

# \$1,508,433,991 Government National Mortgage Association GINNIE MAE®

# Guaranteed REMIC Pass-Through Securities and MX Securities Ginnie Mae REMIC Trust 2024-196

#### 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 Ginnie Mae 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-10 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 December 30, 2024.

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	24141100(2)		.,,,,,,	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		24.0(1)
JD	\$ 50,000,000	5.00%	PAC/AD	FIX	38385BMX5	May 2054
JF	50,670,000	(5)	PAC/AD	FLT	38385BMY3	August 2054
JS	50,670,000	(5)	NTL(PAC/AD)	INV/IO	38385BMZ0	August 2054 August 2054
JZ	670.000	5.00	PAC/AD)	FIX/Z	38385BNA4	August 2054 August 2054
ZW	11,260,937	6.50	SUP	FIX/Z	38385BNB2	August 2054 August 2054
Security Group 2						-
FB	100,000,000	(5)	PT	FLT	38385BNC0	December 2054
SB	100,000,000	(5)	NTL(PT)	INV/IO	38385BND8	December 2054
Security Group 3						
YS	50,000,000 50,000,000	(5) (5)	PT NTL(PT)	FLT INV/IO	38385BNE6 38385BNF3	December 2054 December 2054
Security Group 4	30,000,000	(3)	INIE(I I)	1144710	30303DIVI 3	December 2004
FZ	21,094,711	(5)	SUP	FLT/Z(6)	38385BNG1	October 2064
KF	100.000.000	(5)	TAC/AD	FLT(6)	38385BNH9	October 2064 October 2064
KS	121,094,711	(5)	NTL(PT)	INV/IO	38385BNJ5	October 2064 October 2064
Security Group 5	,,,,,,,,	(-)	()			
AB	100,000,000	5.50	SEQ/AD	FIX	38385BNK2	September 2045
AC	100,000,000	5.50	SEQ/AD	FIX	38385BNL0	September 2045
AD	100,000,000	5.50	SEQ/AD	FIX	38385BNM8	September 2045
AE	100.000.000	5.50	SEQ/AD	FIX	38385BNN6	September 2045
Z	84,136,886	5.50	SEQ	FIX/Z	38385BNP1	December 2054
Security Group 6						
M	58,314,063	2.50	SEQ	FIX	38385BNQ9	December 2046
ML	37,837,242	2.50	SEQ	FIX	38385BNR7	December 2054
Security Group 7		( <u>,</u>				
HF	50,000,000 50,000,000	(5) (5)	PT NTL(PT)	FLT INV/IO	38385BNS5 38385BNT3	December 2054 December 2054
HS Security Group 8	30,000,000	(3)	NIL(FI)	1144/10	36363DIV13	December 2004
DF	40,000,000	(E)	PT	FLT	38385BNU0	December 2054
DS	40,000,000	(5) (5)	NTL(PT)	INV/IO	38385BNV8	December 2054
UF(1)	20.000,000	` '	PT	FLT	38385BNW6	December 2054
US(1)	20,000,000	(5) (5)	NTL(PT)	INV/IO	38385BNX4	December 2054
Security Group 9			, ,			
FK(1)	49,719,045	(5)	PT	FLT	38385BNY2	December 2054
Κ	20,055,000	4.00	SEQ	FIX	38385BNZ9	June 2052
LK	4,804,523	4.00	SEQ	FIX	38385BPA2	December 2054
SK	49,719,045	(5)	NTL(PT)	INV/IO	38385BPB0	December 2054
Security Group 10						
DP(1)	72,567,000	5.50	PAC	FIX	38385BPC8	September 2053
FL(1)	50,280,955	(5)	PT	FLT	38385BPD6	November 2054
LC(1)	17,371,000	5.50	SUP	FIX	38385BPE4	September 2053
SL	50,280,955	(5)	NTL(PT)	INV/IO	38385BPF1	November 2054
VD(1)	4,777,000	5.50	AD/SEQ	FIX FIX/Z	38385BPG9	November 2035
ZD(1)	5,846,910	5.50	SEQ	FIX/Z	38385BPH7	November 2054
Security Group 11 NF(1)	20 644 202	(F)	DT.		2020500 10	Fobruse 2005 4
NT(1)	32,644,390	(5)	PT NTL (PT)	FLT INV/IO	38385BPJ3 38385BPK0	February 2054
QS	32,644,390 32,644,390	(5) (5)	NTL(PT) NTL(PT)	INV/IO	38385BPL8	February 2054 February 2054
	32,044,390	(5)	NIL(FI)	INV/IO	JOSOSDELO	1 ebiliary 2004
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### J.P. Morgan

### Mischler Financial Group, Inc.

The date of this Offering Circular Supplement is December 23, 2024.

Class of REMIC Securities	Original Principal Balance(2)	Interest Rate	Principal Type(3)	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
Security Group 12						
FN	\$ 45,988,573	(5)	PT	FLT	38385BPM6	December 2054
SN	45,988,573	(5)	NTL(PT)	INV/IO	38385BPN4	December 2054
Security Group 13						
FE	100,000,000	(5)	PT	FLT	38385BPP9	January 2054
SE	100,000,000	(5)	NTL(PT)	INV/IO	38385BPQ7	January 2054
Security Group 14						
LM	14,678,675	2.50%	SEQ	FIX	38385BPR5	July 2052
MA	15,717,081	2.50	SEQ	FIX	38385BPS3	September 2044
Residual						
RR	0	0.00	NPR	NPR	38385BPT1	October 2064

- (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.
- (6) For additional discussion regarding the effect of 30-day Average SOFR on the rate of principal payments on these Securities, see "Risk Factors — The rate of principal payments on certain Group 4 classes will be sensitive to 30-day Average SOFR," "Yield Maturity and Prepayment Considerations — Securities that Receive Principal on the Basis of Schedules" and "Decrement Tables" in this Supplement.

#### **AVAILABLE INFORMATION**

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

- this Offering Circular Supplement (this "Supplement") and
- the Base Offering Circular.

The Base Offering Circular is 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.

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:** J.P. Morgan Securities LLC

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

Trustee: U.S. Bank National Association

**Tax Administrator:** The Trustee **Closing Date:** December 30, 2024

**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 January 2025.

#### **Trust Assets:**

Trust Asset Group	Trust Asset Type	Certificate Rate	Original Term To Maturity (in years)
1	Ginnie Mae II	6.500%	30
2	Ginnie Mae II	6.500%	30
3	Ginnie Mae II	6.500%	30
4	Ginnie Mae II	6.500%	40
5	Ginnie Mae II	5.500%	30
6	Ginnie Mae II	2.500%	30
7	Ginnie Mae II	6.000%	30
8	Ginnie Mae II	6.500%	30
9	Ginnie Mae II	6.000%	30
10	Ginnie Mae II	6.000%	30
11	Ginnie Mae II	7.500%	30
12	Ginnie Mae II	7.500%	30
13	Ginnie Mae II	7.000%	30
14	Ginnie Mae II	2.500%	30

**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. Except in the case of a certain MX Class in Groups 9 and 10, 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 2, 3, 5, 6, 7, 8, 9 and 12 Trust Assets<sup>(1)</sup>:

Weighted Average Remaining Term to Maturity (in months)	Weighted Average Loan Age (in months)	Weighted Average Mortgage Rate <sup>(2)</sup>
357	3	6.951%
356	2	7.009%
358	1	6.111%
324	34	2.936%
357	2	6.591%
355	4	6.815%
357	2	6.459%
355	3	7.905%
	357 356 358 324 357 355 357	Remaining Term to Maturity (in months)         Weighted Average Loan Age (in months)           357         3           356         2           358         1           324         34           357         2           355         4           357         2

<sup>(1)</sup> As of December 1, 2024.

The actual remaining terms to maturity, loan ages and Mortgage Rates of many of the Mortgage Loans underlying the Group 2, 3, 5, 6, 7, 8, 9 and 12 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 Mortgage Loans Underlying the Group 1, 4, 10, 11, 13 and 14 Trust Assets:** See Exhibit A to this Supplement for certain information regarding the characteristics of the Mortgage Loans underlying the Group 1, 4, 10, 11, 13 and 14 Trust Assets. The actual remaining terms to maturity, loan ages and Mortgage Rates of many of the Mortgage Loans underlying the Group 1, 4, 10, 11, 13 and 14 Trust Assets will differ from the weighted averages shown in Exhibit A, perhaps significantly. See "The Trust Assets — The Mortgage Loans" in this Supplement.

**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.* 

<sup>&</sup>lt;sup>(2)</sup> The Mortgage Loans underlying the Group 2, 3, 5, 6, 7, 8, 9 and 12 Trust Assets may bear interest at rates ranging from 0.25% to 1.50% per annum above the related Certificate Rate.

<sup>(3)</sup> More than 10% of the Mortgage Loans underlying the Group 6 Trust Assets may be higher balance Mortgage Loans. *See "Risk Factors" 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 — Form of Securities" 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		30-day Average SOFR for Minimum Interest Rate
Security Group 1						
JF	30-day Average SOFR + 0.90%	5.68890%	0.90%	8.00%	0	0.00%
JS	7.10% – 30-day Average SOFR	2.31110%	0.00%	7.10%	0	7.10%
Security Group 2						
FB	30-day Average SOFR + 1.25%	6.01078%	1.25%	6.50%	0	0.00%
SB	5.25% - 30-day Average SOFR	0.48922%	0.00%	5.25%	0	5.25%
Security Group 3						
YF	30-day Average SOFR + 1.20%	5.88251%	1.20%	6.50%	0	0.00%
YS	5.30% – 30-day Average SOFR	0.61749%	0.00%	5.30%	0	5.30%
Security Group 4						
FZ	30-day Average SOFR + 1.05%	5.68898%	1.05%	6.50%	0	0.00%
	30-day Average SOFR + 1.05%		1.05%	6.50%	0	0.00%
KS	5.45% – 30-day Average SOFR	0.81102%	0.00%	5.45%	0	5.45%
Security Group 7						
HF	30-day Average SOFR + 1.40%	6.00000%	1.40%	6.00%	0	0.00%
	4.60% – 30-day Average SOFR	0.00000%	0.00%	4.60%	0	4.60%
Security Group 8						
	30-day Average SOFR + 0.90%		0.90%	7.00%	0	0.00%
CS	6.10% - 30-day Average SOFR	1.50550%	0.00%	6.10%	0	6.10%
DF	30-day Average SOFR + 1.20%	5.79450%	1.20%	6.25%	0	0.00%
DS	5.05% - 30-day Average SOFR	0.45550%	0.00%	5.05%	0	5.05%
UF	30-day Average SOFR + 1.00%	5.59450%	1.00%	7.00%	0	0.00%
US	6.00% – 30-day Average SOFR	1.40550%	0.00%	6.00%	0	6.00%
Security Group 9						
FK	30-day Average SOFR + 0.90%	5.49450%	0.90%	7.00%	0	0.00%
SK	6.10% – 30-day Average SOFR	1.50550%	0.00%	6.10%	0	6.10%
Security Group 10						
FL	30-day Average SOFR + 0.90%	5.49450%	0.90%	7.00%	0	0.00%
	6.10% - 30-day Average SOFR	1.50550%	0.00%	6.10%	0	6.10%
Security Groups 9 an	d 10					
FJ	30-day Average SOFR + 0.90%	5.49450%	0.90%	7.00%	0	0.00%

Class	Interest Rate Formula(1)	Initial Interest Rate(2)	Minimum Rate	Maximum Rate	Delay (in days)	30-day Average SOFR for Minimum Interest Rate
<b>Security Group 11</b>						
NF	30-day Average SOFR + 0.85%	5.44690%	0.85%	7.50%	0	0.00%
NT	6.65% - 30-day Average SOFR	0.10000%	0.00%	0.10%	0	6.65%
QF	30-day Average SOFR + 0.95%	5.54690%	0.95%	7.50%	0	0.00%
QS	6.55% - 30-day Average SOFR	1.95310%	0.00%	6.55%	0	6.55%
<b>Security Group 12</b>						
FN	30-day Average SOFR + 0.85%	5.44757%	0.85%	7.50%	0	0.00%
SN	6.65% - 30-day Average SOFR	2.05243%	0.00%	6.65%	0	6.65%
Security Group 13						
FE	30-day Average SOFR + 0.92%	5.51757%	0.92%	7.00%	0	0.00%
SE	6.08% – 30-day Average SOFR	1.48243%	0.00%	6.08%	0	6.08%

<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.

