

\$1,167,115,715
Government National Mortgage Association

GINNIE MAE®

**Guaranteed REMIC Pass-Through Securities
and MX Securities
Ginnie Mae REMIC Trust 2023-113**

The Securities

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

The Ginnie Mae Guaranty

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

The Trust and its Assets

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

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

See “Risk Factors” beginning on page S-12 which highlights some of these risks.

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

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

The securities are exempt from registration under the Securities Act of 1933 and are “exempt 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						
AS(1)	\$ 63,695,566	(5)	NTL(PT)	INV/IO	38384CTS8	August 2063
DA(1)	25,633,000	5.50%	SEQ	FIX	38384CTT6	January 2061
DY	6,214,784	5.50	SEQ	FIX	38384CTU3	August 2063
FA(1)	63,695,566	(5)	PT	FLT	38384CTV1	August 2063
SX(1)	1,469,897	(5)	NTL(PT)	INV/IO	38384CTW9	August 2063
XS(1)	1,469,897	(5)	NTL(PT)	INV/IO	38384CTX7	August 2063
Security Group 2						
BS(1)	32,291,568	(5)	NTL(PT)	INV/IO	38384CTY5	August 2053
FB	20,000,000	(5)	PT	FLT	38384CTZ2	August 2053
FD	50,875,000	(5)	PT	FLT	38384CUA5	August 2053
FJ	15,000,000	(5)	PT	FLT	38384CUB3	August 2053
IS	615,384	(5)	NTL(PT)	INV/IO	38384CUC1	August 2053
IT(1)	2,076,923	(5)	NTL(PT)	INV/IO	38384CUD9	August 2053
LA(1)	36,942,000	5.50	SEQ	FIX	38384CUE7	April 2050
LB(1)	4,652,000	5.50	SEQ	FIX	38384CUF4	August 2051
LC(1)	8,406,000	5.50	SEQ	FIX	38384CUG2	August 2053
LF(1)	50,000,000	(5)	PT	FLT	38384CUH0	August 2053
MF(1)	50,000,000	(5)	PT	FLT	38384CUI6	August 2053
SC(1)	53,583,432	(5)	NTL(PT)	INV/IO	38384CUIK3	August 2053
SI	153,846	(5)	NTL(PT)	INV/IO	38384CUL1	August 2053
SL	100,000,000	(5)	NTL(PT)	INV/IO	38384CUM9	August 2053
ST(1)	1,538,461	(5)	NTL(PT)	INV/IO	38384CUN7	August 2053
TI	782,691	(5)	NTL(PT)	INV/IO	38384CUP2	August 2053
Security Group 3						
FG	100,000,000	(5)	PT	FLT	38384CUQ0	August 2053
FH	25,000,000	(5)	PT	FLT	38384CUR8	August 2053
GA	5,100,000	5.50	SEQ	FIX	38384CUS6	June 2050
GC	31,857,000	5.50	SEQ	FIX	38384CUT4	March 2050
GV(1)	5,115,000	5.50	SEQ/AD	FIX	38384CUU1	July 2034
GY(1)	1,667,157	5.50	SEQ	FIX	38384CUV9	August 2053
GZ(1)	6,260,843	5.50	SEQ	FIX/Z	38384CUW7	August 2053
SB(1)	25,000,000	(5)	NTL(PT)	INV/IO	38384CUX5	August 2053
SG	100,000,000	(5)	NTL(PT)	INV/IO	38384CUY3	August 2053
TS(1)	961,538	(5)	NTL(PT)	INV/IO	38384CUZ0	August 2053
Security Group 4						
FN	100,000,000	(5)	PT	FLT	38384CVA4	August 2053
JA(1)	73,196,000	6.00	SEQ	FIX	38384CVB2	February 2050
JC(1)	17,310,000	6.00	SEQ	FIX	38384CVC0	July 2052
JD(1)	9,494,000	6.00	SEQ	FIX	38384CVD8	August 2053
SN	100,000,000	(5)	NTL(PT)	INV/IO	38384CVE6	August 2053
Security Group 5						
CF	50,897,529	(5)	PT	FLT	38384CVF3	August 2053
CS(1)	50,897,529	(5)	NTL(PT)	INV/IO	38384CVG1	August 2053
PO(1)	3,915,195	0.00	PT	PO	38384CVH9	August 2053
Security Group 6						
HA	25,000,000	6.00	SEQ	FIX	38384CVJ5	September 2049
HB(1)	10,043,453	6.00	SEQ	FIX	38384CVK2	August 2053
Security Group 7						
AC	21,000,000	6.00	SEQ	FIX	38384CVL0	April 2052
CY(1)	2,636,405	6.00	SEQ	FIX	38384CVM8	August 2053
Security Group 8						
HI	1,384,615	6.50	NTL(SEQ)	FIX/IO	38384CVN6	April 2049
HK	30,000,000	6.20	SEQ	FIX	38384CVP1	April 2049
JY(1)	9,224,163	6.50	SEQ	FIX	38384CVQ9	August 2053
KA	10,000,000	6.50	SEQ	FIX	38384CVR7	April 2049
KY	10,000,000	6.50	SEQ	FIX	38384CVS5	August 2053

(Cover continued on next page)



Ramirez & Co., Inc.

The date of this Offering Circular Supplement is August 24, 2023.

Class of REMIC Securities	Original Principal Balance(2)	Interest Rate	Principal Type(3)	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
Security Group 9						
MA	\$ 10,000,000	6.50%	SEQ	FIX	38384CVT3	August 2049
MY(1)	4,360,028	6.50	SEQ	FIX	38384CVU0	August 2053
Security Group 10						
IA(1)	1,486,248	(5)	NTL(SC/PT)	INV/IO	38384CVV8	September 2048
SE(1)	44,587,455	(5)	NTL(SC/PT)	INV/IO	38384CVW6	September 2048
Security Group 11						
IB	412,595	(5)	NTL(SC/PT)	INV/IO	38384CVX4	June 2049
IC	509,186	(5)	NTL(SC/PT)	INV/IO	38384CVY2	September 2049
SK(1)	87,418,149	(5)	NTL(SC/PT)	INV/IO	38384CVZ9	September 2049
Security Group 12						
FV	25,000,000	(5)	PT	FLT	38384CWA3	August 2053
SV(1)	25,000,000	(5)	NTL(PT)	INV/IO	38384CWB1	August 2053
Security Group 13						
FP	113,819,457	(5)	PT	FLT	38384CWC9	August 2053
SP	113,819,457	(5)	NTL(PT)	INV/IO	38384CWD7	August 2053
Security Group 14						
FQ(1)	50,000,000	(5)	PT	FLT	38384CWE5	August 2053
IX(1)	769,230	(5)	NTL(PT)	INV/IO	38384CWF2	August 2053
QA(1)	36,452,000	6.00	SEQ	FIX	38384CWG0	February 2050
QB(1)	4,707,000	6.00	SEQ	FIX	38384CWH8	June 2051
QC(1)	8,841,000	6.00	SEQ	FIX	38384CWI4	August 2053
SQ(1)	50,000,000	(5)	NTL(PT)	INV/IO	38384CWL1	August 2053
UI(1)	769,230	(5)	NTL(PT)	INV/IO	38384CWL9	August 2053
XI(1)	769,230	(5)	NTL(PT)	INV/IO	38384CWM7	August 2053
Security Group 15						
FW	34,801,135	(5)	PT	FLT	38384CWN5	August 2053
SW	34,801,135	(5)	NTL(PT)	INV/IO	38384CWP0	August 2053
Residual						
RR	0	0.00	NPR	NPR	38384CQW8	August 2063

- (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.

