.57
May 2037	3,749,376.68	2,243,721.68
June 2037	3,660,194.06	2,212,699.28
July 2037	3,573,044.38	2,182,049.11
August 2037	3,487,882.47	2,151,766.97
September 2037	3,404,664.19	2,121,848.70
October 2037	3,323,346.32	2,092,290.18
November 2037	3,243,886.62	2,063,087.34
December 2037	3,166,243.76	2,034,236.17
January 2038	3,090,377.31	2,005,732.68
February 2038	3,016,247.73	1,977,572.93
March 2038	2,943,816.33	1,949,753.03
April 2038	2,873,045.28	1,922,269.14
May 2038	2,803,897.59	1,895,117.44
June 2038	2,736,337.05	1,868,294.18
July 2038	2,670,328.27	1,841,795.61
August 2038	2,605,836.61	1,815,618.07
September 2038	2,542,828.21	1,789,757.90
October 2038	2,481,269.94	1,764,211.51
November 2038	2,421,129.41	1,738,975.32
December 2038	2,362,374.91	1,714,045.83

Distribution Date	asses KA and KF n the aggregate)	Classes PA, PC and PZ (in the aggregate)
January 2039	\$ 2,304,975.47	\$ 1,689,419.53
February 2039	2,248,900.75	1,665,092.99
March 2039	2,194,121.12	1,641,062.79
April 2039	2,140,607.57	1,617,325.57
May 2039	2,088,331.73	1,593,877.98
June 2039	2,037,265.88	1,570,716.73
July 2039	1,987,382.88	1,547,838.56
August 2039	1,938,656.20	1,525,240.25
September 2039	1,891,059.88	1,502,918.59
October 2039	1,844,568.55	1,480,870.45
November 2039	1,799,157.38	1,459,092.69
December 2039	1,754,802.10	1,437,582.24
January 2040	1,711,478.96	1,416,336.03
February 2040	1,669,164.75	1,395,351.06
March 2040	1,627,836.76	1,374,624.33
April 2040	1,587,472.78	1,354,152.90
May 2040	1,548,051.10	1,333,933.84
June 2040	1,509,550.47	1,313,964.27
July 2040	1,471,950.12	1,294,241.34
August 2040	1,435,229.74	1,274,762.22
September 2040	1,399,369.46	1,255,524.11
October 2040	1,364,349.87	1,236,524.26
November 2040	1,330,151.95	1,217,759.93
December 2040	1,296,757.14	1,199,228.43
January 2041	1,264,147.27	1,180,927.08
February 2041	1,232,304.56	1,162,853.24
March 2041	1,201,211.65	1,145,004.30
April 2041	1,170,851.55	1,127,377.67
May 2041	1,141,207.64	1,109,970.81
June 2041	1,112,263.68	1,092,781.17
July 2041	1,084,003.79	1,075,806.27
August 2041	1,056,412.42	1,059,043.64
September 2041	1,029,474.40	1,042,490.82
October 2041	1,003,174.86	1,026,145.41
November 2041	977,499.28	1,010,005.01
December 2041	952,433.46	994,067.26
January 2042	927,963.52	978,329.83
February 2042	904,075.87	962,790.39
March 2042	880,757.24	947,446.67
April 2042	857,994.65	932,296.41
May 2042	835,775.40	917,337.37
June 2042	814,087.09	902,567.33
July 2042	792,917.56	887,984.13
August 2042	772,254.97	873,585.58
September 2042	752,087.71	859,369.56
October 2042	732,404.44	845,333.95
November 2042	713,194.06	831,476.66

Distribution Date	Classes KA and KF (in the aggregate)	Classes PA, PC and PZ (in the aggregate)
December 2042	\$ 694,445.73	\$ 817,795.62
January 2043	676,148.86	804,288.79
February 2043	658,293.07	790,954.15
March 2043	640,868.23	777,789.70
April 2043	623,864.44	764,793.46
May 2043	607,272.00	751,963.47
June 2043	591,081.45	739,297.81
July 2043	575,283.53	726,794.56
August 2043	559,869.19	714,451.83
September 2043	544,829.58	702,267.76
October 2043	530,156.04	690,240.49
November 2043	515,840.12	678,368.20
December 2043	501,873.56	666,649.07
January 2044	488,248.26	655,081.33
February 2044	474,956.33	643,663.20
March 2044	461,990.05	632,392.93
April 2044	449,341.85	621,268.81
May 2044	437,004.37	610,289.11
June 2044	424,970.38	599,452.16
July 2044	413,232.83	588,756.27
August 2044	401,784.83	578,199.80
September 2044	390,619.64	567,781.11
October 2044	379,730.66	557,498.59
November 2044	369,111.46	547,350.63
December 2044	358,755.74	537,335.67
January 2045	348,657.35	527,452.13
February 2045	338,810.28	517,698.48
March 2045	329,208.64	508,073.18
April 2045	319,846.69	498,574.73
May 2045	310,718.82	489,201.63
June 2045	301,819.53	479,952.40
July 2045	293,143.46	470,825.59
August 2045	284,685.36	461,819.75
September 2045	276,440.11	452,933.46
October 2045	268,402.70	444,165.30
November 2045	260,568.24	435,513.88
December 2045	252,931.94	426,977.81
January 2046	245,489.11	418,555.73
February 2046	238,235.20	410,246.30
March 2046	231,165.74	402,048.18
April 2046	224,276.36	393,960.05
May 2046	217,562.79	385,980.60
June 2046	211,020.86	378,108.55
July 2046	204,646.51	370,342.62
August 2046	198,435.75	362,681.55
September 2046	192,384.69	355,124.10
October 2046	186,489.52	347,669.02