**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, the JZ Accrual Amount and the ZW Accrual Amount will be allocated as follows:

- The JZ Accrual Amount, sequentially, to JD and JZ, in that order, until retired
- The Group 1 Principal Distribution Amount and the ZW Accrual Amount in the following order of priority:
  - 1. To JD, JF and JZ, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date, concurrently, as follows:
    - a. 50% to JF, while outstanding
    - b. 50%, sequentially, to JD and JZ, in that order, while outstanding
    - 2. To ZW, until retired
  - 3. To JD, JF and JZ, in the same manner and order of priority as described in step 1. above, but without regard to their Aggregate Scheduled Principal Balance, until retired

#### **SECURITY GROUP 2**

The Group 2 Principal Distribution Amount will be allocated to FB, until retired

#### **SECURITY GROUP 3**

The Group 3 Principal Distribution Amount will be allocated to YF, until retired

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

#### **SECURITY GROUP 4**

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

- 1. To KF, until reduced to its Scheduled Principal Balance for that Distribution Date
- 2. To FZ, until retired
- 3. To KF, without regard to its Scheduled Principal Balance, until retired

#### **SECURITY GROUP 5**

The Group 5 Principal Distribution Amount and the Z Accrual Amount will be allocated in the following order of priority:

- 1. Concurrently, to AB, AC, AD and AE, pro rata, until retired
- 2. To Z, until retired

#### **SECURITY GROUP 6**

The Group 6 Principal Distribution Amount will be allocated, sequentially, to M and ML, in that order, until retired

#### **SECURITY GROUP 7**

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

#### **SECURITY GROUP 8**

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

#### **SECURITY GROUP 9**

The Group 9 Principal Distribution Amount will be allocated, concurrently, as follows:

- 66.666662197% to FK, until retired
- 33.333337803%, sequentially, to K and LK, in that order, until retired

#### **SECURITY GROUP 10**

The Group 10 Principal Distribution Amount and the ZD Accrual Amount will be allocated as follows:

- The ZD Accrual Amount, sequentially, to VD and ZD, in that order, until retired
- 33.333333333% of the Group 10 Principal Distribution Amount to FL, until retired
- 66.666666667% of the Group 10 Principal Distribution Amount in the following order of priority:
  - 1. To DP, until reduced to its Scheduled Principal Balance for that Distribution Date
  - 2. To LC, until retired

- 3. To DP, without regard to its Scheduled Principal Balance, until retired
- 4. Sequentially, to VD and ZD, in that order, until retired

#### **SECURITY GROUP 11**

The Group 11 Principal Distribution Amount will be allocated to NF, until retired

#### **SECURITY GROUP 12**

The Group 12 Principal Distribution Amount will be allocated to FN, until retired

#### **SECURITY GROUP 13**

The Group 13 Principal Distribution Amount will be allocated to FE, until retired

#### **SECURITY GROUP 14**

The Group 14 Principal Distribution Amount will be allocated, sequentially, to MA and LM, in that order, until retired

**Scheduled Principal Balances:** The Scheduled Principal Balances or 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 or Rate:

Security Group		Structuring Ranges or Rate
	PAC Classes	
1	JD, JF and JZ (in the aggregate)	200% PSA through 300% PSA
10	DP TAC Class	150% PSA through 250% PSA
4	KF	490% 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 Balance or the outstanding principal balance of the related Trust Asset Group indicated:

Class	Original Class Notional Balance	Represents
Security Group 1		
JS	\$ 50,670,000	100% of JF (PAC/AD Class)
Security Group 2		
SB	\$100,000,000	100% of FB (PT Class)
Security Group 3		
YS	\$ 50,000,000	100% of YF (PT Class)
Security Group 4		
KS	\$121,094,711	100% of the Group 4 Trust Assets
Security Group 7		
HS	\$ 50,000,000	100% of HF (PT Class)
Security Group 8		
CS	\$ 20,000,000	100% of UF (PT Class)
DS	40,000,000	100% of DF (PT Class)
US	20,000,000	100% of UF (PT Class)
Security Group 9		
SK	\$ 49,719,045	100% of FK (PT Class)
Security Group 10		
ID	\$ 18,141,750	25% of DP (PAC Class)
SL	50,280,955	100% of FL (PT Class)
Security Group 11		
NT	\$ 32,644,390	100% of NF (PT Class)
QS	32,644,390	100% of NF (PT Class)
Security Group 12		
SN	\$ 45,988,573	100% of FN (PT Class)
Security Group 13		
SE	\$100,000,000	100% of FE (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 rate of principal payments on certain group 4 securities will be sensitive to 30-day Average SOFR. The rate of principal payments on the group 4 accrual class that is also a floating rate class, and the rate of principal payments on its related accretion directed class, will depend in part on the rate at which interest accrues on such accrual class, which in turn will depend on the level of 30-day Average SOFR. In particular, during periods when the level of 30-day Average SOFR is lower than expected, the principal balance of such accrual and accretion directed

classes will be paid more slowly than would otherwise be the case, and their weighted average lives may be extended, perhaps significantly.

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 and TAC 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 and TAC classes for that distribution date, this excess will be distributed to the related support class.

Up to 10% of the mortgage loans underlying the group 1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12 and 13 trust assets and up to 100% of the mortgage loans underlying the group 6 and 14 trust assets may be higher 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, 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 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 will evidence, directly or indirectly, Ginnie Mae Certificates.

#### The Trust MBS

The Trust Assets 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 Mortgage Loans

The Mortgage Loans underlying the Group 2, 3, 5, 6, 7, 8, 9 and 12 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 2, 3, 5, 6, 7, 8, 9 and 12 Trust Assets" and the general characteristics described in the Base Offering Circular. The Mortgage Loans underlying the Group 1, 4, 10, 11, 13 and 14 Trust Assets are expected to have, on a weighted average basis, the characteristics set forth in Exhibit A to this Supplement under "Characteristics of the Mortgage Loans Underlying the Group 1, 4, 10, 11, 13 and 14 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	From the 20th day of the month preceding the month of the related Distribution
Inverse Floating	Date through the 19th day of the month of that Distribution Date
Rate Classes	

#### 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 the 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.

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 FZ, JZ, Z, ZD and ZW 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 may 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 all proceeds and any other amounts 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 or Classes shown on Schedule I to this Supplement. Similarly, all or a portion of the related MX Class or Classes may be exchanged for proportionate interests in the related Class or Classes of REMIC Securities and, in the case of Combination 3, other related MX Classes. 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.

In the case of Combination 3, the related REMIC Securities may be exchanged for proportionate interests in various subcombinations of MX Classes. Similarly, all or a portion of these MX Classes may be exchanged for proportionate interests in the related REMIC Securities or in other subcombinations of the related MX Classes. Each subcombination 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. See the example under "Description of the Securities — Modification and Exchange" in the Base Offering Circular.

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 and 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, MA 02110, Attention: Ginnie Mae REMIC Program Agency Group 2024-196. 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  $\frac{1}{32}$  of 1% of the outstanding principal balance of the Securities surrendered for exchange (but not less than \$2,000 or more than \$25,000). 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.

In addition, changes in 30-day Average SOFR will affect the rate of principal payments on Classes FZ and KF. Investors in these Securities are urged to review the discussion under "Risk Factors — The rate of principal payments on certain group 4 classes will be sensitive to 30-day Average SOFR," "Yield, Maturity and Prepayment Considerations — Securities that Receive Principal on the Basis of Schedules" and "— Decrement Tables" in this Supplement.

#### **Accretion Directed Classes**

Classes AB, AC, AD, AE, JD, JF, JZ, KF and VD are Accretion Directed Classes. The related Accrual Amounts will be applied to making principal distributions on those Classes as described in this Supplement. Class JS is a Notional Class whose Class Notional Balance is determined by reference to the Class Principal Balance of the related Accretion Directed Class shown under "Terms Sheet — Notional Classes" in this Supplement.

Each of the Accretion Directed Classes (other than Class VD) 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 VD 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 constant prepayment rate significantly higher than 0% PSA, except within any applicable Effective Range.

The Accretion Directed Classes are entitled to principal payments in an amount equal to interest accrued on the related Accrual Classes. The Weighted Average Life of Class VD cannot exceed its Weighted Average Life as shown in the following table under any constant 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 VD 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 VD 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) <sup>(1)</sup>	Final Distribution Date	Prepayment Rate at or below
10	VD	6.0	November 2035	317% PSA

<sup>(1)</sup> The maximum Weighted Average Life for the Class shown in this table 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 VD, 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 and TAC Class will receive principal payments in accordance with a schedule calculated on the basis of, among other things, a Structuring Range or Rate. 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 and, in the case of Class KF, on the level of 30-day Average SOFR for each accrual period.

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

Security Group		Initial Effective Ranges or Rate
	PAC Classes	
1	JD, JF and JZ (in the aggregate)	200% PSA through 300% PSA
10	DP	150% PSA through 250% PSA
	TAC Class	
4	KF	490% PSA

- The principal payment stability of the PAC Classes will be supported by the related Support Class.
- The principal payment stability of the TAC Class 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 or Rate 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 or Rate. If the initial Effective Ranges or Rate were calculated using the actual characteristics of the related Mortgage Loans, the initial Effective Ranges or Rate could differ from those shown in the above table, or an initial Effective Rate might not exist. Therefore, even if the Mortgage Loans were to prepay at a constant rate within

the initial Effective Range or at the initial Effective Rate shown for any Class in the above table, that Class could fail to receive Scheduled Payments.

It is not likely that 30-day Average SOFR will remain at the constant level set forth in the modeling assumptions for Class FZ, which was used to determine the Initial Effective Rate for Class KF. If 30-day Average SOFR increases significantly above that level, the Effective Rate for Class KF may change or cease to exist and its Weighted Average Life may be extended, perhaps significantly.

Moreover, the related Mortgage Loans will not prepay at any *constant* rate. Non-constant prepayment rates can cause any PAC or TAC Class not to receive Scheduled Payments, even if prepayment rates remain within the initial Effective Range (or if prepayment rates average the Effective Rate) for that Class. Further, the Effective Range for any PAC Class can narrow, shift over time or cease to exist, and the Effective Rate for any TAC Class can change 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 or Rate for any PAC or TAC Class, the amount available to pay principal on the Securities may be insufficient to produce Scheduled Payments on such related PAC or TAC 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 or Rate for any PAC or TAC Class, its supporting Class may be retired earlier than that PAC or TAC 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 following assumptions (the "Modeling Assumptions"), among others:

1. The Mortgage Loans underlying the Group 2, 3, 5, 6, 7, 8, 9 and 12 Trust Assets have the assumed characteristics shown under "Assumed Characteristics of the Mortgage Loans Underlying the Group 2, 3, 5, 6, 7, 8, 9 and 12 Trust Assets" in the Terms Sheet and the Mortgage Loans underlying the Group 1, 4, 10, 11, 13 and 14 Trust Assets have the characteristics shown under "Characteristics of the Mortgage Loans Underlying the Group 1, 4, 10, 11, 13 and 14 Trust Assets" in Exhibit A, except in the case of information set forth under the 0% PSA Prepayment Assumption Rate, for which each Mortgage Loan underlying a Group 2, 3, 5, 6, 7, 8, 9 or 12 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 January 2025.
  - 4. A termination of the Trust or any Underlying Trust does not occur.
  - 5. The Closing Date for the Securities is December 30, 2024.
- 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. Each Class is held from the Closing Date and is not exchanged in whole or in part.
- 8. The Interest Rate applicable to Class FZ for each Accrual Period is based on a constant 30-day Average SOFR level of 4.63898%, except with respect to the decrement tables.

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 and, in the case of Classes FZ and KF, under various assumed constant levels of 30-day Average SOFR. 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. In addition, the Weighted Average Lives of Classes FZ and KF are likely to vary due to differences between actual 30-day Average SOFR and the assumed constant levels of 30-day Average SOFR.

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

Security Group 1 PSA Prepayment Assumption Rates

		(	Class JI	)			Class	es JF a	nd JS		_	(	Class JZ	:			(	lass ZW	7	
Distribution Date	0%	200%	250%	300%	500%	0%	200%	250%	300%	500%	0%	200%	250%	300%	500%	0%	200%	250%	300%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
December 2025	98	93	93	93	93	98	93	93	93	93	105	105	105	105	105	107	107	96	86	44
December 2026	96	82	82	82	75	96	82	82	82	75	110	110	110	110	110	114	114	84	54	0
December 2027	94	68	68	68	51	94	69	69	69	52	116	116	116	116	116	121	121	71	22	0
December 2028	91	56	56	56	35	91	57	57	57	36	122	122	122	122	122	130	130	65	6	0
December 2029	88	46	46	46	23	89	47	47	47	25	128	128	128	128	128	138	138	65	0	0
December 2030	86	36	36	36	16	86	38	38	38	17	135	135	135	135	135	148	144	67	0	0
December 2031	83	29	29	29	10	83	30	30	30	12	142	142	142	142	142	157	145	66	0	0
December 2032	79	23	23	23	6	80	24	24	24	8	149	149	149	149	149	168	141	63	0	0
December 2033	76	18	18	18	4	77	20	20	20	6	157	157	157	157	157	179	134	59	0	0
December 2034	72	14	14	14	2	73	16	16	16	4	165	165	165	165	165	191	126	54	0	0
December 2035	68	10	10	10	0	70	13	13	13	3	173	173	173	173	173	204	116	49	0	0
December 2036	64	8	8	8	0	66	10	10	10	2	182	182	182	182	133	218	106	44	0	0
December 2037	59	5	5	5	0	61	8	8	8	1	191	191	191	191	90	232	96	39	0	0
December 2038	55	4	4	4	0	57	6	6	6	1	201	201	201	201	61	248	86	34	0	0
December 2039	49	2	2	2	0	52	5	5	5	1	211	211	211	211	41	264	76	29	0	0
December 2040	44	1	1	1	0	46	4	4	4	0	222	222	222	222	28	282	67	25	0	0
December 2041	38	0	0	0	0	41	3	3	3	0	234	231	231	231	18	301	58	21	0	0
December 2042	32	0	0	0	0	35	2	2	2	0	246	180	180	180	12	321	50	18	0	0
December 2043	25	0	0	0	0	28	2	2	2	0	258	139	139	139	8	343	43	15	0	0
December 2044	18	0	0	0	0	21	1	1	1	0	271	106	106	106	5	366	36	12	0	0
December 2045	10	0	0	0	0	14	1	1	1	0	285	80	80	80	3	390	30	10	0	0
December 2046	2	0	0	0	0	6	1	1	1	0	300	60	60	60	2	416	24	8	0	0
December 2047	0	0	0	0	0	1	1	1	1	0	44	44	44	44	1	412	20	6	0	0
December 2048	0	0	0	0	0	0	0	0	0	0	31	31	31	31	1	361	15	5	0	0
December 2049	0	0	0	0	0	0	0	0	0	0	22	22	22	22	0	306	12	4	0	0
December 2050	0	0	0	0	0	0	0	0	0	0	14	14	14	14	0	246	8	3	0	0
December 2051	0	0	0	0	0	0	0	0	0	0	9	9	9	9	0	182	6	2	0	0
December 2052	0	0	0	0	0	0	0	0	0	0	4	4	4	4	0	113	3	1	0	0
December 2053	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	39	1	0	0	0
December 2054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average																				
Life (years)	13.8	5.5	5.5	5.5	3.7	14.2	5.8	5.8	5.8	3.9	22.8	20.5	20.5	20.5	13.8	26.3	16.1	10.5	2.2	0.9