AVAILABLE INFORMATION

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

- this Offering Circular Supplement (this “Supplement”),
- the Base Offering Circular and
- in the case of the Group 10 and 11 securities, each disclosure document relating to the Underlying Certificates (the “Underlying Certificate Disclosure Documents”).

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

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

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

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TERMS SHEET

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

Sponsor: BMO Capital Markets Corp.

Co-Sponsor: Samuel A. Ramirez & Company, Inc.

Trustee: U.S. Bank National Association

Tax Administrator: The Trustee

Closing Date: August 30, 2023

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

Trust Assets:

<u>Trust Asset Group or Subgroup⁽²⁾</u>	<u>Trust Asset Type</u>	<u>Certificate Rate</u>	<u>Original Term To Maturity (in years)</u>
1	Ginnie Mae II	6.500%	40
2A	Ginnie Mae II	6.500%	30
2B	Ginnie Mae II	6.500%	30
2C	Ginnie Mae II	6.500%	30
2D	Ginnie Mae II	6.500%	30
3	Ginnie Mae II	6.500%	30
4	Ginnie Mae II	6.500%	30
5	Ginnie Mae II	6.500%	30
6	Ginnie Mae II	6.000%	30
7	Ginnie Mae II	6.000%	30
8	Ginnie Mae II	6.500%	30
9	Ginnie Mae II	6.500%	30
10	Underlying Certificates	(1)	(1)
11A	Underlying Certificate	(1)	(1)
11B	Underlying Certificates	(1)	(1)
11C	Underlying Certificates	(1)	(1)
12	Ginnie Mae II	6.500%	30
13	Ginnie Mae II	7.000%	30
14	Ginnie Mae II	6.500%	30
15	Ginnie Mae II	7.000%	30

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

⁽²⁾ The Group 2 and 11 Trust Assets consist of the enumerated subgroups (each, a “Subgroup”).

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 certain MX Classes in Groups 3, 6, 7, 8, 9, 10, 11 and 12, payments on each Group will be based solely on payments on the Trust Asset Group with the same numerical designation.

Assumed Characteristics of the Mortgage Loans Underlying the Group 1, 2, 3, 4, 5, 6, 7, 8, 9, 12, 13, 14 and 15 Trust Assets⁽¹⁾:

<u>Principal Balance</u>	<u>Weighted Average Remaining Term to Maturity (in months)</u>	<u>Weighted Average Loan Age (in months)</u>	<u>Weighted Average Mortgage Rate⁽²⁾</u>
Group 1 Trust Assets			
\$95,543,350 ⁽³⁾	472	2	6.857%
Subgroup 2A Trust Assets			
\$18,583,432	353	2	7.062%
Subgroup 2B Trust Assets			
\$32,291,568	356	2	7.098%
Subgroup 2C Trust Assets			
\$50,000,000	355	1	7.054%
Subgroup 2D Trust Assets			
\$135,000,000	358	1	7.089%
Group 3 Trust Assets			
\$175,000,000	358	1	7.039%
Group 4 Trust Assets			
\$200,000,000	359	0	7.039%
Group 5 Trust Assets			
\$54,812,724	358	2	6.997%
Group 6 Trust Assets			
\$35,043,453	350	1	6.450%
Group 7 Trust Assets			
\$23,636,405	358	1	6.585%
Group 8 Trust Assets			
\$59,224,163	359	1	7.036%
Group 9 Trust Assets			
\$14,360,028	325	1	6.986%
Group 12 Trust Assets			
\$25,000,000	359	0	7.035%
Group 13 Trust Assets			
\$113,819,457	353	4	7.371%
Group 14 Trust Assets			
\$100,000,000	359	0	7.039%
Group 15 Trust Assets			
\$34,801,135	358	2	7.483%

⁽¹⁾ As of August 1, 2023.

- (2) The Mortgage Loans underlying the Group 1, 2, 3, 4, 5, 6, 7, 8, 9, 12, 13, 14 and 15 Trust Assets may bear interest at rates ranging from 0.25% to 1.50% per annum above the related Certificate Rate.
- (3) The Mortgage Loans underlying the Group 1 Trust Assets are modified loans with terms greater than or equal to 361 but not more than 480 months from the pool issuance date.

The actual remaining terms to maturity, loan ages and Mortgage Rates of many of the Mortgage Loans underlying the Group 1, 2, 3, 4, 5, 6, 7, 8, 9, 12, 13, 14 and 15 Trust Assets will differ from the weighted averages shown above, perhaps significantly. See *“The Trust Assets — The Mortgage Loans” in this Supplement*.

Characteristics of the Group 10 and 11 Trust Assets: See Exhibit A to this Supplement for certain information regarding the characteristics of the related Underlying Certificates.

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

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

Increased Minimum Denomination Classes: Each Class that constitutes a Principal Only, Interest Only or Inverse Floating Rate 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 one-month CME Term SOFR (hereinafter referred to as “CME Term SOFR”) or a 30-day compounded average of the Secured Overnight Financing Rate (“SOFR”) (hereinafter referred to as “30-day Average SOFR”) as follows:

Class	Interest Rate Formula(1)	Initial Interest Rate(2)	Minimum Rate	Maximum Rate	Delay (in days)	CME Term SOFR or 30-day Average SOFR for Minimum Interest Rate
Security Group 1						
AF	30-day Average SOFR + 1.25%	6.35884%	1.25%	7.00000000%	0	0.00000%
AS	5.60% — 30-day Average SOFR	0.49116%	0.00%	5.60000000%	0	5.60000%
BF	30-day Average SOFR + 1.40%	6.50884%	1.40%	7.00000000%	0	0.00000%
ES	5.75% — 30-day Average SOFR	0.64116%	0.00%	5.75000000%	0	5.75000%
FA	30-day Average SOFR + 1.10%	6.20884%	1.10%	7.00000000%	0	0.00000%
SA	5.90% — 30-day Average SOFR	0.79116%	0.00%	5.90000000%	0	5.90000%
SX	249.16666667% — (30-day Average SOFR x 43.33333333)	6.50000%	0.00%	6.50000000%	0	5.75000%
XS	255.66666667% — (30-day Average SOFR x 43.33333333)	6.50000%	0.00%	6.50000000%	0	5.90000%