Distribution Date	Classes KA and KF (in the aggregate)	Classes PA, PC and PZ (in the aggregate)
November 2046	\$ 180,746.54	\$ 340,315.11
December 2046	175,152.11	333,061.16
January 2047	169,702.69	325,905.97
February 2047	164,394.80	318,848.36
March 2047	159,225.06	311,887.19
April 2047	154,190.17	305,021.28
May 2047	149,286.88	298,249.50
June 2047	144,512.04	291,570.73
July 2047	139,862.56	284,983.86
August 2047	135,335.42	278,487.78
September 2047	130,927.67	272,081.40
October 2047	126,636.45	265,763.65
November 2047	122,458.92	259,533.47
December 2047	118,392.35	253,389.80
January 2048	114,434.04	247,331.61
February 2048	110,581.38	241,357.86
March 2048	106,831.81	235,467.54
April 2048	103,182.80	229,659.65
May 2048	99,631.93	223,933.19
June 2048	96,176.80	218,287.17
July 2048	92,815.07	212,720.64
August 2048	89,544.47	207,232.62
September 2048	86,362.77	201,822.17
October 2048	83,267.78	196,488.35
November 2048	80,257.40	191,230.23
December 2048	77,329.53	186,046.90
January 2049	74,482.15	180,937.44
February 2049	71,713.28	175,900.97
March 2049	69,020.98	170,936.59
April 2049	66,403.37	166,043.43
May 2049	63,858.59	161,220.62
June 2049	61,384.85	156,467.31
July 2049	58,980.38	151,782.64
August 2049	56,643.47	147,165.79
September 2049	54,372.43	142,615.92
October 2049	52,165.62	138,132.21
November 2049	50,021.45	133,713.86
December 2049	47,938.34	129,360.07
January 2050	45,914.77	125,070.05
February 2050	43,949.25	120,843.01
March 2050	42,040.32	116,678.18
April 2050	40,186.55	112,574.80
May 2050	38,386.56	108,532.11
June 2050	36,639.00	104,549.38
July 2050	34,942.53	100,625.84
August 2050	33,295.86	96,760.79
September 2050	31,697.73	92,953.50

Distribution Date	ses KA and KF he aggregate)	]	Classes PA, PC and PZ he aggregate)
October 2050	\$ 30,146.91	\$	89,203.25
November 2050	28,642.20		85,509.35
December 2050	27,182.41		81,871.08
January 2051	25,766.40		78,287.78
February 2051	24,393.06		74,758.74
March 2051	23,061.28		71,283.31
April 2051	21,770.00		67,860.82
May 2051	20,518.17		64,490.60
June 2051	19,304.79		61,172.01
July 2051	18,128.85		57,904.41
August 2051	16,989.39		54,687.16
September 2051	15,885.46		51,519.63
October 2051	14,816.14		48,401.20
November 2051	13,780.52		45,331.26
December 2051	12,777.73		42,309.21
January 2052	11,806.90		39,334.43
February 2052	10,867.20		36,406.34
March 2052	9,957.81		33,524.36
April 2052	9,077.94		30,687.91
May 2052	8,226.80		27,896.40
June 2052	7,403.63		25,149.28
July 2052	6,607.69		22,445.99
August 2052	5,838.25		19,785.98
September 2052	5,094.62		17,168.69
October 2052	4,376.10		14,593.59
November 2052	3,682.01		12,060.15
December 2052	3,011.71		9,567.83
January 2053	2,364.55		7,116.12
February 2053	1,739.91		4,704.49
March 2053	1,137.17		2,332.45
April 2053	555.75		0.00
May 2053 and thereafter	0.00		0.00

# **Underlying Certificates**

Ginnie	Mae	I or II	п	П
Percentage	of Class	in Trust	100%	100
Principal	Balance in	Trust	\$ 48,407,851.41	109,771,973.14
Underlying	Certificate	Factor(2)	0.95080794	0.98970608
Original Principal	Balance of	Class	\$ 50,912,334	110,913,710
	Principal	Type(1)	PT	PT
Final	Distribution	Date	March 2052	May 2053
	Interest	Type(1)	FIX	FLT
	Interest	Rate	2.50%	9
	CUSIP	Number	38383MC48	38383X4R2
		Issue Date	March 30, 2022	May 30, 2023
		Class	JT(3)	邑
		Series	2022-056	2023-076
		Issuer	Ginnie Mae	Ginnie Mae
Trust	Asset	Group	9	_

As defined under "Class Types" in Appendix I to the Base Offering Circular. Underlying Certificate Factors are as of August 2023.

MX Class.

The Interest Rate will be calculated as described under "Terms Sheet — Interest Rates" in the related Underlying Certificate Disclosure Document. 5000



\$625,434,968

**Government National Mortgage Association** 

# **GINNIE MAE**®

Guaranteed REMIC
Pass-Through Securities
and MX Securities
Ginnie Mae REMIC Trust 2023-117

OFFERING CIRCULAR SUPPLEMENT August 24, 2023

Wells Fargo Securities Mischler Financial Group