Security Group 2 PSA Prepayment Assumption Rates

		Cla	asses FB and	SB	
Distribution Date	0%	100%	395%	600%	800%
Initial Percent	100	100	100	100	100
December 2025	99	97	91	88	84
December 2026	98	92	75	64	54
December 2027	97	85	57	41	28
December 2028	96	79	43	26	14
December 2029	95	73	32	16	7
December 2030	94	68	24	10	4
December 2031	92	63	18	6	2
December 2032	91	58	14	4	1
December 2033	89	53	10	3	1
December 2034	88	49	8	2	0
December 2035	86	45	6	1	0
December 2036	84	41	4	1	0
December 2037	82	37	3	0	0
December 2038	79	34	2	0	0
December 2039	77	31	2	0	0
December 2040	74	28	1	0	0
December 2041	71	25	1	0	0
December 2042	68	22	1	0	0
December 2043	64	20	0	0	0
December 2044	60	17	0	0	0
December 2045	56	15	0	0	0
December 2046	52	13	0	0	0
December 2047	47	11	0	0	0
December 2048	42	9	0	0	0
December 2049	36	7	0	0	0
December 2050	30	6	0	0	0
December 2051	23	4	0	0	0
December 2052	16	2	0	0	0
December 2053	8	1	0	0	0
December 2054	0	0	0	0	0
Weighted Average Life (years)	20.5	11.4	4.4	3.1	2.5

Security Group 3 PSA Prepayment Assumption Rates

			Classes Y	T and YS		
Distribution Date	0%	100%	250%	403%	650%	900%
Initial Percent	100	100	100	100	100	100
December 2025	99	97	95	92	88	84
December 2026	98	92	84	76	64	52
December 2027	97	86	71	57	39	24
December 2028	96	80	59	43	23	11
December 2029	95	74	50	32	14	5
December 2030	94	68	42	24	8	2
December 2031	92	63	35	18	5	1
December 2032	91	58	29	13	3	0
December 2033	89	53	24	10	2	0
December 2034	88	49	20	7	1	0
December 2035	86	45	17	5	1	0
December 2036	84	41	14	4	0	0
December 2037	82	38	11	3	0	0
December 2038	79	34	9	2	0	0
December 2039	77	31	8	2	0	0
December 2040	74	28	6	1	0	0
December 2041	71	25	5	1	0	0
December 2042	68	22	4	1	0	0
December 2043	64	20	3	0	0	0
December 2044	60	17	3	0	0	0
December 2045	56	15	2	0	0	0
December 2046	52	13	2	0	0	0
December 2047	47	11	1	0	0	0
December 2048	42	9	1	0	0	0
December 2049	36	7	1	0	0	0
December 2050	30	6	0	0	0	0
December 2051	23	4	0	0	0	0
December 2052	16	2	0	0	0	0
December 2053	8	1	0	0	0	0
December 2054	0	0	0	0	0	0
Weighted Average						
Life (years)	20.5	11.4	6.5	4.4	3.0	2.3

Security Group 4
PSA Prepayment Assumption Rates

•	3.	.63898%		ss FZ ay Ave	rage SC	OFR	Class FZ 4.63898% 30-day Average SOFR 0% 100% 300% 544% 800% 1,100%						5	.04449		ss FZ ay Ave	rage S	OFR		5.4500	00% and	ss FZ d abov ge SOF		ıy
Distribution Date	0%	100%	300%	544%	800%	1,100%	0%	100%	300%	544%	800%	1,100%	0%	100%	300%	544%	800%	1,100%	0%	100%	300%	544%	800%	1,100%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
December 2025	105	105	105	99	69	33	106	106	106	99	69	33	106	106	106	99	69	33	107	107	107	99	69	33
December 2026	110	110	110	95	18	0	112	112	112	95	18	0	113	113	113	95	18	0	114	114	114	95	18	0
December 2027	115	115	115	94	0	0	119	119	119	94	0	0	120	120	120	94	0	0	121	121	121	94	0	0
December 2028	121	121	121	99	Ő	0	125	125	125	99	Õ	0	127	127	127	100	0	0	130		130	100	0	0
December 2029	126	126	126	103	Ő	Õ	133	133	133	105	Õ	Õ	135	135	135	106	0	Õ	138		138	106	Ŏ	Õ
December 2030	133	133	133	77	Ő	0	141	141	141	77	Õ	0	144	144	144	77	0	0	147	147	147	77	0	0
December 2031	139	139	139	52	Ŏ	Ő	149	149	149	52	Ő	ő	153	153	153	52	Ő	0	157	157	157	52	0	Ő
	146		135	34	ŏ	0	157	157	135	34	ő	0	163	163	135	34	0	ő	168		135	34	0	ő
December 2033	153		110	23	0	ő	167	167	110	23	Ő	ő	173	173	110	23	0	Ő	179		110	23	Ő	Ő
December 2034	160	160	89	15	0	0	176	176	89	15	ő	0	184	184	89	15	0	0	191	191	89	15	0	ő
December 2035	167	167	72	10	0	ő	187	187	72	10	0	0	195	195	72	10	0	0	204	204	72	10	0	ő
December 2036		175	59	7	0	0	198	198	59	7	0	0	207	207	59	7	0	0	218		59	7	0	0
December 2037	184	184	48	5	0	0	209	209	48	5	0	0	220	220	48	5	0	0	232		48	5	0	0
December 2038	193	193	38	3	0	0	221	221	38	3	0	0	234	228	38	3	0	0	248		38	3	0	ő
December 2039	202	202	31	2	0	0	234	211	31	2	0	0	249	211	31	2	0	0	264		31	2	0	0
December 2040	212	195	25	1	0	0	248	195	25	1	0	0	264	195	25	1	0	0	282		25	1	0	0
December 2041	222	180	20	1	0	0	262	180	20	1	0	0	281	180	20	1	0	0	301	180	20	1	0	0
December 2042	232	166	16	1	0	0	278	166	16	1	0	0	299	166	16	1	0	0	321	166	16	1	0	0
December 2043	244	153	13	0	0	0	294	153	13	0	0	0	317	153	13	0	0	0	342		13	0	0	0
December 2044	255	141	10	0	0	0	311	141	10	0	0	0	337	141	10	0	0	0	365		10	0	0	0
December 2045	267	129	8	0	0	0	329	129	8	0	0	0	358	129	8	0	0	0	390		8	0	0	0
December 2046	280	118	7	0	0	0	349	118	7	0	0	0	381	118	7	0	0	0	416		7	0	0	0
December 2047	294	108	5	0	0	0		108		0	0	0	405	108	5	0	0	0	421	108	5	0	0	0
December 2048	308	98	4	0	0	0	369 390	98	5 4	0	0	0	407	98	4	0	0	0	407	98	4	0	0	0
					0	0				0	0	0				0	0					0	0	0
December 2049	322	89 80	3	0	0		393 377	89 80	3		0		393 377	89 80	3	0	0	0	393 377	89 80	3	0	0	
December 2050	338		3			0			3	0		0			3	-		0			3	-		0
December 2051	354	72	2	0	0	0	359	72	2	0	0	0	359	72	2	0	0	0	359	72	2	0	0	0
December 2052	341	64	2	0	0	0	341	64	2	0	0	0	341	64	2	0	0	0	341	64	2	0	0	0
December 2053	321	57	1	0	0	0	321	57	1	0	0	0	321	57	1	0	0	0	321	57	1	0	0	0
December 2054	300	50	1	0	0	0	300	50	1	0	0	0	300	50	1	0	0	0	300	50	1	0	0	0
December 2055	278	43	1	0	0	0	278	43	1	0	0	0	278	43	1	0	0	0	278	43	1	0	0	0
December 2056	253	37	1	0	0	0	253	37	1	0	0	0	253	37	1	0	0	0	253	37	1	0	0	0
December 2057	227	31	0	0	0	0	227	31	0	0	0	0	227	31	0	0	0	0	227	31	0	0	0	0
December 2058	199	26	0	0	0	0	199	26	0	0	0	0	199	26	0	0	0	0	199	26	0	0	0	0
December 2059	169	21	0	0	0	0	169	21	0	0	0	0	169	21	0	0	0	0	169	21	0	0	0	0
December 2060	137	16	0	0	0	0	137	16	0	0	0	0	137	16	0	0	0	0	137	16	0	0	0	0
December 2061	103	11	0	0	0	0	103	11	0	0	0	0	103	11	0	0	0	0	103	11	0	0	0	0
December 2062	66	7	0	0	0	0	66	7	0	0	0	0	66	7	0	0	0	0	66		0	0	0	0
December 2063	26	2	0	0	0	0	26	2	0	0	0	0	26	2	0	0	0	0	26	2	0	0	0	0
December 2064	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average														_										
Life (years)	34.3	24.7	12.4	7.3	1.4	0.8	33.4	23.9	12.2	7.3	1.4	0.8	33.0	23.6	12.1	7.3	1.4	0.8	32.7	23.3	12.0	7.3	1.4	0.8

Security Group 4
PSA Prepayment Assumption Rates

•	Class KF 3.63898% 30-day Average SOFR 4.63898% 30-day Average SOFR										OFR	5.	.044499		ss KF ay Ave	rage S0	OFR		5.4500	Clas 00% and Averaş			ıy	
Distribution Date	0%	100%	300%	544%	800%	1,100%	0%	100%	300%	544%	800%	1,100%	0%	100%	300%	544%	800%	1,100%	0%	100%	300%	544%	800%	1,100%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
December 2025	98	96	91	86	86	86	98	96	91	86	86	86	98	96	91	86	86	86	98	96	91	86	86	86
December 2026	97	89	74	61	61	47	96	89	74	61	61	47	96	88	74	61	61	47	96	88	74	61	61	47
December 2027	95	81	55	34	34	16	94	80	55	34	34	16	94	80	54	34	34	16	94	79	54	34	34	16
December 2028	93	73	39	16	17	5	92	72	38	15	17	5	92	71	38	15	17	5	91	71	38	15	17	5
December 2029	91	65	26	3	9	2	90	64	25	2	9	2	89	63	24	2	9	2	89	62	24	2	9	$\tilde{2}$
December 2030	89	58	15	0	5	1	87	56	13	0	5	1	87	55	13	0	5	1	86	54	12	0	5	1
December 2031	87	50	6	0	2	0	85	48	4	0	2	0	84	47	3	0	2	0	83	47	2	0	2	0
December 2032	84	44	0	ő	- ī	ő	82	41	0	ő	1	ő	81	40	ő	ő	ĩ	ő	80	39	0	ő	1	ő
December 2033	82	37	0	0	1	ő	79	34	ő	ő	1	0	78	33	ő	0	1	0	76	31	0	0	1	0
December 2034	79	31	0	0	0	0	76	27	0	Ő	0	0	74	26	0	0	0	0	73	24	0	0	0	0
December 2035	76	25	0	0	0	0	72	21	0	0	0	0	71	19	0	0	0	0	69	17	0	0	0	0
December 2036	74	19	0	0	0	0	69	14	0	0	0	0	67	12	0	0	0	0	65	10	0	0	0	0
December 2037	70	13	0	0	0	0	65	8	0	0	0	0	63	5	0	0	0	0	60	3	0	0	0	0
December 2038	67	7	0	0	0	0	61	1	0	0	0	0	58	ó	0	0	0	0	55	0	ő	0	0	0
December 2039	64	2	0	0	0	0	57	0	0	0	0	0	54	0	0	0	0	0	50	0	0	0	0	0
December 2040	60	0	0	0	0	0	52	0	0	0	0	0	49	0	0	0	0	0	45	0	0	0	0	0
December 2041	56	0	0	0	0	0	47	0	0	0	0	0	43	0	0	0	0	0	39	0	0	0	0	0
December 2042	52	0	0	0	0	0	42	0	0	0	0	0	38	0	0	0	0	0	33	0	0	0	0	0
December 2043	47	0	0	0	0	0	37	0	0	0	0	0	32	0	0	0	0	0	26	0	0	0	0	0
December 2044	43	0	0	0	0	0	31	0	0	0	0	0	25	0	0	0	0	0	19	0	0	0	0	0
December 2045	38	0	0	0	0	0	25	0	0	0	0	0	19	0	0	0	0	0	12	0	0	0	0	0
December 2046	33	0	0	0	0	0	18	0	0	0	0	0	11	0	0	0	0	0	4	0	0	0	0	0
December 2047	27	0	0	0	0	0	11	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0
December 2048	21	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
December 2049	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
December 2050	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
December 2051	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
December 2052	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
December 2053	0	0	0	0	0	0	0	0	0	0	0	0	0	ő	0	0	0	0	0	0	ő	0	0	0
December 2054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
December 2055	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
December 2056	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
December 2057	0	0	0	0	0	ő	0	0	ő	ő	0	0	0	0	ő	0	ő	0	0	0	0	ő	0	0
December 2058	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
December 2059	0	0	0	0	0	0	0	0	0	0	0	0	0	Ö	0	0	0	0	0	0	ő	0	0	0
December 2060	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
December 2061	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
December 2062	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
December 2063	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
December 2064	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average	U	U	U	U	U	0	U	U	U	U	U	U	U	U	U	U	U	0	0	U	U	U	U	U
Life (years)	17.0	74	36	2.5	2.7	2.1	15.2	7.0	3.5	2.5	2.7	2.1	14.6	6.9	3.5	2.5	2.7	2.1	13.9	6.7	3.4	2.5	2.7	2.1
Life (years)	17.0	/1	5.0	4.)	4./	4.1	1).4	7.0	5.5	4.)	4./	4.1	17.0	0.7	5.5	4.)	4./	4.1	13.7	0./	J±	4.)	4./	4.1