Class	Interest Rate Formula(1)	Initial Interest Rate(2)	Minimum Rate	Maximum Rate	Delay (in days)	CME Term SOFR or 30-day Average SOFR for Minimum Interest Rate
Security Group 2						
BS	5.05% - 30-day Average SOFR	0.00000%	0.00%	5.05000000%	0	5.05000%
FB	30-day Average SOFR + 1.40%	6.50000%	1.40%	6.50000000%	0	0.00000%
FD	30-day Average SOFR + 1.35%	6.41968%	1.35%	6.50000000%	0	0.00000%
FJ	30-day Average SOFR + 1.45%	6.50000%	1.45%	6.50000000%	0	0.00000%
FL	30-day Average SOFR + 1.12%	6.29245%	1.12%	7.00000000%	0	0.00000%
FM	30-day Average SOFR + 1.20%	6.37245%	1.20%	7.00000000%	0	0.00000%
IS	477.75% - (30-day Average SOFR x 81.25)	6.50000%	0.00%	6.50000000%	0	5.88000%
IT	148.0555556% - (30-day Average SOFR x 24.07407407)	6.50000%	0.00%	6.50000000%	0	6.15000%
LF	30-day Average SOFR + 0.85%	6.02245%	0.85%	7.00000000%	0	0.00000%
MF	30-day Average SOFR + 1.00%	6.17245%	1.00%	7.00000000%	0	0.00000%
SC	5.05% - 30-day Average SOFR	0.00000%	0.00%	5.05000000%	0	5.05000%
SI	663.00% - (30-day Average SOFR x 130)	0.00000%	0.00%	6.50000000%	0	5.10000%
SL	5.80% - 30-day Average SOFR	0.62755%	0.00%	5.80000000%	0	5.80000%
SM	5.05% - 30-day Average SOFR	0.00000%	0.00%	5.05000000%	0	5.05000%
ST	195.00% - (30-day Average SOFR x 32.5)	6.50000%	0.00%	6.50000000%	0	6.00000%
TI	334.75% - (30-day Average SOFR x 65)	5.22080%	0.00%	6.50000000%	0	5.15000%
Security Group 3						
FG	30-day Average SOFR + 1.10%	6.21620%	1.10%	7.00000000%	0	0.00000%
FH	30-day Average SOFR + 1.55%	6.50000%	1.55%	6.50000000%	0	0.00000%
SB	4.70% - 30-day Average SOFR	0.00000%	0.00%	4.70000000%	0	4.70000%
SG	5.90% - 30-day Average SOFR	0.78380%	0.00%	5.90000000%	0	5.90000%
SH	4.95% - 30-day Average SOFR	0.00000%	0.00%	4.95000000%	0	4.95000%
TS	128.70% - (30-day Average SOFR x 26)	0.00000%	0.00%	6.50000000%	0	4.95000%
Security Group 4						
FN	30-day Average SOFR + 1.25%	6.47165%	1.25%	7.00000000%	0	0.00000%
SN	5.75% - 30-day Average SOFR	0.52835%	0.00%	5.75000000%	0	5.75000%
Security Group 5						
CF	30-day Average SOFR + 1.27%	6.45048%	1.27%	7.00000000%	0	0.00000%
CS	5.73% - 30-day Average SOFR	0.54952%	0.00%	5.73000000%	0	5.73000%
KS	17.19000034% - (30-day Average SOFR x 3.00000006)	1.64856%	0.00%	17.19000034%	0	5.73000%
LS	22.92000045% - (30-day Average SOFR x 4.00000008)	2.19808%	0.00%	22.92000045%	0	5.73000%
NS	28.65000056% - (30-day Average SOFR x 5.00000010)	2.74760%	0.00%	28.65000056%	0	5.73000%
QS	74.48999122% - (30-day Average SOFR x 12.99999847)	7.14376%	0.00%	74.48999122%	0	5.73000%
S	11.46000023% - (30-day Average SOFR x 2.00000004)	1.09904%	0.00%	11.46000023%	0	5.73000%
Security Group 10						
IA	182.5656% - (CME Term SOFR x 30)	4.50000%	0.00%	4.50000000%	0	6.08552%
JS	6.08552% - CME Term SOFR	0.77154%	0.00%(3)	6.20000000%(3)	0	6.08552%
SE	5.93552% - CME Term SOFR	0.62154%	0.00%(3)	6.05000000%(3)	0	5.93552%
Security Group 11						
IB	271.5984% - (CME Term SOFR x 45)	4.50000%	0.00%	4.50000000%	0	6.03552%
IC	538.6968% - (CME Term SOFR x 90)	4.50000%	0.00%	4.50000000%	0	5.98552%
SK	5.93552% - CME Term SOFR	0.62154%	0.00%(3)	6.05000000%(3)	0	5.93552%
Security Groups 10 and 11						
HS	5.93552% - CME Term SOFR	0.62154%	0.00%(3)	6.05000000%(3)	0	5.93552%
Security Group 12						
FV	30-day Average SOFR + 1.80%	6.50000%	1.80%	6.50000000%	0	0.00000%
SV	4.70% - 30-day Average SOFR	0.00000%	0.00%	4.70000000%	0	4.70000%
Security Groups 3 and 12						
PS	4.70% - 30-day Average SOFR	0.00000%	0.00%	4.70000000%	0	4.70000%
Security Group 13						
FP	30-day Average SOFR + 1.20%	6.30145%	1.20%	7.00000000%	0	0.00000%
SP	5.80% - 30-day Average SOFR	0.69855%	0.00%	5.80000000%	0	5.80000%

Class	Interest Rate Formula(1)	Initial Interest Rate(2)	Minimum Rate	Maximum Rate	Delay (in days)	CME Term SOFR or 30-day Average SOFR for Minimum Interest Rate
Security Group 14						
DF	30-day Average SOFR + 1.40%	6.62160%	1.40%	7.00000000%	0	0.00000%
EF	30-day Average SOFR + 1.30%	6.52160%	1.30%	7.00000000%	0	0.00000%
FQ	30-day Average SOFR + 1.10%	6.32160%	1.10%	7.00000000%	0	0.00000%
GF	30-day Average SOFR + 1.20%	6.42160%	1.20%	7.00000000%	0	0.00000%
GS	5.90% – 30-day Average SOFR	0.67840%	0.00%	5.90000000%	0	5.90000%
IX	383.50% – (30-day Average SOFR x 65)	6.50000%	0.00%	6.50000000%	0	5.90000%
MS	5.80% – 30-day Average SOFR	0.57840%	0.00%	5.80000000%	0	5.80000%
SJ	5.70% – 30-day Average SOFR	0.47840%	0.00%	5.70000000%	0	5.70000%
SQ	5.60% – 30-day Average SOFR	0.37840%	0.00%	5.60000000%	0	5.60000%
UI	370.50% – (30-day Average SOFR x 65)	6.50000%	0.00%	6.50000000%	0	5.70000%
XI	377.00% – (30-day Average SOFR x 65)	6.50000%	0.00%	6.50000000%	0	5.80000%
Security Group 15						
FW	30-day Average SOFR + 1.30%	6.52165%	1.30%	7.00000000%	0	0.00000%
SW	5.70% – 30-day Average SOFR	0.47835%	0.00%	5.70000000%	0	5.70000%

- (1) CME Term SOFR and 30-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.
- (2) The initial Interest Rate will be in effect during the first Accrual Period; the Interest Rate will adjust monthly thereafter.
- (3) The minimum and maximum rate for Classes HS, JS, SE and SK, which bear interest based on CME Term SOFR, are based on the minimum and maximum rate for the related Underlying Certificates, which bear interest based on Adjusted CME Term SOFR. This may impact whether the minimum or maximum rate for Classes HS, JS, SE and SK is reached. *See “Yield, Maturity and Prepayment Considerations — Yield Considerations — CME Term SOFR and 30-day Average SOFR: Effect on Yields of the Floating Rate and Inverse Floating Rate Classes” in this Supplement and “Underlying Certificates” in the Base Offering Circular.*

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

SECURITY GROUP 1

The Group 1 Principal Distribution Amount will be allocated, concurrently, as follows:

- 33.3333340311%, sequentially, to DA and DY, in that order, until retired
- 66.6666659689% to FA, until retired

SECURITY GROUP 2

The Subgroup 2A Principal Distribution Amount, the Subgroup 2B Principal Distribution Amount, the Subgroup 2C Principal Distribution Amount and the Subgroup 2D Principal Distribution Amount will be allocated as follows:

- The Subgroup 2A Principal Distribution Amount and the Subgroup 2B Principal Distribution Amount to FD, until retired
- 70% of the Subgroup 2C Principal Distribution Amount, concurrently, to FB and FJ, pro rata, until retired

- 10% of the Subgroup 2C Principal Distribution Amount and 33.3333333333% of the Subgroup 2D Principal Distribution Amount, sequentially, to LA, LB and LC, in that order, until retired
- The remainder of the Subgroup 2C Principal Distribution Amount and the remainder of the Subgroup 2D Principal Distribution Amount, concurrently, to LF and MF, pro rata, until retired