Security Group 4
PSA Prepayment Assumption Rates

			Clas	ss KS		
Distribution Date	0%	100%	300%	544%	800%	1,100%
Initial Percent	100	100	100	100	100	100
December 2025	100	97	93	88	83	77
December 2026	99	93	81	67	53	39
December 2027	98	87	66	45	28	13
December 2028	98	81	54	30	14	5
December 2029	97	76	44	20	7	2
December 2030	97	71	36	13	4	1
December 2031	96	66	29	9	2	0
December 2032	95	61	24	6	1	0
December 2033	94	57	19	4	1	0
December 2034	93	53	16	3	0	0
December 2035	92	50	13	2	0	0
December 2036	91	46	10	1	0	0
December 2037	90	43	8	1	0	0
December 2038	89	40	7	1	0	0
December 2039	88	37	5	0	0	0
December 2040	86	34	4	0	0	0
December 2041	85	31	4	0	0	0
December 2042	83	29	3	0	0	0
December 2043	82	27	2	0	0	0
December 2044	80	25	2	0	0	0
December 2045	78	22	1	0	0	0
December 2046	76	21	1	0	0	0
December 2047	73	19	1	0	0	0
December 2048	71	17	1	0	0	0
December 2049	68	15	1	0	0	0
December 2050	66	14	0	Ö	Ö	Ö
December 2051	63	12	0	0	0	0
December 2052	59	11	0	0	0	0
December 2053	56	10	Ö	Ö	Ö	Ö
December 2054	52	9	0	0	0	0
December 2055	48	8	0	0	0	0
December 2056	44	6	Ö	Ö	Ö	Ö
December 2057	40	5	0	0	0	0
December 2058	35	4	Õ	Õ	Õ	0
December 2059	29	4	Ö	Ö	Ö	Ö
December 2060	24	3	0	0	0	0
December 2061	18	2	ŏ	ŏ	ŏ	ŏ
December 2062	11	$\bar{1}$	ŏ	ŏ	ŏ	ŏ
December 2063	5	0	ŏ	ŏ	ŏ	ŏ
December 2064	ó	ŏ	ŏ	ő	Ö	Ŏ
Weighted Average	V	0	~	0	· ·	
Life (years)	28.0	13.4	5.8	3.4	2.4	1.9
		-5	2.0	J		/

Security Group 5 PSA Prepayment Assumption Rates

		Classes	AB, AC, AI	and AE				Class Z		
Distribution Date	0%	100%	246%	350%	500%	0%	100%	246%	350%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100
December 2025	98	96	93	91	88	106	106	106	106	106
December 2026	95	88	79	73	64	112	112	112	112	112
December 2027	92	79	62	51	36	118	118	118	118	118
December 2028	89	70	47	33	16	125	125	125	125	125
December 2029	86	61	33	18	1	132	132	132	132	132
December 2030	83	53	22	6	0	139	139	139	139	95
December 2031	79	45	12	0	0	147	147	147	131	65
December 2032	76	37	3	0	0	155	155	155	101	45
December 2033	72	29	0	0	0	164	164	141	78	31
December 2034	67	22	0	0	0	173	173	117	60	21
December 2035	63	15	0	0	0	183	183	97	46	14
December 2036	58	8	0	0	0	193	193	81	35	10
December 2037	53	2	0	0	0	204	204	67	27	7
December 2038	48	0	0	0	0	216	192	55	21	4
December 2039	42	0	0	0	0	228	173	45	16	3
December 2040	35	0	0	0	0	241	156	37	12	2
December 2041	29	0	0	0	0	254	140	30	9	1
December 2042	22	0	0	0	0	269	124	24	7	1
December 2043	14	0	0	0	0	284	110	19	5	1
December 2044	6	0	0	0	0	300	96	15	4	0
December 2045	0	0	0	0	0	306	84	12	3	0
December 2046	0	0	0	0	0	281	72	9	2	0
December 2047	0	0	0	0	0	254	61	7	1	0
December 2048	0	0	0	0	0	225	50	5	1	0
December 2049	0	0	0	0	0	193	40	4	1	0
December 2050	0	0	0	0	0	160	31	3	0	0
December 2051	0	0	0	0	0	124	22	2	0	0
December 2052	0	0	0	0	0	86	14	1	0	0
December 2053	0	0	0	0	0	44	6	0	0	0
December 2054	0	0	0	0	0	0	0	0	0	0
Weighted Average										
Life (years)	12.6	6.6	4.0	3.2	2.6	25.9	20.1	13.4	10.4	7.8

Security Group 6 PSA Prepayment Assumption Rates

			Class M					Class ML		
Distribution Date	0%	50%	97%	250%	400%	0%	50%	97%	250%	400%
Initial Percent	100	100	100	100	100	100	100	100	100	100
December 2025	97	91	87	72	57	100	100	100	100	100
December 2026	94	82	74	48	26	100	100	100	100	100
December 2027	91	74	62	29	2	100	100	100	100	100
December 2028	88	66	51	12	0	100	100	100	100	76
December 2029	84	58	41	0	0	100	100	100	98	56
December 2030	81	51	32	0	0	100	100	100	81	41
December 2031	77	43	23	0	0	100	100	100	66	30
December 2032	73	36	15	0	0	100	100	100	54	22
December 2033	69	29	7	0	0	100	100	100	44	16
December 2034	65	22	0	0	0	100	100	100	36	12
December 2035	61	16	0	0	0	100	100	90	29	9
December 2036	56	10	0	0	0	100	100	81	24	6
December 2037	51	3	0	0	0	100	100	72	19	4
December 2038	47	0	0	0	0	100	96	64	15	3
December 2039	42	0	0	0	0	100	87	56	12	2
December 2040	36	0	0	0	0	100	79	49	10	2
December 2041	31	0	0	0	0	100	70	43	7	1
December 2042	25	0	0	0	0	100	62	37	6	1
December 2043	19	0	0	0	0	100	54	31	4	1
December 2044	13	0	0	0	0	100	47	26	3	0
December 2045	6	0	0	0	0	100	40	21	2	0
December 2046	0	0	0	0	0	100	32	17	2	0
December 2047	0	0	0	0	0	89	26	13	1	0
December 2048	0	0	0	0	0	78	19	9	1	0
December 2049	0	0	0	0	0	66	12	6	0	0
December 2050	0	0	0	0	0	54	6	3	0	0
December 2051	0	0	0	0	0	41	0	0	0	0
December 2052	0	0	0	0	0	28	0	0	0	0
December 2053	0	0	0	0	0	14	0	0	0	0
December 2054	0	0	0	0	0	0	0	0	0	0
Weighted Average										
Life (years)	12.6	6.3	4.4	2.1	1.3	26.2	19.8	16.7	9.7	6.3

Security Group 7 PSA Prepayment Assumption Rates

		Cla	sses HF and	HS	
Distribution Date	0%	100%	278%	450%	600%
Initial Percent	100	100	100	100	100
December 2025	99	97	94	91	89
December 2026	98	92	82	73	66
December 2027	97	86	68	53	42
December 2028	96	79	56	38	27
December 2029	95	73	46	28	17
December 2030	93	68	38	20	11
December 2031	92	63	31	14	7
December 2032	90	58	25	10	4
December 2033	89	53	20	7	3
December 2034	87	49	17	5	2
December 2035	85	45	14	4	1
December 2036	83	41	11	3	1
December 2037	80	37	9	2	0
December 2038	78	34	7	1	0
December 2039	75	31	6	1	0
December 2040	73	28	5	1	0
December 2041	70	25	4	0	0
December 2042	66	22	3	0	0
December 2043	63	19	2	0	0
December 2044	59	17	2	0	0
December 2045	55	15	1	0	0
December 2046	50	13	1	0	0
December 2047	46	11	1	0	0
December 2048	40	9	1	0	0
December 2049	35	7	0	0	0
December 2050	29	5	0	0	0
December 2051	22	4	0	0	0
December 2052	16	2	0	0	0
December 2053	8	1	0	0	0
December 2054	0	0	0	0	0
Weighted Average					
Life (years)	20.2	11.3	5.9	4.0	3.2

Security Group 8 PSA Prepayment Assumption Rates

		Class	ooo CE CC T	E De Hean	A TIE	
			ses CF, CS, D			
Distribution Date	0%	100%	250%	445%	650%	900%
Initial Percent	100	100	100	100	100	100
December 2025	99	97	94	90	85	80
December 2026	98	91	82	71	60	47
December 2027	97	85	69	51	36	21
December 2028	96	79	58	37	22	10
December 2029	95	73	48	27	13	4
December 2030	94	67	40	19	8	2
December 2031	92	62	34	14	5	1
December 2032	91	57	28	10	3	0
December 2033	89	53	23	7	2	0
December 2034	88	48	19	5	1	0
December 2035	86	44	16	4	1	0
December 2036	84	41	13	3	0	0
December 2037	82	37	11	2	0	0
December 2038	79	34	9	1	0	0
December 2039	77	30	7	1	0	0
December 2040	74	27	6	1	0	0
December 2041	71	25	5	0	0	0
December 2042	68	22	4	0	0	0
December 2043	64	19	3	0	0	0
December 2044	60	17	2	0	0	0
December 2045	56	15	2	0	0	0
December 2046	52	13	2	0	0	0
December 2047	47	11	1	0	0	0
December 2048	42	9	1	0	0	0
December 2049	36	7	1	0	0	0
December 2050	30	5	0	0	0	0
December 2051	23	4	0	0	0	0
December 2052	16	2	0	0	0	0
December 2053	8	1	0	0	0	0
December 2054	0	0	0	0	0	0
Weighted Average						
Life (years)	20.5	11.3	6.3	3.9	2.9	2.2

Security Group 9 PSA Prepayment Assumption Rates

		Class	es FK ar	d SK				Class K					Class LK		
Distribution Date	0%	100%	200%	300%	400%	0%	100%	200%	300%	400%	0%	100%	200%	300%	400%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
December 2025	99	97	95	94	92	99	96	94	92	90	100	100	100	100	100
December 2026	98	92	87	81	76	98	90	83	77	70	100	100	100	100	100
December 2027	97	85	75	66	57	96	82	69	58	47	100	100	100	100	100
December 2028	96	79	65	53	43	95	74	57	42	29	100	100	100	100	100
December 2029	95	73	57	43	32	93	67	46	29	16	100	100	100	100	100
December 2030	93	68	49	35	24	92	60	37	19	6	100	100	100	100	100
December 2031	92	62	42	28	18	90	53	28	11	0	100	100	100	100	93
December 2032	90	58	36	22	13	88	47	21	4	0	100	100	100	100	69
December 2033	89	53	31	18	10	86	42	15	0	0	100	100	100	93	51
December 2034	87	49	27	14	7	84	36	9	0	0	100	100	100	75	38
December 2035	85	44	23	12	5	81	31	5	0	0	100	100	100	60	28
December 2036	83	41	20	9	4	79	26	1	0	0	100	100	100	47	21
December 2037	80	37	17	7	3	76	22	0	0	0	100	100	87	38	15
December 2038	78	34	14	6	2	73	18	0	0	0	100	100	74	30	11
December 2039	75	30	12	5	2	70	14	0	0	0	100	100	63	24	8
December 2040	73	27	10	4	1	66	10	0	0	0	100	100	53	18	6
December 2041	70	24	9	3	1	62	6	0	0	0	100	100	44	14	4
December 2042	66	22	7	2	1	58	3	0	0	0	100	100	37	11	3
December 2043	63	19	6	2	0	54	0	0	0	0	100	100	31	9	2
December 2044	59	17	5	1	0	49	0	0	0	0	100	88	25	7	2
December 2045	55	15	4	1	0	44	0	0	0	0	100	76	20	5	1
December 2046	50	13	3	1	0	38	0	0	0	0	100	65	16	4	1
December 2047	46	11	3	1	0	33	0	0	0	0	100	55	13	3	1
December 2048	40	9	2	0	0	26	0	0	0	0	100	45	10	2	0
December 2049	35	7	1	0	0	19	0	0	0	0	100	36	8	1	0
December 2050	29	5	1	0	0	12	0	0	0	0	100	28	5	1	0
December 2051	22	4	1	0	0	4	0	0	0	0	100	20	4	1	0
December 2052	16	2	0	0	0	0	0	0	0	0	80	12	2	0	0
December 2053	8	1	0	0	0	0	0	0	0	0	42	5	1	0	0
December 2054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average															
Life (years)	20.2	11.3	7.5	5.6	4.4	18.1	8.3	5.2	3.8	3.1	28.8	23.8	17.4	12.9	10.1

Security Group 10 PSA Prepayment Assumption Rates

			Class D	)		Class	ses DA,	DB, DE	, DP an	d ID		Class	es FL aı	nd SL				Class L		
Distribution Date	0%	150%	200%	250%	400%	0%	150%	200%	250%	400%	0%	150%	200%	250%	400%	0%	150%	200%	250%	400%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
December 2025	99	96	95	94	91	98	95	95	95	95	99	96	95	95	92	100	100	100	100	100
December 2026	97	88	85	82	73	97	85	85	85	85	98	89	87	84	76	100	100	100	100	100
December 2027	96	78	72	67	52	95	73	73	73	65	96	80	75	71	57	100	100	100	100	100
December 2028	94	69	61	54	36	93	61	61	61	45	95	72	65	59	43	100	100	100	100	100
December 2029	93	60	52	44	24	91	51	51	51	30	94	65	57	49	32	100	100	100	100	100
December 2030	91	53	43	34	15	89	41	41	41	19	92	58	49	41	24	100	100	100	100	100
December 2031	89	46	36	27	8	87	33	33	33	10	90	52	42	35	18	100	100	100	100	100
December 2032	87	40	29	20	3	84	25	25	25	4	88	46	37	29	13	100	100	100	100	100
December 2033	85	34	23	15	0	81	18	18	18	0	87	41	31	24	10	100	100	100	100	94
December 2034	83	29	18	10	0	79	13	13	13	0	85	36	27	20	7	100	100	100	100	70
December 2035	80	24	14	7	0	76	8	8	8	0	82	32	23	16	5	100	100	100	100	52
December 2036	78	20	10	3	0	72	4	4	4	0	80	29	20	14	4	100	100	100	100	38
December 2037	75	16	7	1	0	69	1	1	1	0	78	25	17	11	3	100	100	100	100	28
December 2038	72	13	4	0	0	65	0	0	0	0	75	22	14	9	2	100	100	100	87	21
December 2039	69	10	2	0	0	61	0	0	0	0	72	19	12	8	2	100	100	100	71	15
December 2040	65	7	0	0	0	57	0	0	0	0	69	17	10	6	1	100	100	97	58	11
December 2041	62	5	0	0	0	53	0	0	0	0	66	15	9	5	1	100	100	81	47	8
December 2042	58	2	0	0	0	48	0	0	0	0	62	13	7	4	1	100	100	68	38	6
December 2043	54	0	0	0	0	43	0	0	0	0	59	11	6	3	0	100	100	56	30	4
December 2044	49	0	0	0	0	37	0	0	0	0	55	9	5	3	0	100	87	46	24	3
December 2045	45	0	0	0	0	31	0	0	0	0	51	8	4	2	0	100	73	37	19	2
December 2046	40	0	0	0	0	25	0	0	0	0	46	6	3	2	0	100	61	30	15	1
December 2047	34	0	0	0	0	19	0	0	0	0	41	5	3	1	0	100	49	24	11	1
December 2048	29	0	0	0	0	12	0	0	0	0	36	4	2	1	0	100	39	18	8	1
December 2049	23	0	0	0	0	4	0	0	0	0	31	3	1	1	0	100	30	14	6	0
December 2050	16	0	0	0	0	0	0	0	0	0	25	2	1	0	0	100	22	10	4	0
December 2051	9	0	0	0	0	0	0	0	0	0	19	2	1	0	0	100	15	6	3	0
December 2052	2	0	0	0	0	0	0	0	0	0	12	1	0	0	0	100	9	4	1	0
December 2053	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	47	3	1	1	0
December 2054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average																				
Life (years)	18.2	7.4	6.0	5.1	3.5	16.2	5.6	5.6	5.6	4.0	19.4	9.1	7.6	6.4	4.4	29.0	23.4	20.4	17.7	12.1

Security Group 10 PSA Prepayment Assumption Rates

			Class LC				Class VD					Class ZD			
Distribution Date	0%	150%	200%	250%	400%	0%	150%	200%	250%	400%	0%	150%	200%	250%	400%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
December 2025	100	100	95	90	75	93	93	93	93	93	106	106	106	106	106
December 2026	100	100	84	69	23	86	86	86	86	86	112	112	112	112	112
December 2027	100	100	71	44	0	78	78	78	78	78	118	118	118	118	118
December 2028	100	100	61	25	0	70	70	70	70	70	125	125	125	125	125
December 2029	100	100	54	13	0	61	61	61	61	61	132	132	132	132	132
December 2030	100	100	49	5	0	52	52	52	52	52	139	139	139	139	139
December 2031	100	100	46	1	0	43	43	43	43	43	147	147	147	147	147
December 2032	100	100	45	0	0	33	33	33	33	33	155	155	155	155	155
December 2033	100	99	44	0	0	22	22	22	22	8	164	164	164	164	164
December 2034	100	96	42	0	0	11	11	11	11	0	173	173	173	173	127
December 2035	100	92	39	0	0	0	0	0	0	0	182	182	182	182	94
December 2036	100	87	36	0	0	0	0	0	0	0	182	182	182	182	69
December 2037	100	81	33	0	0	0	0	0	0	0	182	182	182	182	51
December 2038	100	67	22	0	0	0	0	0	0	0	182	182	182	158	37
December 2039	100	51	9	0	0	0	0	0	0	0	182	182	182	129	27
December 2040	100	37	0	0	0	0	0	0	0	0	182	182	176	105	20
December 2041	100	24	0	0	0	0	0	0	0	0	182	182	148	85	14
December 2042	100	12	0	0	0	0	0	0	0	0	182	182	123	69	10
December 2043	100	1	0	0	0	0	0	0	0	0	182	182	102	55	7
December 2044	100	0	0	0	0	0	0	0	0	0	182	158	84	44	5
December 2045	100	0	0	0	0	0	0	0	0	0	182	133	68	34	4
December 2046	100	0	0	0	0	0	0	0	0	0	182	110	55	26	3
December 2047	100	0	0	0	0	0	0	0	0	0	182	90	43	20	2
December 2048	100	0	0	0	0	0	0	0	0	0	182	72	33	15	1
December 2049	100	0	0	0	0	0	0	0	0	0	182	55	25	11	1
December 2050	83	0	0	0	0	0	0	0	0	0	182	41	18	7	0
December 2051	47	0	0	0	0	0	0	0	0	0	182	28	12	5	0
December 2052	9	0	0	0	0	0	0	0	0	0	182	16	7	3	0
December 2053	0	0	0	0	0	0	0	0	0	0	86	6	2	1	0
December 2054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average															
Life (years)	26.9	15.0	7.8	3.0	1.5	6.0	6.0	6.0	6.0	5.8	29.0	23.4	20.4	17.7	12.4

Security Groups 9 and 10 PSA Prepayment Assumption Rates

	Class FJ											
Distribution Date	0%	100%	150%	200%	250%	300%	400%					
Initial Percent	100	100	100	100	100	100	100					
December 2025	99	97	96	95	95	94	92					
December 2026	98	92	89	87	84	81	76					
December 2027	97	85	80	75	71	66	57					
December 2028	95	79	72	65	59	53	43					
December 2029	94	73	65	57	49	43	32					
December 2030	93	68	58	49	41	35	24					
December 2031	91	62	52	42	34	28	18					
December 2032	89	58	46	36	29	22	13					
December 2033	88	53	41	31	24	18	10					
December 2034	86	49	36	27	20	14	7					
December 2035	84	44	32	23	16	12	5					
December 2036	81	41	29	20	14	9	4					
December 2037	79	37	25	17	11	7	3 2					
December 2038	76	34	22	14	9	6	2					
December 2039	74	30	19	12	7	5	2					
December 2040	71	27	17	10	6	4	1					
December 2041	68	25	15	9	5	3	1					
December 2042	64	22	13	7	4	2	1					
December 2043	61	19	11	6	3	2	0					
December 2044	57	17	9	5	3 3	1	0					
December 2045	53	15	8	4	2	1	0					
December 2046	48	13	6	3	2	1	0					
December 2047	43	11	5	3 3	1	1	0					
December 2048	38	9	4	2	1	0	0					
December 2049	33	7	3	1	1	0	0					
December 2050	27	5	2	1	0	0	0					
December 2051	21	4	2	1	0	0	0					
December 2052	14	2	1	0	0	0	0					
December 2053	7	1	0	0	0	0	0					
December 2054	0	0	0	0	0	0	0					
Weighted Average												
Life (years)	19.8	11.3	9.1	7.6	6.4	5.6	4.4					

Security Group 11 PSA Prepayment Assumption Rates

		QS				
Distribution Date	0%	100%	350%	601%	950%	1,300%
Initial Percent	100	100	100	100	100	100
December 2025	99	95	86	77	63	50
December 2026	98	89	68	50	29	13
December 2027	97	83	53	31	12	3
December 2028	96	77	41	20	5	1
December 2029	94	71	32	13	2	0
December 2030	93	66	25	8	1	0
December 2031	91	61	20	5	0	0
December 2032	90	56	15	3	0	0
December 2033	88	52	12	2	0	0
December 2034	86	48	9	1	0	0
December 2035	84	44	7	1	0	0
December 2036	82	40	5	0	0	0
December 2037	79	36	4	0	0	0
December 2038	77	33	3	0	0	0
December 2039	74	30	2	0	0	0
December 2040	71	27	2	0	0	0
December 2041	67	24	1	0	0	0
December 2042	64	21	1	0	0	0
December 2043	60	19	1	0	0	0
December 2044	56	17	1	0	0	0
December 2045	51	14	0	0	0	0
December 2046	46	12	0	0	0	0
December 2047	41	10	0	0	0	0
December 2048	35	8	0	0	0	0
December 2049	29	6	0	0	0	0
December 2050	22	4	0	0	0	0
December 2051	14	3	0	0	0	0
December 2052	6	1	0	0	0	0
December 2053	0	0	0	0	0	0
December 2054	0	0	0	0	0	0
Weighted Average						
Life (years)	19.4	11.0	4.4	2.6	1.6	1.1

Security Group 12 PSA Prepayment Assumption Rates

	Classes FN and SN								
Distribution Date	0%	100%	350%	601%	950%	1,300%			
Initial Percent	100	100	100	100	100	100			
December 2025	99	97	92	88	81	74			
December 2026	99	92	78	64	47	32			
December 2027	98	86	61	41	20	7			
December 2028	97	80	48	26	9	2			
December 2029	96	74	37	16	4	0			
December 2030	95	69	29	10	2	0			
December 2031	94	63	23	6	1	0			
December 2032	92	59	17	4	0	0			
December 2033	91	54	14	3	0	0			
December 2034	89	50	10	2	0	0			
December 2035	88	46	8	1	0	0			
December 2036	86	42	6	1	0	0			
December 2037	84	38	5	0	0	0			
December 2038	82	35	4	0	0	0			
December 2039	79	32	3	0	0	0			
December 2040	77	29	2	0	0	0			
December 2041	74	26	2	0	0	0			
December 2042	71	23	1	0	0	0			
December 2043	67	21	1	0	0	0			
December 2044	64	18	1	0	0	0			
December 2045	59	16	0	0	0	0			
December 2046	55	14	0	0	0	0			
December 2047	50	11	0	0	0	0			
December 2048	45	9	0	0	0	0			
December 2049	39	8	0	0	0	0			
December 2050	32	6	0	0	0	0			
December 2051	25	4	0	0	0	0			
December 2052	18	2	0	0	0	0			
December 2053	9	1	0	0	0	0			
December 2054	0	0	0	0	0	0			
Weighted Average									
Life (years)	21.0	11.6	4.9	3.1	2.1	1.7			

Security Group 13 PSA Prepayment Assumption Rates

	Classes FE and SE									
Distribution Date	0%	100%	300%	491%	750%	1,000%				
Initial Percent	100	100	100	100	100	100				
December 2025	99	95	88	81	71	62				
December 2026	98	89	72	58	40	26				
December 2027	97	83	58	40	22	10				
December 2028	95	77	47	28	12	4				
December 2029	94	71	38	19	6	2				
December 2030	93	66	31	13	3	1				
December 2031	91	61	25	9	2	0				
December 2032	89	56	20	6	1	0				
December 2033	87	51	16	4	1	0				
December 2034	85	47	13	3	0	0				
December 2035	83	43	10	2	0	0				
December 2036	81	40	8	1	0	0				
December 2037	78	36	7	1	0	0				
December 2038	76	33	5	1	0	0				
December 2039	73	30	4	0	0	0				
December 2040	70	27	3	0	0	0				
December 2041	66	24	2	0	0	0				
December 2042	63	21	2	0	0	0				
December 2043	59	19	1	0	0	0				
December 2044	55	16	1	0	0	0				
December 2045	50	14	1	0	0	0				
December 2046	45	12	1	0	0	0				
December 2047	40	10	0	0	0	0				
December 2048	34	8	0	0	0	0				
December 2049	28	6	0	0	0	0				
December 2050	21	4	0	0	0	0				
December 2051	14	3	0	0	0	0				
December 2052	6	1	0	0	0	0				
December 2053	0	0	0	0	0	0				
December 2054	0	0	0	0	0	0				
Weighted Average										
Life (years)	19.2	10.9	5.1	3.2	2.1	1.5				

Security Group 14 PSA Prepayment Assumption Rates

			Class LM				Class MA					
Distribution Date	0%	100%	107%	250%	400%	0%	100%	107%	250%	400%		
Initial Percent	100	100	100	100	100	100	100	100	100	100		
December 2025	100	100	100	100	100	95	84	83	67	50		
December 2026	100	100	100	100	100	90	69	67	39	12		
December 2027	100	100	100	100	84	85	54	53	16	0		
December 2028	100	100	100	96	62	79	41	39	0	0		
December 2029	100	100	100	79	45	74	29	26	0	0		
December 2030	100	100	100	65	33	68	18	15	0	0		
December 2031	100	100	100	53	24	62	7	4	0	0		
December 2032	100	97	94	44	18	56	0	0	0	0		
December 2033	100	88	84	35	13	49	0	0	0	0		
December 2034	100	79	75	29	9	43	0	0	0	0		
December 2035	100	70	67	23	7	36	0	0	0	0		
December 2036	100	63	59	19	5	29	0	0	0	0		
December 2037	100	55	52	15	3	22	0	0	0	0		
December 2038	100	49	46	12	2	15	0	0	0	0		
December 2039	100	43	40	9	2	8	0	0	0	0		
December 2040	100	37	35	7	1	0	0	0	0	0		
December 2041	91	32	30	6	1	0	0	0	0	0		
December 2042	82	27	25	4	1	0	0	0	0	0		
December 2043	73	23	21	3	0	0	0	0	0	0		
December 2044	64	19	17	2	0	0	0	0	0	0		
December 2045	54	15	14	2	0	0	0	0	0	0		
December 2046	45	12	11	1	0	0	0	0	0	0		
December 2047	36	9	8	1	0	0	0	0	0	0		
December 2048	26	6	5	1	0	0	0	0	0	0		
December 2049	17	4	3	0	0	0	0	0	0	0		
December 2050	8	2	1	0	0	0	0	0	0	0		
December 2051	0	0	0	0	0	0	0	0	0	0		
December 2052	0	0	0	0	0	0	0	0	0	0		
Weighted Average	21.5	14.8	14.4	8.6	5.6	8.6	3.5	3.4	1.7	1.1		
Life (years)	21.5	14.8	14.4	8.0	5.0	8.0	5.5	5.4	1./	1.1		