SECURITY GROUP 3

The Group 3 Principal Distribution Amount and the Accrual Amount will be allocated as follows:

- The Accrual Amount, sequentially, to GV and GZ, in that order, until retired
- 3.8669468571% of the Group 3 Principal Distribution Amount, sequentially, to GA and GY, in that order, until retired
- 24.7044817143% of the Group 3 Principal Distribution Amount, sequentially, to GC, GV and GZ, in that order, until retired
- The remainder of the Group 3 Principal Distribution Amount, concurrently, to FG and FH, pro rata, until retired

SECURITY GROUP 4

The Group 4 Principal Distribution Amount will be allocated, concurrently, as follows:

- 50% to FN, until retired
- 50%, sequentially, to JA, JC and JD, in that order, until retired

SECURITY GROUP 5

The Group 5 Principal Distribution Amount will be allocated, concurrently, to CF and PO, pro rata, until retired

SECURITY GROUP 6

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

SECURITY GROUP 7

The Group 7 Principal Distribution Amount will be allocated, sequentially, to AC and CY, in that order, until retired

SECURITY GROUP 8

The Group 8 Principal Distribution Amount will be allocated in the following order of priority:

1. Concurrently, to HK and KA, pro rata, until retired
2. Concurrently, to JY and KY, pro rata, until retired

SECURITY GROUP 9

The Group 9 Principal Distribution Amount will be allocated, sequentially, to MA and MY, in that order, until retired

SECURITY GROUP 12

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

SECURITY GROUP 13

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

SECURITY GROUP 14

The Group 14 Principal Distribution Amount will be allocated, concurrently, as follows:

- 50% to FQ, until retired
- 50%, sequentially, to QA, QB and QC, in that order, until retired

SECURITY GROUP 15

The Group 15 Principal Distribution Amount will be allocated to FW, until retired

Accrual Class: Interest will accrue on the 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 Class as interest. Interest so accrued on the Accrual Class on each Distribution Date will constitute the Accrual Amount, which will be added to the Class Principal Balance of that Class on each Distribution Date and will be distributable as principal as set forth in this Terms Sheet under “Allocation of Principal.”

Notional Classes: The Notional Classes will not receive distributions of principal but have Class Notional Balances for convenience in describing their entitlements to interest. The Class Notional Balance of each Notional Class represents the percentage indicated below of, and reduces to that extent with, the Class Principal Balances or the outstanding principal or notional balance of the related Trust Asset Group, Groups, Subgroup or Subgroups indicated:

<u>Class</u>	<u>Original Class Notional Balance</u>	<u>Represents Approximately</u>
Security Group 1		
AS	\$ 63,695,566	100% of FA (PT Class)
DI	5,915,307	23.0769230769% of DA (SEQ Class)
ES	63,695,566	100% of FA (PT Class)
SA	63,695,566	100% of FA (PT Class)
SX	1,469,897	2.3076923077% of FA (PT Class)
XS	1,469,897	2.3076923077% of FA (PT Class)
Security Group 2		
BS	\$ 32,291,568	100% of the Subgroup 2B Trust Assets
IL	9,598,615	23.0769230769% of LA and LB (in the aggregate) (SEQ Classes)
IS	615,384	1.2307692308% of LF (PT Class)
IT	2,076,923	4.1538461538% of LF (PT Class)
LI	8,525,076	23.0769230769% of LA (SEQ Class)
MI	\$ 1,153,846	2.3076923077% of the Subgroup 2C Trust Assets
	10,384,615	7.6923076923% of the Subgroup 2D Trust Assets
	<u>\$ 11,538,461</u>	

Class	Original Class Notional Balance	Represents Approximately
SC	\$ 18,583,432	100% of the Subgroup 2A Trust Assets
	35,000,000	70% of the Subgroup 2C Trust Assets
	<u>\$ 53,583,432</u>	
SI	\$ 153,846	0.7692307692% of FB (PT Class)
SL	100,000,000	100% of LF and MF (in the aggregate) (PT Classes)
SM	\$ 50,875,000	100% of the Subgroup 2A Trust Assets and the Subgroup 2B Trust Assets (in the aggregate)
	35,000,000	70% of the Subgroup 2C Trust Assets
	<u>\$ 85,875,000</u>	
ST	\$ 1,538,461	3.0769230769% of MF (PT Class)
TI	\$ 285,898	1.5384615385% of the Subgroup 2A Trust Assets
	496,793	1.5384615385% of the Subgroup 2B Trust Assets
	<u>\$ 782,691</u>	
Security Group 3		
SB	\$ 25,000,000	100% of FH (PT Class)
SG	100,000,000	100% of FG (PT Class)
SH	25,000,000	100% of FH (PT Class)
TS	961,538	3.8461538462% of FH (PT Class)
Security Group 4		
IJ	\$ 16,891,384	23.0769230769% of JA (SEQ Class)
IN	23,076,923	11.5384615385% of the Group 4 Trust Assets
NI	20,886,000	23.0769230769% of JA and JC (in the aggregate) (SEQ Classes)
SN	100,000,000	100% of FN (PT Class)
Security Group 5		
CS	\$ 50,897,529	100% of CF (PT Class)
Security Group 8		
HI	\$ 1,384,615	4.6153846154% of HK (SEQ Class)
Security Group 10		
IA	\$ 1,486,248	3.3333333333% of the Group 10 Trust Assets
JS	44,587,455	100% of the Group 10 Trust Assets
SE	44,587,455	100% of the Group 10 Trust Assets
Security Group 11		
IB	\$ 412,595	2.2222222222% of the Subgroup 11A Trust Assets
IC	509,186	1.1111111111% of the Subgroup 11B Trust Assets
SK	87,418,149	100% of the Group 11 Trust Assets
Security Groups 10 and 11		
HS	\$ 44,587,455	100% of the Group 10 Trust Assets
	87,418,149	100% of the Group 11 Trust Assets
	<u>\$ 132,005,604</u>	
Security Group 12		
SV	\$ 25,000,000	100% of FV (PT Class)
Security Groups 3 and 12		
PS	\$ 25,000,000	100% of FH (PT Class)
	25,000,000	100% of FV (PT Class)
	<u>\$ 50,000,000</u>	
Security Group 13		
SP	\$ 113,819,457	100% of FP (PT Class)

Class	Original Class Notional Balance	Represents Approximately
Security Group 14		
CI	\$ 15,384,615	15.3846153846% of the Group 14 Trust Assets
GS	50,000,000	100% of FQ (PT Class)
IQ	12,664,307	30.7692307692% of QA and QB (in the aggregate) (SEQ Classes)
IX	769,230	1.5384615385% of FQ (PT Class)
MS	50,000,000	100% of FQ (PT Class)
QI	11,216,000	30.7692307692% of QA (SEQ Class)
SJ	50,000,000	100% of FQ (PT Class)
SQ	50,000,000	100% of FQ (PT Class)
UI	769,230	1.5384615385% of FQ (PT Class)
XI	769,230	1.5384615385% of FQ (PT Class)
Security Group 15		
SW	\$ 34,801,135	100% of FW (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 (principal only securities, for example) and

principal payments are slower than you expected.

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

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

The levels of CME Term SOFR and 30-day Average SOFR, as applicable, will affect the yields on the floating rate and inverse floating rate securities. If CME Term SOFR or 30-day Average SOFR, as applicable, 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 30-day Average SOFR will generally reduce the yield on floating rate securities; higher levels of such indices, as applicable, 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 indices, as applicable, may affect your yield: generally, the earlier a change, the greater the effect on your yield. It is doubtful that such indices 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.