#### **Yield Considerations**

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

- the anticipated yield of that Class resulting from its purchase price,
- the investor's own projection of Mortgage Loan prepayment rates 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, 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 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 experience 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 JS to Prepayments Assumed Price 5.90625%\*

	<b>PSA Prepayment Assumption Rates</b>			
30-day Average SOFR	200%	250%	300%	500%
3.78890%	47.7%	47.7%	47.7%	39.7%
4.78890%	26.9%	26.9%	26.9%	17.6%
5.94445%	3.3%	3.3%	3.3%	(8.0)%
7 10000% and above	**	**	**	**

#### **SECURITY GROUP 2**

## Sensitivity of Class SB to Prepayments Assumed Price 4.25%\*

	PSA Prepayment Assumption Rates				
30-day Average SOFR	100%	395%	600%	800%	
3.76078%	30.5%	14.8%	3.4%	(8.2)%	
4.76078%	3.5%	(13.7)%	(26.7)%	(40.2)%	
5.00539%	(4.4)%	(21.9)%	(35.1)%	(49.3)%	
5.25000% and above	3636	**	**	**	

## **SECURITY GROUP 3**

# Sensitivity of Class YS to Prepayments Assumed Price 2.30078125%\*

30-day Average SOFR	PSA Prepayment Assumption Rates					
	100%	250%	403%	650%	900%	
3.68251%	73.3%	66.6%	59.5%	47.9%	35.8%	
4.68251%	21.6%	13.6%	5.3%	(8.7)%	(23.5)%	
4.99126%	6.0%	(2.4)%	(11.3)%	(26.6)%	(43.3)%	
5.30000% and above	**	**	**	**	**	

#### **SECURITY GROUP 4**

# Sensitivity of Class KS to Prepayments Assumed Price 1.96875%\*

30-day Average SOFR	PSA Prepayment Assumption Rates				
	100%	300%	544%	800%	1,100%
3.63898%	102.6%	93.1%	81.1%	68.1%	52.2%
4.63898%	39.1%	28.5%	15.1%	0.4%	(17.7)%
5.04449%	15.5%	4.1%	(10.6)%	(27.0)%	(47.6)%
5.45000% 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 7**

## Sensitivity of Class HS to Prepayments Assumed Price 2.50415625%

	PSA Prepayment Assumption Rates			
30-day Average SOFR	100%	278%	450%	600%
3.12487%	58.1%	49.8%	41.5%	34.2%
3.61658%	35.1%	26.2%	17.3%	9.3%
4.10829%	12.9%	3.1%	(6.7)%	(15.6)%
4.60000% and above	**	**	**	**

#### **SECURITY GROUP 8**

# Sensitivity of Class CS to Prepayments Assumed Price 8.34375%\*

	PSA Prepayment Assumption Rates					
30-day Average SOFR	100%	250%	445%	650%	900%	
3.59450%	24.8%	16.6%	5.5%	(6.7)%	(22.4)%	
4.59450%	11.2%	2.6%	(9.0)%	(21.9)%	(38.7)%	
5.34725%	0.2%	(8.5)%	(20.4)%	(33.9)%	(52.0)%	
6.10000% and above	**	**	**	**	**	

# Sensitivity of Class DS to Prepayments Assumed Price 4.625%\*

30-day Average SOFR	PSA Prepayment Assumption Rates					
	100%	250%	445%	650%	900%	
3.59450%	26.2%	18.1%	7.0%	(5.1)%	(20.6)%	
4.59450%	1.3%	(7.4)%	(19.4)%	(32.8)%	(50.8)%	
4.82225%	(5.9)%	(14.6)%	(26.6)%	(40.3)%	(59.3)%	
5.05000% and above	**	3(13)1	of the	***	***	

# Sensitivity of Class US to Prepayments Assumed Price 8.34375%\*

30-day Average SOFR	PSA Prepayment Assumption Rates					
	100%	250%	445%	650%	900%	
3.59450%	23.4%	15.1%	4.0%	(8.2)%	(24.0)%	
4.59450%	9.8%	1.2%	(10.4)%	(23.4)%	(40.4)%	
5.29725%	(0.6)%	(9.3)%	(21.2)%	(34.8)%	(53.0)%	
6.00000% 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 9**

## Sensitivity of Class SK to Prepayments Assumed Price 9.8125%\*

30-day Average SOFR	PSA Prepayment Assumption Rates				
	100%	200%	300%	400%	
3.59450%	19.8%	14.5%	9.1%	3.6%	
4.59450%	8.1%	2.6%	(3.1)%	(8.9)%	
5.34725%	(1.6)%	(7.3)%	(13.1)%	(19.1)%	
6.10000% and above	**	**	**	**	

#### **SECURITY GROUP 10**

# Sensitivity of Class ID to Prepayments Assumed Price 18.0%\*

PSA Prepayment Assumption Rates							
150%	200%	250%	400%	581%			
20.1%	20.1%	20.1%	12.1%	0.0%			

# Sensitivity of Class SL to Prepayments Assumed Price 4.203125%\*

30-day Average SOFR	PSA Prepayment Assumption Rates			
	150%	200%	250%	400%
3.59450%	58.0%	55.7%	53.4%	46.3%
4.59450%	29.5%	26.9%	24.4%	16.6%
5.34725%	8.6%	5.9%	3.1%	(5.5)%
6.10000% and above	**	**	**	**

#### **SECURITY GROUP 11**

# Sensitivity of Class NT to Prepayments Assumed Price 0.140625%\*

	PSA Prepayment Assumption Rates					
30-day Average SOFR	100%	350%	601%	950%	1,300%	
6.55000% and below	74.6%	57.7%	39.5%	11.6%	(21.0)%	
6.60000%	31.5%	15.3%	(2.3)%	(29.7)%	(62.5)%	
6.65000% 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.

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

	PSA Prepayment Assumption Rates					
30-day Average SOFR	100%	350%	601%	950%	1,300%	
3.59690%	90.8%	73.6%	55.1%	26.7%	(6.2)%	
4.59690%	55.0%	38.4%	20.6%	(7.1)%	(39.5)%	
5.57345%	22.4%	6.3%	(11.2)%	(38.7)%	(71.8)%	
6.55000% and above	**	**	**	**	**	

#### **SECURITY GROUP 12**

#### Sensitivity of Class SN to Prepayments Assumed Price 5.3125%\*

	PSA Prepayment Assumption Rates						
30-day Average SOFR	100%	350%	601%	950%	1,300%		
3.59757%	58.0%	45.6%	32.8%	14.2%	(5.5)%		
4.59757%	35.5%	22.4%	8.7%	(11.4)%	(32.7)%		
5.62379%	13.2%	(0.9)%	(16.0)%	(38.6)%	(63.4)%		
6.65000% and above	**	**	**	**	水水		

#### **SECURITY GROUP 13**

## Sensitivity of Class SE to Prepayments Assumed Price 3.2421875%\*

		PSA Prepayment Assumption Rates						
30-day Average SOFR	100%	300%	491%	750%	1,000%			
3.59757%	80.2%	66.8%	53.3%	33.7%	13.0%			
4.59757%	42.6%	29.7%	16.6%	(2.5)%	(22.9)%			
5.33879%	16.5%	3.8%	(9.1)%	(28.1)%	(48.8)%			
6.08000% 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 Cleary Gottlieb Steen & Hamilton 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	250%
2	395%
3	403%
4	544%
5	246%
6	97%
7	278%
8	445%
9 and 10	200%
11 and 12	601%
13	491%
14	107%

In the case of the 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.

#### **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) December 1, 2024 on the Fixed Rate Classes and (2) December 20, 2024 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 Scheduled Principal Balances or 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 Cleary Gottlieb Steen & Hamilton LLP and Marcell Solomon & Associates, P.C., and for the Trustee by Faegre Drinker Biddle & Reath LLP.

Available Combinations(1)

REMIC Securities					MX Securities	ies		
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 8 Combination 1								
UF	\$20,000,000	CF	\$ 20,000,000	PT	(5)	FLT	38385BPU8	December 2054
NS	20,000,000	CS	20,000,000	NTL(PT)	(5)	OI/ANI	38385BPV6	December 2054
Security Group 10 Combination 2								
DP	\$72,567,000	О	\$ 89,938,000	SEQ	5.50%	FIX	38385BPW4	September 2053
TC	17,371,000			,				4
Combination 3(6)								
DP	\$72,567,000	DA	\$ 72,567,000	PAC	4.00%	FIX	38385BPX2	September 2053
		DB	72,567,000	PAC	4.50	FIX	38385BPY0	September 2053
		DE	72,567,000	PAC	5.00	FIX	38385BPZ7	September 2053
			18,141,750	NTL(PAC)	00.9	FIX/IO	38385BQA1	September 2053
Combination 4								
VD	\$ 4,777,000	T	\$ 10,623,910	SEQ	5.50%	FIX	38385BQB9	November 2054
ZD	5,846,910							
Security Groups 9 and 10								
Combination $5(7)$								
FK	\$49,719,045	FJ	\$100,000,000	PT	(5)	FLT	38385BQC7	December 2054
FL	50,280,955							
Security Group 11								
Combination 6								
NF	\$32,644,390	QF	\$ 32,644,390	PT	(5)	FLT	38385BQD5	February 2054
LN	32,644,390							
		•	•					

<sup>(1)</sup> All exchanges must comply with minimum denomination restrictions.

<sup>(2)</sup> 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.

- (3) 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. (4)
- The Interest Rate will be calculated as described under "Terms Sheet Interest Rates" in this Supplement. (3)
- In the case of Combination 3, various subcombinations are permitted. See "Description of the Securities Modification and Exchange" in the Base Offering Circular for a discussion of subcombinations. 9
- (7) Derived from REMIC Classes relating to separate Groups.

# Schedule II

# SCHEDULED PRINCIPAL BALANCES

Distribution Date	Classes JD, JF and JZ (in the aggregate)	Class KF	Class DP
Initial Balance	\$101,340,000.00	\$100,000,000.00	\$72,567,000.00
January 2025	100,993,276.67	99,381,079.45	72,399,308.89
February 2025	100,608,129.80	98,660,597.63	72,205,991.13
March 2025	100,184,730.41	97,839,070.13	71,987,114.80
April 2025	99,723,288.71	96,917,266.91	71,742,767.69
May 2025	99,224,053.92	95,896,213.39	71,473,057.29
June 2025	98,687,314.15	94,777,190.47	71,178,110.77
July 2025	98,113,396.18	93,561,733.61	70,858,074.92
August 2025	97,502,665.16	92,251,630.69	70,513,116.03
September 2025	96,855,524.23	90,848,918.97	70,143,419.83
October 2025	96,172,414.15	89,355,880.80	69,749,191.31
November 2025	95,453,812.74	87,775,038.36	69,330,654.61
December 2025	94,700,234.38	86,109,147.24	68,888,052.75
January 2026	93,912,229.35	84,361,296.51	68,421,647.53
February 2026	93,090,383.16	82,534,731.26	67,931,719.19
March 2026	92,235,315.79	80,632,879.82	67,418,566.23
April 2026	91,347,680.89	78,659,457.25	66,882,505.05
May 2026	90,428,164.90	76,618,277.27	66,323,869.73
June 2026	89,477,486.11	74,513,275.75	65,743,011.61
July 2026	88,496,393.69	72,348,549.12	65,140,298.99
August 2026	87,485,666.61	70,128,378.97	64,516,116.73
September 2026	86,446,112.57	67,857,456.14	63,870,865.88
October 2026	85,378,566.85	65,541,866.77	63,204,963.20
November 2026	84,283,891.10	63,188,144.64	62,518,840.78
December 2026	83,162,972.05	60,801,419.70	61,812,945.52
January 2027	82,016,720.31	58,389,690.86	61,087,738.71
February 2027	80,846,068.95	55,964,356.54	60,343,695.46
March 2027	79,687,165.31	53,533,544.04	59,581,304.24
April 2027	78,539,876.64	51,169,278.11	58,801,066.31
May 2027	77,404,071.54	48,869,619.51	58,027,163.39
June 2027	76,279,620.00	46,632,684.78	57,259,545.33
July 2027	75,166,393.36	44,456,644.64	56,498,162.40
August 2027	74,064,264.30	42,339,722.44	55,742,965.24
September 2027	72,973,106.82	40,280,192.64	54,993,904.88
October 2027	71,892,796.25	38,276,379.36	54,250,932.75
November 2027	70,823,209.21	36,326,654.90	53,514,000.65
December 2027	69,764,223.58	34,429,438.42	52,783,060.76
January 2028	68,715,718.54	32,583,194.51	52,058,065.63
February 2028	67,677,574.53	30,786,431.98	51,338,968.19
March 2028	66,649,673.20	29,037,702.51	50,625,721.74
April 2028	65,631,897.45	27,335,599.42	49,918,279.94
May 2028	64,624,131.41	25,678,756.54	49,216,596.82
June 2028	63,626,260.38	24,065,846.96	48,520,626.77
July 2028	62,638,170.88	22,495,581.95	47,830,324.54

Distribution Date	Classes JD, JF and JZ (in the aggregate)	Class KF	Class DP
August 2028	\$ 61,659,750.58	\$ 20,966,709.84	\$47,145,645.24
September 2028	60,690,888.34	19,478,014.97	46,466,544.31
October 2028	59,731,474.16	18,028,316.63	45,792,977.57
November 2028	58,781,399.18	16,616,468.07	45,124,901.17
December 2028	57,840,555.66	15,241,355.53	44,462,271.60
January 2029	56,908,836.99	13,901,897.25	43,805,045.72
February 2029	55,986,137.65	12,597,042.60	43,153,180.68
March 2029	55,072,353.21	11,325,771.16	42,506,634.02
April 2029	54,167,380.34	10,087,091.83	41,865,363.59
May 2029	53,271,116.74	8,880,042.02	41,229,327.55
June 2029	52,383,461.21	7,703,686.81	40,598,484.42
July 2029	51,504,313.56	6,557,118.15	39,972,793.04
August 2029	50,633,574.65	5,439,454.10	39,352,212.56
September 2029	49,771,146.35	4,349,838.06	38,736,702.47
October 2029	48,916,931.55	3,287,438.06	38,126,222.56
November 2029	48,070,834.14	2,251,446.02	37,520,732.94
December 2029	47,232,758.99	1,241,077.11	36,920,194.05
January 2030	46,402,611.97	255,569.02	36,324,566.62
February 2030	45,582,104.44	0.00	35,733,811.69
March 2030	44,775,689.25	0.00	35,147,890.63
April 2030	43,983,128.50	0.00	34,566,765.09
May 2030	43,204,188.23	0.00	33,990,397.02
June 2030	42,438,638.42	0.00	33,418,748.69
July 2030	41,686,252.86	0.00	32,851,782.65
August 2030	40,946,809.16	0.00	32,289,461.74
September 2030	40,220,088.61	0.00	31,731,749.11
October 2030	39,505,876.19	0.00	31,178,608.19
November 2030	38,803,960.44	0.00	30,630,002.69
December 2030	38,114,133.47	0.00	30,085,896.62
January 2031	37,436,190.84	0.00	29,546,254.26
February 2031	36,769,931.53	0.00	29,011,040.18
March 2031	36,115,157.91	0.00	28,480,219.22
April 2031	35,471,675.62	0.00	27,953,756.51
May 2031	34,839,293.56	0.00	27,431,617.44
June 2031	34,217,823.86	0.00	26,913,767.68
July 2031	33,607,081.75	0.00	26,400,173.16
August 2031	33,006,885.57	0.00	25,890,800.10
September 2031	32,417,056.72	0.00	25,385,614.96
October 2031	31,837,419.54	0.00	24,884,584.48
November 2031	31,267,801.37	0.00	24,387,675.65
December 2031	30,708,032.39	0.00	23,894,855.73
January 2032	30,157,945.67	0.00	23,406,092.24
February 2032	29,617,377.03	0.00	22,921,352.94
March 2032	29,086,165.07	0.00	22,440,605.85
April 2032	28,564,151.09	0.00	21,963,819.25
May 2032	28,051,179.04	0.00	21,490,961.66
June 2032	27,547,095.49	0.00	21,022,001.86

Distribution Date	Classes JD, JF and JZ (in the aggregate)	Class KF	Class DP
July 2032	\$ 27,051,749.59	\$ 0.00	\$20,556,908.85
August 2032	26,564,992.99	0.00	20,095,651.90
September 2032	26,086,679.86	0.00	19,638,200.51
October 2032	25,616,666.79	0.00	19,184,524.43
November 2032	25,154,812.80	0.00	18,734,593.62
December 2032	24,700,979.26	0.00	18,289,436.42
January 2033	24,255,029.85	0.00	17,850,671.88
February 2033	23,816,830.55	0.00	17,418,210.73
March 2033	23,386,249.61	0.00	16,991,964.97
April 2033	22,963,157.46	0.00	16,571,847.77
May 2033	22,547,426.71	0.00	16,157,773.52
June 2033	22,138,932.12	0.00	15,749,657.77
July 2033	21,737,550.54	0.00	15,347,417.25
August 2033	21,343,160.89	0.00	14,950,969.82
September 2033	20,955,644.14	0.00	14,560,234.47
October 2033	20,574,883.23	0.00	14,175,131.31
November 2033	20,200,763.09	0.00	13,795,581.55
December 2033	19,833,170.57	0.00	13,421,507.48
January 2034	19,471,994.43	0.00	13,052,832.46
February 2034	19,117,125.29	0.00	12,689,480.92
March 2034	18,768,455.60	0.00	12,331,378.30
April 2034	18,425,879.65	0.00	11,978,451.10
May 2034	18,089,293.48	0.00	11,630,626.80
June 2034	17,758,594.88	0.00	11,287,833.91
July 2034	17,433,683.37	0.00	10,950,001.89
August 2034	17,114,460.15	0.00	10,617,061.21
September 2034	16,800,828.09	0.00	10,288,943.28
October 2034	16,492,691.68	0.00	9,965,580.44
November 2034	16,189,957.03	0.00	9,646,905.98
December 2034	15,892,531.84	0.00	9,332,854.11
January 2035	15,600,325.33	0.00	9,023,359.94
February 2035	15,313,248.28	0.00	8,718,359.49
March 2035	15,031,212.96	0.00	8,417,789.63
April 2035	14,754,133.12	0.00	8,121,588.14
May 2035	14,481,923.96	0.00	7,829,693.63
June 2035	14,214,502.10	0.00	7,542,045.56
July 2035	13,951,785.58	0.00	7,258,584.24
August 2035	13,693,693.82	0.00	6,979,250.80
September 2035	13,440,147.58	0.00	6,703,987.16
October 2035	13,191,068.99	0.00	6,432,736.08
November 2035	12,946,381.45	0.00	6,165,441.07
December 2035	12,706,009.68	0.00	5,902,046.45
January 2036	12,469,879.67	0.00	5,642,497.30
February 2036	12,237,918.65	0.00	5,386,739.45
March 2036	12,010,055.08	0.00	5,134,719.48
April 2036	11,786,218.61	0.00	4,886,384.73
May 2036	11,566,340.11	0.00	4,641,683.24

Distribution Date	Classes JD, JF and JZ (in the aggregate)	Class KF	Class DP
June 2036	\$ 11,350,351.60	\$ 0.00	\$ 4,400,563.78
July 2036	11,138,186.24	0.00	4,162,975.83
August 2036	10,929,778.33	0.00	3,928,869.56
September 2036	10,725,063.27	0.00	3,698,195.84
October 2036	10,523,977.57	0.00	3,470,906.22
November 2036	10,326,458.80	0.00	3,246,952.89
December 2036	10,132,445.57	0.00	3,026,288.75
January 2037	9,941,877.56	0.00	2,808,867.31
February 2037	9,754,695.44	0.00	2,594,642.76
March 2037	9,570,840.90	0.00	2,383,569.88
April 2037	9,390,256.62	0.00	2,175,604.12
May 2037	9,212,886.23	0.00	1,970,701.51
June 2037	9,038,674.32	0.00	1,768,818.73
July 2037	8,867,566.44	0.00	1,569,913.01
August 2037	8,699,509.03	0.00	1,373,942.21
September 2037	8,534,449.45	0.00	1,180,864.77
October 2037	8,372,335.96	0.00	990,639.68
November 2037	8,213,117.69	0.00	803,226.53
December 2037	8,056,744.61	0.00	618,585.45
January 2038	7,903,167.58	0.00	436,677.13
February 2038	7,752,338.26	0.00	257,462.81
March 2038	7,604,209.14	0.00	80,904.26
April 2038	7,458,733.52	0.00	0.00
May 2038	7,315,865.47	0.00	0.00
June 2038	7,175,559.87	0.00	0.00
July 2038	7,037,772.34	0.00	0.00
August 2038	6,902,459.27	0.00	0.00
September 2038	6,769,577.78	0.00	0.00
October 2038	6,639,085.73	0.00	0.00
November 2038	6,510,941.67	0.00	0.00
December 2038	6,385,104.88	0.00	0.00
January 2039	6,261,535.33	0.00	0.00
February 2039	6,140,193.64	0.00	0.00
March 2039	6,021,041.14	0.00	0.00
April 2039	5,904,039.79	0.00	0.00
•	5,789,152.21	0.00	0.00
May 2039	5,676,341.65	0.00	0.00
	5,565,571.97	0.00	0.00
July 2039	5,456,807.68	0.00	0.00
August 2039	5,350,013.86	0.00	0.00
September 2039	, , , , , , , , , , , , , , , , , , ,		0.00
October 2039	5,245,156.21	0.00	
November 2039	5,142,200.99	0.00	0.00
December 2039	5,041,115.06	0.00	0.00
January 2040	4,941,865.81	0.00	0.00
February 2040	4,844,421.23	0.00	0.00
March 2040	4,748,749.82	0.00	0.00
April 2040	4,654,820.62	0.00	0.00

Distribution Date	Classes JD, JF and JZ (in the aggregate)	Class KF	Class DP
May 2040	\$ 4,562,603.23	\$ 0.00	\$ 0.00
June 2040	4,472,067.72	0.00	0.00
July 2040	4,383,184.71	0.00	0.00
August 2040	4,295,925.30	0.00	0.00
September 2040	4,210,261.09	0.00	0.00
October 2040	4,126,164.16	0.00	0.00
November 2040	4,043,607.08	0.00	0.00
December 2040	3,962,562.88	0.00	0.00
January 2041	3,883,005.04	0.00	0.00
February 2041	3,804,907.51	0.00	0.00
March 2041	3,728,244.68	0.00	0.00
April 2041	3,652,991.36	0.00	0.00
May 2041	3,579,122.83	0.00	0.00
June 2041	3,506,614.75	0.00	0.00
July 2041	3,435,443.23	0.00	0.00
August 2041	3,365,584.77	0.00	0.00
September 2041	3,297,016.27	0.00	0.00
October 2041	3,229,715.04	0.00	0.00
November 2041	3,163,658.77	0.00	0.00
December 2041	3,098,825.53	0.00	0.00
January 2042	3,035,193.77	0.00	0.00
February 2042	2,972,742.31	0.00	0.00
March 2042	2,911,450.33	0.00	0.00
April 2042	2,851,297.38	0.00	0.00
May 2042	2,792,263.33	0.00	0.00
June 2042	2,734,328.42	0.00	0.00
July 2042	2,677,473.23	0.00	0.00
August 2042	2,621,678.67	0.00	0.00
September 2042	2,566,925.97	0.00	0.00
October 2042	2,513,196.69	0.00	0.00
November 2042	2,460,472.70	0.00	0.00
December 2042	2,408,736.19	0.00	0.00
January 2043	2,357,969.66	0.00	0.00
February 2043	2,308,155.89	0.00	0.00
March 2043	2,259,277.98	0.00	0.00
April 2043	2,211,319.31	0.00	0.00
May 2043	2,164,263.54	0.00	0.00
June 2043	2,118,094.62	0.00	0.00
July 2043	2,072,796.78	0.00	0.00
August 2043	2,028,354.52	0.00	0.00
September 2043	1,984,752.60	0.00	0.00
October 2043	1,941,976.04	0.00	0.00
November 2043	1,900,010.13	0.00	0.00
December 2043	1,858,840.42	0.00	0.00
January 2044	1,818,452.68	0.00	0.00
February 2044	1,778,832.96	0.00	0.00
March 2044	1,739,967.53	0.00	0.00
	,. 0, ,, 0, .,0		

Distribution Date	Classes JD, JF and JZ (in the aggregate)	Class KF	Class DP
April 2044	\$ 1,701,842.89	\$ 0.00	\$ 0.00
May 2044	1,664,445.81	0.00	0.00
June 2044	1,627,763.24	0.00	0.00
July 2044	1,591,782.40	0.00	0.00
August 2044	1,556,490.70	0.00	0.00
September 2044	1,521,875.79	0.00	0.00
October 2044	1,487,925.51	0.00	0.00
November 2044	1,454,627.93	0.00	0.00
December 2044	1,421,971.32	0.00	0.00
January 2045	1,389,944.15	0.00	0.00
February 2045	1,358,535.10	0.00	0.00
March 2045	1,327,733.05	0.00	0.00
April 2045	1,297,527.04	0.00	0.00
May 2045	1,267,906.34	0.00	0.00
June 2045	1,238,860.38	0.00	0.00
July 2045	1,210,378.80	0.00	0.00
August 2045	1,182,451.38	0.00	0.00
September 2045	1,155,068.12	0.00	0.00
October 2045	1,128,219.17	0.00	0.00
November 2045	1,101,894.85	0.00	0.00
December 2045	1,076,085.66	0.00	0.00
January 2046	1,050,782.27	0.00	0.00
February 2046	1,025,975.48	0.00	0.00
March 2046	1,001,656.30	0.00	0.00
April 2046	977,815.85	0.00	0.00
May 2046	954,445.43	0.00	0.00
June 2046	931,536.49	0.00	0.00
July 2046	909,080.62	0.00	0.00
August 2046	887,069.57	0.00	0.00
September 2046	865,495.23	0.00	0.00
October 2046	844,349.62	0.00	0.00
November 2046	823,624.91	0.00	0.00
December 2046	803,313.40	0.00	0.00
January 2047	783,407.55	0.00	0.00
February 2047	763,899.91	0.00	0.00
March 2047	744,783.19	0.00	0.00
April 2047	726,050.22	0.00	0.00
May 2047	707,693.96	0.00	0.00
June 2047	689,707.48	0.00	0.00
July 2047	672,083.99	0.00	0.00
August 2047	654,816.81	0.00	0.00
September 2047	637,899.37	0.00	0.00
October 2047	621,325.23	0.00	0.00
November 2047	605,088.06	0.00	0.00
December 2047	589,181.63	0.00	0.00
January 2048	573,599.82	0.00	0.00
February 2048	558,336.64	0.00	0.00
1 Columny 2010	770,330.04	0.00	0.00