The rate of payments on the underlying certificates will directly affect the rate of payments on the group 10 and 11 securities. The underlying certificates will be sensitive in varying degrees to:

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

As described in the related underlying certificate disclosure document, the trust assets underlying one of the underlying certificates included in trust asset subgroup 11B are also previously issued certificates that represent beneficial ownership interests in separate trusts. The rate of payments on the previously issued certificates backing this underlying certificate will directly affect the timing and rate of payments on the group 11 securities. You should read the related underlying certificate disclosure documents, including the risk factors contained therein, to understand the payments on and related risks of the previously issued certificates backing this underlying certificate.

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

Up to 10% of the mortgage loans underlying the 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 and CME Term SOFR are relatively new market indices, 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 or CME Term SOFR may evolve over time, and trading prices of some securities indexed to 30-day Average SOFR or CME Term SOFR may be lower than those of later-issued securities as a result. Similarly, if 30-day Average SOFR or CME Term 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 or CME Term SOFR is no longer avail-

able, which could adversely affect the value of your investment in the floating rate and inverse floating rate securities. 30-day Average SOFR and CME Term SOFR are published by the Federal Reserve Bank of New York and CME Group 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 or CME Group may directly affect prevailing 30-day Average SOFR or CME Term SOFR, as applicable, in unpredictable ways. There can be no guarantee that 30-day Average SOFR or CME Term 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 or CME Term SOFR, as applicable. If the manner in which 30-day Average SOFR or CME Term SOFR is calculated is changed or if 30-day Average SOFR or CME Term 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 and CME Group have noted that they may alter the methods of calculation, publication schedule, rate revision practices or availability of 30-day Average SOFR or CME Term SOFR, as applicable, at any time without notice. There can be no assurance that 30-day Average SOFR or CME Term 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 or CME Term SOFR, as applicable, 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 CME Term SOFR, as applicable or that any replacement rate will produce the economic equivalent of 30-day Average SOFR or CME Term SOFR, as applicable.

The securities may not be a suitable investment for you. The securities, especially the group 10 and 11 securities and, in particular, the interest only, principal only, inverse floating rate, 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, regardless of whether the assets consist of Trust MBS or the Underlying Certificates, will evidence, directly or indirectly, Ginnie Mae Certificates.

The Trust MBS (Groups 1, 2, 3, 4, 5, 6, 7, 8, 9, 12, 13, 14 and 15)

The Trust MBS are either:

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

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

The Underlying Certificates (Groups 10 and 11)

The Group 10 and 11 Trust Assets are Underlying Certificates that represent beneficial ownership interests in one or more separate trusts, the assets of which evidence direct or indirect beneficial ownership interests in certain Ginnie Mae Certificates. Each Underlying Certificate constitutes all or a portion of a class of a separate Series of certificates described in the related Underlying Certificate Disclosure Document. Each Underlying Certificate Disclosure Document may be obtained from the Information Agent as described under “Available Information” in this Supplement or on ginniemae.gov. Investors are cautioned that material changes in facts and circumstances may have occurred since the date of each Underlying Certificate Disclosure Document, including changes in prepayment rates, prevailing interest rates and other economic factors, which may limit the usefulness of, and be directly contrary to the

assumptions used in preparing the information included in, the offering document. See *“Underlying Certificates” in the Base Offering Circular*.

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

The Mortgage Loans

The Mortgage Loans underlying the Group 1, 2, 3, 4, 5, 6, 7, 8, 9, 12, 13, 14 and 15 Trust Assets are expected to have, on a weighted average basis, the characteristics set forth in the Terms Sheet under “Assumed Characteristics of the Mortgage Loans Underlying the Group 1, 2, 3, 4, 5, 6, 7, 8, 9, 12, 13, 14 and 15 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 principal or 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 the 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 the 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:

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

Trading

For the sole purpose of facilitating trading and settlement, the Principal Only Class will be treated as a non-delay class.

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 or CME Term SOFR as described below.

The Interest Rate for the Group 1, 2, 3, 4, 5, 12, 13, 14 and 15 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 Interest Rate for the Group 10 and 11 Inverse Floating Rate Classes will be based on CME Term SOFR. The Trustee or its agent will determine CME Term SOFR as described under “Description of the Securities — Interest Rate Indices — Determination of CME Term SOFR” in the Base Offering Circular. In the case of the Group 10 and 11 Securities, the Trustee or its agent will use the same values of CME Term SOFR as are used for the related Underlying Certificates.

If CME Term 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 or CME Term 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 or CME Term 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 Class

Class GZ is an Accrual Class. Interest will accrue on the Accrual Class and be distributed as described under “Terms Sheet — Accrual Class” in this Supplement.

Principal Distributions

The Principal Distribution Amount for each Group or Subgroup, as applicable, and the 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 the 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 the Accrual Class) can calculate the amount of principal and

interest to be distributed to that Class and investors in the Accrual Class can calculate the total amount of principal to be distributed to (or interest to be added to the Class Principal Balance of) that Class on the Distribution Date in the current month.

- Investors may obtain current Class Factors on ginniemae.gov.

See “*Description of the Securities — Distributions*” in the Base Offering Circular.

Termination

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

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

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

Modification and Exchange

All or a portion of the Classes of REMIC Securities specified on the front cover may be exchanged for a proportionate interest in the related MX Class 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 Combinations 5, 7, 10, 11, 16, 17, 18, 31, 37 and 38, 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 Combinations 5, 7, 10, 11, 16, 17, 18, 31, 37 and 38, 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 2023-113. 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 (or notional balance) of the Securities surrendered for exchange (but not less than \$2,000 or more than \$25,000); provided, however, that no fee will be payable in respect of an interest only security unless all securities involved in the exchange are interest only securities. If the notional balance of the interest only securities surrendered exceeds that of the interest only securities received, the fee will be based on the latter. The fee must be paid concurrently with the exchange.

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

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

YIELD, MATURITY AND PREPAYMENT CONSIDERATIONS

General

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

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

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

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

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

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

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

Investors in the Group 10 and 11 Securities are urged to review the discussion under *“Risk Factors — The rate of payments on the underlying certificates will directly affect the rate of payments on the group 10 and 11 securities”* in this Supplement.

Accretion Directed Class

Class GV is an Accretion Directed Class. The Accrual Amount will be applied to making principal distributions on Class GV as described in this Supplement.

Class GV 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 GV will have principal payment stability only through the prepayment rate shown in the table below.

Class GV is entitled to principal payments in an amount equal to interest accrued on the Accrual Class. The Weighted Average Life of Class GV 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 GV 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 GV will be reduced at prepayment speeds higher than the constant rate shown in the table below. See *“Yield, Maturity and Prepayment Considerations — Decrement Tables” in this Supplement*.

Accretion Directed Class				
Security Group	Class	Maximum Weighted Average Life (in years) ⁽¹⁾	Final Distribution Date	Prepayment Rate at or below
3	GV	6.0	July 2034	188% PSA

- ⁽¹⁾ The maximum Weighted Average Life for Class GV 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 GV, 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.

Assumability

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

Final Distribution Date

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

- The actual retirement of any Class may occur earlier than its Final Distribution Date.
- According to the terms of the Ginnie Mae Guaranty, Ginnie Mae will guarantee payment in full of the Class Principal Balance of each Class of Securities no later than its Final Distribution Date.