Distribution Date	Classes JD, JF and JZ (in the aggregate)	Class KF	Class DP
March 2048	\$ 543,386.18	\$ 0.00	\$ 0.00
April 2048	528,742.65	0.00	0.00
May 2048	514,400.35	0.00	0.00
June 2048	500,353.70	0.00	0.00
July 2048	486,597.19	0.00	0.00
August 2048	473,125.43	0.00	0.00
September 2048	459,933.12	0.00	0.00
October 2048	447,015.05	0.00	0.00
November 2048	434,366.11	0.00	0.00
December 2048	421,981.26	0.00	0.00
January 2049	409,855.57	0.00	0.00
February 2049	397,984.20	0.00	0.00
March 2049	386,362.37	0.00	0.00
April 2049	374,985.42	0.00	0.00
May 2049	363,848.74	0.00	0.00
June 2049	352,947.82	0.00	0.00
July 2049	342,278.22	0.00	0.00
August 2049	331,835.60	0.00	0.00
September 2049	321,615.67	0.00	0.00
October 2049	311,614.23	0.00	0.00
November 2049	301,827.15	0.00	0.00
December 2049	292,250.38	0.00	0.00
January 2050	282,879.95	0.00	0.00
February 2050	273,711.93	0.00	0.00
March 2050	264,742.49	0.00	0.00
April 2050	255,967.85	0.00	0.00
May 2050	247,384.32	0.00	0.00
June 2050	238,988.25	0.00	0.00
July 2050	230,776.07	0.00	0.00
August 2050	222,744.28	0.00	0.00
September 2050	214,889.41	0.00	0.00
October 2050	207,208.09	0.00	0.00
November 2050	199,697.00	0.00	0.00
December 2050	192,352.87	0.00	0.00
January 2051	185,172.50	0.00	0.00
February 2051	178,152.72	0.00	0.00
March 2051	171,290.47	0.00	0.00
April 2051	164,582.69	0.00	0.00
May 2051	158,026.41	0.00	0.00
June 2051	151,618.69	0.00	0.00
July 2051	145,356.67	0.00	0.00
• •	*	0.00	0.00
August 2051	139,237.52 133,258.47	0.00	0.00
September 2051	127,416.79	0.00	0.00
October 2051		0.00	0.00
November 2051	121,709.82	0.00	0.00
December 2051	116,134.92		
January 2052	110,689.52	0.00	0.00

Distribution Date	JF :	sses JD, and JZ aggregate)		Class KF		Class DP
February 2052	<u>\$</u> 1	05,371.09	\$	0.00	\$	0.00
March 2052		00,177.15	4	0.00	7	0.00
April 2052		95,105.25		0.00		0.00
May 2052		90,153.00		0.00		0.00
June 2052		85,318.05		0.00		0.00
July 2052		80,598.09		0.00		0.00
August 2052		75,990.85		0.00		0.00
September 2052		71,494.10		0.00		0.00
October 2052		67,105.67		0.00		0.00
November 2052		62,823.40		0.00		0.00
December 2052		58,645.18		0.00		0.00
January 2053		54,568.96		0.00		0.00
February 2053		50,592.69		0.00		0.00
March 2053		46,714.39		0.00		0.00
April 2053		42,932.11		0.00		0.00
May 2053		39,243.91		0.00		0.00
June 2053		35,647.91		0.00		0.00
July 2053		32,142.26		0.00		0.00
August 2053		28,725.15		0.00		0.00
September 2053		25,394.80		0.00		0.00
October 2053		22,149.44		0.00		0.00
November 2053		18,987.36		0.00		0.00
December 2053		15,906.88		0.00		0.00
January 2054		12,906.34		0.00		0.00
February 2054		9,984.11		0.00		0.00
March 2054		7,138.60		0.00		0.00
April 2054		4,368.24		0.00		0.00
May 2054		1,671.50		0.00		0.00
June 2054 and thereafter		0.00		0.00		0.00

Characteristics of the Mortgage Loans Underlying the Group 1, 4, 10, 11, 13 and 14 Trust Assets<sup>(1)</sup>:

Exhibit A

Pool Number	Principal Balance	Weighted Average Remaining Term to Maturity (in months)	Weighted Average Loan Age (in months)	Weighted Average Mortgage Rate <sup>(2)</sup>
	Balance	(III IIIOIIIIIS)	(III IIIOIIIIIS)	Mortgage Kate
Group 1 Trust Assets	φ110 (00 02 <b>=</b> 1 <b>=</b>	25/	/	( 0==0/
MA9853	\$112,600,937.17	354	4	6.977%
Group 4 Trust Assets <sup>(3)</sup>	<b>==</b> 000 00	/ <b>-</b> /		<b>-</b> 4 <b>-</b> /0/
CQ5816	\$ 75,820.38	474	6	7.174%
CV1303	15,368.20	474	6	7.250
CV1311	49,774.46	452	11	7.055
CV7873	202,910.61	476	4	6.999
CZ0399	104,827.99	476	4	7.250
CZ9578	91,970.71	477	3	6.875
DA3416	120,620.61	477	3	7.250
DB2565	41,359.96	477	3	6.750
DB4158	65,262.97	474	6	7.177
DB8021	166,382.41	473	7	6.898
DC1289	39,294.96	474	6	7.125
DC5076	176,362.36	474	5	7.003
DC5166	105,598.03	451	10	7.114
DC5337	146,970.17	475	5	7.085
DC5435	82,118.15	475	5	7.125
DC5619	191,479.08	463	3	7.250
DC6346	79,865.16	474	6	7.125
DC6733	1,141,309.30	474	5	7.021
DC6748	1,362,279.95	474	5	6.944
DC6981	32,577.10	469	8	6.875
DC7031	74,251.28	473	6	7.000
DC7045	137,366.69	472	7	6.875
DC7073	95,860.55	474	6	7.000
DC7141	133,079.82	475	5	7.000
DC7148	145,999.97	476	4	6.750
DC7161	102,702.66	475	5	7.035
DC7472	59,729.45	466	14	7.076
DC7982	31,187.14	473	7	7.250
DC7984	59,322.83	472	7	7.250
DC8065	36,709.29	473	7	7.250
DC8571	199,996.72	474	6	7.229
DC9670	106,224.66	467	6	7.064
DC9695	93,880.25	474	6	7.160
DC9785	58,567.33	474	5	6.773
DC9948	182,536.46	476	4	6.918
DC9955	49,116.90	475	5	7.000
DC9963	72,928.18	475	5	7.000
DD1133	51,058.79	474	6	7.000
DD1258	189,630.74	471	8	7.059
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Pool Number	Principal Balance	Weighted Average Remaining Term to Maturity (in months)	Weighted Average Loan Age (in months)	Weighted Average Mortgage Rate <sup>(2)</sup>
DD1383	\$1,500,957.59	470	9	6.934%
DD1435	484,062.03	472	8	7.064
DD1525	255,833.39	465	6	7.055
DD1599	309,919.81	470	10	6.929
DD1626	93,413.59	477	3	7.125
DD2482	304,871.28	473	5	7.197
DD4536	396,616.27	473	7	7.087
DD4762	44,246.27	473	7	7.250
DD4799	473,929.59	477	3	7.000
DD4816	231,332.87	477	3	7.071
DD4818	1,904,140.27	477	3	7.129
DD5335	171,192.97	475	5	7.250
DD5346	76,011.23	475	5	7.000
DD5354	92,240.23	476	4	7.064
DD55416	391,560.26	473	6	7.004
DD5417	2,400,266.74	473	5	7.101
			6	
DD5444	49,521.15	451 467	5	7.250
DD5644	459,569.37		5 5	6.875
DD5645	550,837.04	475		6.983
DD5647	649,129.84	469	6	7.150
DD5937	1,984,971.26	471	8	7.117
DD6156	40,442.00	467	5	7.125
DD6758	972,754.79	474	4	6.954
DD7297	26,912.76	460	18	6.875
DD7671	33,371.04	473	7	7.125
DD7779	70,122.45	475	5	7.065
DD8054	42,857.87	476	4	6.750
DD8578	174,482.92	476	4	7.088
DD8772	2,523,395.24	474	6	7.155
DD9207	154,425.36	458	15	7.000
DD9231	392,471.84	469	9	6.866
DD9562	245,299.25	474	5	7.197
DD9563	291,046.36	475	5	7.250
DD9614	851,324.33	474	4	7.155
DD9878	556,283.10	476	3	7.250
DD9931	71,612.42	475	5	7.250
DD9946	64,919.97	463	17	7.250
DE0735	82,234.01	472	8	7.161
DE0747	310,645.88	475	4	7.250
DE1542	149,117.08	430	5	7.125
DE1924	794,762.50	476	4	6.875
DE1927	1,208,315.09	475	5	7.080
DE2477	97,421.20	473	6	7.069
DE2716	100,015.22	317	18	6.750
DE2735	78,906.25	471	9	7.125
DE2869	201,761.34	477	3	7.250
DE2997	38,371.36	476	4	6.750
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Pool Number	Principal Balance	Weighted Average Remaining Term to Maturity (in months)	Weighted Average Loan Age (in months)	Weighted Average Mortgage Rate <sup>(2)</sup>
DE3009	\$ 141,713.04	476	4	6.750%
DE3020	224,013.53	474	4	6.750
DE3057	103,557.56	477	3	6.750
DE3613	32,582.56	476	4	7.125
DE3616	71,720.09	471	9	6.875
DE3660	61,074.15	473	7	7.044
DE4507	877,732.75	476	3	7.163
DE4543	38,015.68	471	9	7.125
DE4644	37,943.83	477	3	7.125
DE4987	50,276.32	471	9	7.125
DE5213	61,900.02	474	5	7.125
DE5978	26,522.56	476	4	7.250
DE5991	50,051.38	471	3	7.034
DE6028	31,638.84	476	4	7.250
DE7127	639,266.20	474	4	7.148
DE7558	229,189.68	477	3	6.961
DE7568	353,111.22	477	3	7.196
DE7570	3,131,022.15	476	3	7.016
DE7589	37,069,282.98	476	3	7.069
DE7615	2,933,590.70	476	3	7.085
DE7619	14,380,241.46	476	3	7.087
DE7623	3,403,913.51	477	3	6.991
DE7624	1,309,571.83	477	3	7.072
DE7649	462,006.90	476	3	7.085
DE7655	3,269,735.19	476	3	7.078
DE8352	211,389.70	477	3	7.250
DE9651	68,464.29	477	3	6.901
DE9686	90,447.01	477	3	7.000
DE9975	6,580,268.12	477	3	7.088
DF0206	142,848.61	475	5	7.143
DF0211	587,330.27	476	3	7.218
DF0834	41,042.00	464	16	7.250
DF0855	237,400.60	477	3	7.250
DF1079	1,352,190.05	477	3	7.037
DF1660	301,235.06	477	3	6.870
DF1852	111,900.67	477	3	6.750
DF1919	92,872.00	477	3	7.125
DF2080	55,552.44	473	7	6.863
DF2366	193,314.49	477	3	7.050
DF2371	749,832.34	477	3	7.083
DF2390	451,056.15	477	3	7.250
DF3382	828,424.15	476	4	6.853
DF3559	1,933,559.60	476	3	6.890
DF3571	255,782.25	469	4	6.938
DF3632	976,737.24	474	3	6.862
DF3636	35,740.49	477	3	7.000
DF3642	475,670.57	477	3	6.888
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Pool Number	Principal Balance	Weighted Average Remaining Term to Maturity (in months)	Weighted Average Loan Age (in months)	Weighted Average Mortgage Rate <sup>(2)</sup>
DF3649	\$ 648,743.31	476	3	6.886%
DF3863	3,311,098.46	477	3	6.913
DF3872	1,143,384.68	475	3	6.863
DF3989	214,662.55	468	5	6.997
DF4747	105,732.16	476	3	7.250
DF6002	733,748.86	477	3	6.837
DF6071	734,674.73	475	3	7.129
DF6080	569,807.24	476	3	6.967
DF9516	299,929.94	477	3	7.152
	\$121,094,711.11			
<b>Group 10 Trust Assets</b>				
MB0027	\$150,842,865.51	356	2	6.568%
<b>Group 11 Trust Assets</b>				
MA8883	\$ 5,425,896.74	340	19	7.760%
MA9492	27,218,493.72	346	11	7.929
	\$ 32,644,390.46			
<b>Group 13 Trust Assets</b>				
MA9174	\$ 27,701.60	342	15	7.426%
MA9244	655,456.38	343	14	7.435
MA9308	1,089,510.08	344	13	7.513
MA9365	86,994,742.32	345	12	7.544
MA9426	11,232,589.87	346	11	7.534
	\$100,000,000.25			
Group 14 Trust Assets <sup>(4)</sup>				
785433	\$ 414,917.53	311	45	2.899%
785655	3,900,374.23	313	46	3.034
785813	3,957.12	323	36	3.040
786332	19,973,615.59	324	35	3.007
BY0769	245,243.17	301	51	2.815
BZ8524	1,217,207.33	289	47	2.750
BZ8525	691,285.09	251	47	2.750
CB4514	2,347,330.24	293	46	2.763
CB4535	796,166.31	252	45	2.750
CP4323	805,660.31	330	30	3.054
	\$ 30,395,756.92			

<sup>(1)</sup> As of December 1, 2024.

<sup>(2)</sup> The Mortgage Loans underlying the Group 1, 4, 10, 11, 13 and 14 Trust Assets may bear interest at rates ranging from 0.25% to 1.50% per annum above the related Certificate Rate.

<sup>(3)</sup> The Mortgage Loans underlying the Group 4 Trust Assets are modified loans with terms greater than or equal to 361 but not more than 480 months from the pool issuance date.

<sup>(4)</sup> More than 10% of the Mortgage Loans underlying the Group 14 Trust Assets may be higher balance Mortgage Loans. See "Risk Factors" in this Supplement.



\$1,508,433,991

# **Government National Mortgage Association**

# **GINNIE MAE®**

Guaranteed REMIC
Pass-Through Securities
and MX Securities
Ginnie Mae REMIC Trust 2024-196

OFFERING CIRCULAR SUPPLEMENT
December 23, 2024

J. P. Morgan

Mischler Financial Group, Inc.