Modeling Assumptions

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

1. The Mortgage Loans underlying the Group 1, 2, 3, 4, 5, 6, 7, 8, 9, 12, 13, 14 and 15 Trust Assets have the assumed characteristics shown under “Assumed Characteristics of the Mortgage Loans Underlying the Group 1, 2, 3, 4, 5, 6, 7, 8, 9, 12, 13, 14 and 15 Trust Assets” in the Terms Sheet, except in the case of information set forth under the 0% PSA Prepayment Assumption Rate, for which each Mortgage Loan underlying a Group 1 Trust Asset is assumed to have an original and a remaining term to maturity of 480 months, each Mortgage Loan underlying a Group 2, 3, 4, 5, 6, 7, 8, 9, 12, 13, 14 or 15 Trust Asset is assumed to have an original and a remaining term to maturity of 360 months and each Mortgage Loan underlying a Group 1, 2, 3, 4, 5, 6, 7, 8, 9, 12, 13, 14 or 15 Trust Asset is assumed to have a Mortgage Rate of 1.50% per annum higher than the related Certificate Rate.

2. The Mortgage Loans prepay at the constant percentages of PSA (described below) shown in the related table.

3. Distributions on the Securities are always received on the 20th day of the month, whether or not a Business Day, commencing in September 2023.

4. A termination of the Trust or any Underlying Trust does not occur.

5. The Closing Date for the Securities is August 30, 2023.

6. No expenses or fees are paid by the Trust other than the Trustee Fee, which is paid as described under “The Trust Assets — The Trustee Fee” in this Supplement.

7. Distributions on the Underlying Certificates are made as described in the related Underlying Certificate Disclosure Documents.

8. Each Class is held from the Closing Date and is not exchanged in whole or in part.

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

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

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

Decrement Tables

Prepayments of mortgage loans are commonly measured by a prepayment standard or model. The model used in this Supplement, Prepayment Speed Assumption (“PSA”), is the standard prepayment assumption model of The Securities Industry and Financial Markets Association. PSA represents an assumed rate of prepayment each month relative to the then outstanding principal balance of the Mortgage Loans to which the model is applied. See *“Yield, Maturity and Prepayment Considerations — Standard Prepayment Assumption Models” in the Base Offering Circular.*

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

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

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

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

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

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

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

Distribution Date	Security Group 1 PSA Prepayment Assumption Rates														
	Classes AF, AS, BF, ES, FA, SA, SX and XS					Classes DA, DC, DE, DG, DH, DI, DJ, DK, DL and DM					Class DY				
	0%	100%	250%	400%	500%	0%	100%	250%	400%	500%	0%	100%	250%	400%	500%
	0%	100%	250%	400%	500%	0%	100%	250%	400%	500%	0%	100%	250%	400%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2024	100	98	95	93	91	100	97	94	91	89	100	100	100	100	100
August 2025	99	93	85	77	72	99	92	81	71	65	100	100	100	100	100
August 2026	99	87	72	58	50	99	84	65	48	38	100	100	100	100	100
August 2027	98	81	61	44	35	98	77	51	31	19	100	100	100	100	100
August 2028	98	76	51	33	24	97	70	40	17	6	100	100	100	100	100
August 2029	97	71	43	25	17	97	64	30	7	0	100	100	100	100	87
August 2030	97	66	37	19	12	96	58	21	0	0	100	100	100	97	60
August 2031	96	62	31	14	8	95	52	14	0	0	100	100	100	73	42
August 2032	95	57	26	11	6	94	47	8	0	0	100	100	100	55	29
August 2033	95	53	22	8	4	93	42	3	0	0	100	100	100	41	20
August 2034	94	50	18	6	3	93	37	0	0	0	100	100	94	31	14
August 2035	93	46	15	5	2	91	33	0	0	0	100	100	79	23	10
August 2036	92	43	13	3	1	90	29	0	0	0	100	100	66	18	7
August 2037	91	40	11	3	1	89	25	0	0	0	100	100	55	13	5
August 2038	90	37	9	2	1	88	21	0	0	0	100	100	46	10	3
August 2039	89	34	8	1	0	86	18	0	0	0	100	100	39	7	2
August 2040	88	31	6	1	0	85	15	0	0	0	100	100	32	5	1
August 2041	86	29	5	1	0	83	12	0	0	0	100	100	27	4	1
August 2042	85	27	4	1	0	81	9	0	0	0	100	100	22	3	1
August 2043	83	24	4	0	0	79	6	0	0	0	100	100	19	2	0
August 2044	81	22	3	0	0	77	3	0	0	0	100	100	15	2	0
August 2045	79	20	2	0	0	74	1	0	0	0	100	100	13	1	0
August 2046	77	19	2	0	0	72	0	0	0	0	100	95	10	1	0
August 2047	75	17	2	0	0	69	0	0	0	0	100	86	9	1	0
August 2048	73	15	1	0	0	66	0	0	0	0	100	78	7	0	0
August 2049	70	14	1	0	0	63	0	0	0	0	100	70	6	0	0
August 2050	67	12	1	0	0	59	0	0	0	0	100	63	5	0	0
August 2051	64	11	1	0	0	56	0	0	0	0	100	56	4	0	0
August 2052	61	10	1	0	0	51	0	0	0	0	100	49	3	0	0
August 2053	57	8	0	0	0	47	0	0	0	0	100	43	2	0	0
August 2054	53	7	0	0	0	42	0	0	0	0	100	37	2	0	0
August 2055	49	6	0	0	0	37	0	0	0	0	100	32	1	0	0
August 2056	45	5	0	0	0	31	0	0	0	0	100	27	1	0	0
August 2057	40	4	0	0	0	25	0	0	0	0	100	22	1	0	0
August 2058	34	3	0	0	0	18	0	0	0	0	100	17	1	0	0
August 2059	28	3	0	0	0	11	0	0	0	0	100	13	0	0	0
August 2060	22	2	0	0	0	3	0	0	0	0	100	9	0	0	0
August 2061	15	1	0	0	0	0	0	0	0	0	79	5	0	0	0
August 2062	8	0	0	0	0	0	0	0	0	0	41	1	0	0	0
August 2063	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average															
Life (years)	29.2	13.4	6.8	4.6	3.8	26.9	9.4	4.6	3.2	2.7	38.8	29.6	16.1	10.4	8.4

Security Group 2 PSA Prepayment Assumption Rates																				
Distribution Date	Class BS					Classes FB, FJ and SI					Classes FD and TI					Classes FL, FM, IS, IT, L, LF, M, MF, MI, MN, MP, MT, SL and ST				
	0%	100%	295%	450%	600%	0%	100%	295%	450%	600%	0%	100%	295%	450%	600%	0%	100%	295%	450%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2024	99	97	94	91	89	99	97	95	92	90	99	97	94	91	89	99	97	95	92	90
August 2025	98	92	82	74	66	98	93	83	75	68	98	92	82	74	66	98	93	83	75	68
August 2026	97	86	67	53	42	97	86	68	55	44	97	86	67	53	42	97	86	68	55	44
August 2027	96	80	54	38	27	96	80	55	39	28	96	80	54	38	27	96	80	55	39	28
August 2028	95	74	44	28	17	95	74	45	28	17	95	74	44	28	17	95	74	45	28	17
August 2029	94	68	36	20	11	94	68	36	20	11	94	68	36	20	11	94	69	36	20	11
August 2030	92	63	29	14	7	92	63	29	15	7	92	63	29	14	7	92	63	29	15	7
August 2031	91	58	23	10	4	91	58	24	10	4	91	58	23	10	4	91	59	24	11	4
August 2032	89	54	19	7	3	89	54	19	7	3	89	54	19	7	3	89	54	19	8	3
August 2033	88	49	15	5	2	88	49	15	5	2	88	49	15	5	2	88	50	15	5	2
August 2034	86	45	12	4	1	86	45	12	4	1	86	45	12	4	1	86	45	12	4	1
August 2035	84	41	10	3	1	84	41	10	3	1	84	41	10	3	1	84	42	10	3	1
August 2036	82	38	8	2	0	82	38	8	2	0	82	38	8	2	0	82	38	8	2	0
August 2037	79	34	6	1	0	79	34	6	1	0	79	34	6	1	0	79	35	6	1	0
August 2038	77	31	5	1	0	77	31	5	1	0	77	31	5	1	0	77	31	5	1	0
August 2039	74	28	4	1	0	74	28	4	1	0	74	28	4	1	0	74	28	4	1	0
August 2040	71	25	3	0	0	71	25	3	0	0	71	25	3	0	0	71	25	3	0	0
August 2041	68	22	2	0	0	68	22	2	0	0	68	22	2	0	0	68	23	2	0	0
August 2042	64	20	2	0	0	64	20	2	0	0	64	20	2	0	0	64	20	2	0	0
August 2043	60	17	1	0	0	60	17	1	0	0	60	17	1	0	0	60	18	1	0	0
August 2044	56	15	1	0	0	56	15	1	0	0	56	15	1	0	0	56	15	1	0	0
August 2045	52	13	1	0	0	52	13	1	0	0	52	13	1	0	0	52	13	1	0	0
August 2046	47	11	1	0	0	47	11	1	0	0	47	11	1	0	0	47	11	1	0	0
August 2047	42	9	0	0	0	42	9	0	0	0	42	9	0	0	0	42	9	0	0	0
August 2048	36	7	0	0	0	36	7	0	0	0	36	7	0	0	0	36	7	0	0	0
August 2049	30	6	0	0	0	30	5	0	0	0	30	5	0	0	0	30	6	0	0	0
August 2050	23	4	0	0	0	23	4	0	0	0	23	4	0	0	0	23	4	0	0	0
August 2051	16	2	0	0	0	16	2	0	0	0	16	2	0	0	0	16	3	0	0	0
August 2052	8	1	0	0	0	8	1	0	0	0	8	1	0	0	0	8	1	0	0	0
August 2053	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average																				
Life (years)	20.5	11.4	5.7	4.1	3.2	20.5	11.5	5.8	4.1	3.3	20.5	11.4	5.7	4.0	3.2	20.5	11.5	5.8	4.1	3.3

Distribution Date	PSA Prepayment Assumption Rates																			
	Classes IL, LK, LN, LP, LQ and LT					Classes LA, LD, LE, LG, LH, LI and LJ					Class LB					Class LC				
	0%	100%	295%	450%	600%	0%	100%	295%	450%	600%	0%	100%	295%	450%	600%	0%	100%	295%	450%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2024	99	97	93	91	88	99	97	93	90	86	100	100	100	100	100	100	100	100	100	100
August 2025	98	91	79	70	62	98	90	77	66	57	100	100	100	100	100	100	100	100	100	100
August 2026	97	83	61	46	32	96	81	56	39	24	100	100	100	100	100	100	100	100	100	100
August 2027	95	76	46	27	13	95	73	39	18	2	100	100	100	100	100	100	100	100	100	100
August 2028	94	69	33	14	1	93	65	25	3	0	100	100	100	100	7	100	100	100	100	100
August 2029	93	62	23	4	0	92	58	14	0	0	100	100	100	39	0	100	100	100	100	65
August 2030	91	56	15	0	0	90	50	4	0	0	100	100	100	0	0	100	100	100	87	41
August 2031	89	50	8	0	0	88	44	0	0	0	100	100	73	0	0	100	100	100	62	26
August 2032	87	45	3	0	0	86	38	0	0	0	100	100	24	0	0	100	100	100	45	16
August 2033	85	39	0	0	0	83	32	0	0	0	100	100	0	0	0	100	100	91	32	10
August 2034	83	34	0	0	0	81	26	0	0	0	100	100	0	0	0	100	100	73	23	6
August 2035	81	30	0	0	0	78	21	0	0	0	100	100	0	0	0	100	100	59	16	4
August 2036	78	25	0	0	0	75	16	0	0	0	100	100	0	0	0	100	100	47	11	2
August 2037	75	21	0	0	0	72	11	0	0	0	100	100	0	0	0	100	100	37	8	2
August 2038	72	17	0	0	0	69	7	0	0	0	100	100	0	0	0	100	100	30	6	1
August 2039	69	14	0	0	0	65	3	0	0	0	100	100	0	0	0	100	100	23	4	1
August 2040	65	10	0	0	0	61	0	0	0	0	100	92	0	0	0	100	100	18	3	0
August 2041	61	7	0	0	0	56	0	0	0	0	100	63	0	0	0	100	100	14	2	0
August 2042	57	4	0	0	0	52	0	0	0	0	100	36	0	0	0	100	100	11	1	0
August 2043	52	1	0	0	0	47	0	0	0	0	100	10	0	0	0	100	100	9	1	0
August 2044	48	0	0	0	0	41	0	0	0	0	100	0	0	0	0	100	92	7	1	0
August 2045	42	0	0	0	0	35	0	0	0	0	100	0	0	0	0	100	79	5	0	0
August 2046	36	0	0	0	0	28	0	0	0	0	100	0	0	0	0	100	67	4	0	0
August 2047	30	0	0	0	0	21	0	0	0	0	100	0	0	0	0	100	55	3	0	0
August 2048	23	0	0	0	0	14	0	0	0	0	100	0	0	0	0	100	45	2	0	0
August 2049	16	0	0	0	0	5	0	0	0	0	100	0	0	0	0	100	34	1	0	0
August 2050	8	0	0	0	0	0	0	0	0	0	71	0	0	0	0	100	25	1	0	0
August 2051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	97	15	0	0	0
August 2052	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	7	0	0	0
August 2053	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average																				
Life (years)	18.8	8.8	4.1	3.0	2.5	17.7	7.6	3.6	2.7	2.2	27.3	18.5	8.5	5.9	4.6	29.0	24.7	13.9	9.6	7.2

Security Group 2 PSA Prepayment Assumption Rates															
Distribution Date	Class LY					Class SC					Class SM				
	0%	100%	295%	450%	600%	0%	100%	295%	450%	600%	0%	100%	295%	450%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2024	100	100	100	100	100	99	97	94	92	90	99	97	94	92	89
August 2025	100	100	100	100	100	98	92	82	75	67	98	92	82	74	67
August 2026	100	100	100	100	100	97	86	67	54	43	97	86	67	54	43
August 2027	100	100	100	100	100	96	80	55	39	27	96	80	54	39	27
August 2028	100	100	100	100	67	95	74	44	28	17	95	74	44	28	17
August 2029	100	100	100	78	42	94	68	36	20	11	94	68	36	20	11
August 2030	100	100	100	56	26	92	63	29	14	7	92	63	29	14	7
August 2031	100	100	91	40	17	91	58	23	10	4	91	58	23	10	4
August 2032	100	100	73	29	10	89	54	19	7	3	89	54	19	7	3
August 2033	100	100	59	21	7	88	49	15	5	2	88	49	15	5	2
August 2034	100	100	47	15	4	86	45	12	4	1	86	45	12	4	1
August 2035	100	100	38	10	3	84	41	10	3	1	84	41	10	3	1
August 2036	100	100	30	7	2	82	38	8	2	0	82	38	8	2	0
August 2037	100	100	24	5	1	79	34	6	1	0	79	34	6	1	0
August 2038	100	100	19	4	1	77	31	5	1	0	77	31	5	1	0
August 2039	100	100	15	3	0	74	28	4	1	0	74	28	4	1	0
August 2040	100	97	12	2	0	71	25	3	0	0	71	25	3	0	0
August 2041	100	87	9	1	0	68	22	2	0	0	68	22	2	0	0
August 2042	100	77	7	1	0	64	20	2	0	0	64	20	2	0	0
August 2043	100	68	6	1	0	60	17	1	0	0	60	17	1	0	0
August 2044	100	59	4	0	0	56	15	1	0	0	56	15	1	0	0
August 2045	100	51	3	0	0	52	13	1	0	0	52	13	1	0	0
August 2046	100	43	2	0	0	47	11	1	0	0	47	11	1	0	0
August 2047	100	36	2	0	0	42	9	0	0	0	42	9	0	0	0
August 2048	100	29	1	0	0	36	7	0	0	0	36	7	0	0	0
August 2049	100	22	1	0	0	30	5	0	0	0	30	5	0	0	0
August 2050	90	16	1	0	0	23	4	0	0	0	23	4	0	0	0
August 2051	62	10	0	0	0	16	2	0	0	0	16	2	0	0	0
August 2052	32	4	0	0	0	8	1	0	0	0	8	1	0	0	0
August 2053	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	28.4	22.5	12.0	8.2	6.3	20.5	11.4	5.7	4.1	3.2	20.5	11.4	5.7	4.1	3.2

Security Group 3																				
PSA Prepayment Assumption Rates																				
Distribution Date	Class AY					Class BY					Classes FG, FH, SB, SG, SH and TS					Class GA				
	0%	100%	295%	450%	600%	0%	100%	295%	450%	600%	0%	100%	295%	450%	600%	0%	100%	295%	450%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2024	100	100	100	100	100	100	100	100	100	100	99	97	95	92	90	99	97	93	90	87
August 2025	100	100	100	100	100	100	100	100	100	100	98	93	83	75	68	98	90	77	67	58
August 2026	100	100	100	100	100	100	100	100	100	100	97	86	68	55	44	96	82	57	40	25
August 2027	100	100	100	100	100	100	100	100	100	100	96	80	55	39	28	95	73	40	20	4
August 2028	100	100	100	100	66	100	100	100	100	67	95	74	45	28	17	93	66	26	5	0
August 2029	100	100	100	78	42	100	100	100	78	42	94	69	36	20	11	92	58	15	0	0
August 2030	100	100	100	56	26	100	100	100	56	26	92	63	29	15	7	90	51	6	0	0
August 2031	100	100	90	40	16	100	100	91	40	17	91	58	24	10	4	88	45	0	0	0
August 2032	100	100	72	29	10	100	100	73	29	10	89	54	19	8	3	86	39	0	0	0
August 2033	100	100	58	20	6	100	100	59	21	7	88	50	15	5	2	84	33	0	0	0
August 2034	100	100	47	15	4	100	100	47	15	4	86	45	12	4	1	81	28	0	0	0
August 2035	100	100	38	10	3	100	100	38	10	3	84	42	10	3	1	79	22	0	0	0
August 2036	100	100	30	7	2	100	100	30	7	2	82	38	8	2	0	76	18	0	0	0
August 2037	100	100	24	5	1	100	100	24	5	1	79	35	6	1	0	73	13	0	0	0
August 2038	100	100	19	4	1	100	100	19	4	1	77	31	5	1	0	69	9	0	0	0
August 2039	100	100	15	3	0	100	100	15	3	0	74	28	4	1	0	66	5	0	0	0
August 2040	100	96	12	2	0	100	97	12	2	0	71	25	3	0	0	62	1	0	0	0
August 2041	100	86	9	1	0	100	87	9	1	0	68	23	2	0	0	57	0	0	0	0
August 2042	100	76	7	1	0	100	77	7	1	0	64	20	2	0	0	53	0	0	0	0
August 2043	100	67	6	1	0	100	68	6	1	0	60	18	1	0	0	48	0	0	0	0
August 2044	100	59	4	0	0	100	59	4	0	0	56	15	1	0	0	42	0	0	0	0
August 2045	100	50	3	0	0	100	51	3	0	0	52	13	1	0	0	36	0	0	0	0
August 2046	100	43	2	0	0	100	43	2	0	0	47	11	1	0	0	30	0	0	0	0
August 2047	100	35	2	0	0	100	36	2	0	0	42	9	0	0	0	23	0	0	0	0
August 2048	100	28	1	0	0	100	29	1	0	0	36	7	0	0	0	15	0	0	0	0
August 2049	100	22	1	0	0	100	22	1	0	0	30	6	0	0	0	7	0	0	0	0
August 2050	89	16	1	0	0	90	16	1	0	0	23	4	0	0	0	0	0	0	0	0
August 2051	62	10	0	0	0	62	10	0	0	0	16	3	0	0	0	0	0	0	0	0
August 2052	32	4	0	0	0	32	4	0	0	0	8	1	0	0	0	0	0	0	0	0
August 2053	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average																				
Life (years)	28.4	22.5	11.9	8.2	6.3	28.4	22.5	12.0	8.3	6.3	20.5	11.5	5.8	4.1	3.3	17.9	7.8	3.7	2.7	2.2

Security Group 3 PSA Prepayment Assumption Rates																				
Distribution Date	Class GC					Class GV					Class GY					Class GZ				
	0%	100%	295%	450%	600%	0%	100%	295%	450%	600%	0%	100%	295%	450%	600%	0%	100%	295%	450%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2024	99	97	93	89	86	93	93	93	93	93	100	100	100	100	100	106	106	106	106	106
August 2025	98	90	77	66	57	86	86	86	86	86	100	100	100	100	100	112	112	112	112	112
August 2026	96	81	56	39	24	78	78	78	78	78	100	100	100	100	100	118	118	118	118	118
August 2027	95	73	39	18	2	70	70	70	70	70	100	100	100	100	100	125	125	125	125	125
August 2028	93	65	25	3	0	61	61	61	61	0	100	100	100	100	71	132	132	132	132	120
August 2029	92	57	13	0	0	52	52	52	2	0	100	100	100	83	45	139	139	139	139	76
August 2030	90	50	4	0	0	43	43	43	0	0	100	100	100	59	28	147	147	147	101	48
August 2031	88	44	0	0	0	33	33	10	0	0	100	100	96	43	18	155	155	155	72	30
August 2032	86	37	0	0	0	22	22	0	0	0	100	100	77	30	11	164	164	132	52	19
August 2033	83	32	0	0	0	11	11	0	0	0	100	100	62	22	7	173	173	106	37	12
August 2034	81	26	0	0	0	0	0	0	0	0	100	100	50	16	4	182	182	85	26	7
August 2035	78	21	0	0	0	0	0	0	0	0	100	100	40	11	3	182	182	68	19	5
August 2036	75	16	0	0	0	0	0	0	0	0	100	100	32	8	2	182	182	54	13	3
August 2037	72	11	0	0	0	0	0	0	0	0	100	100	26	6	1	182	182	43	9	2
August 2038	68	7	0	0	0	0	0	0	0	0	100	100	20	4	1	182	182	34	7	1
August 2039	65	3	0	0	0	0	0	0	0	0	100	100	16	3	0	182	182	27	5	1
August 2040	61	0	0	0	0	0	0	0	0	0	100	100	13	2	0	182	175	21	3	0
August 2041	56	0	0	0	0	0	0	0	0	0	100	92	10	1	0	182	157	17	2	0
August 2042	52	0	0	0	0	0	0	0	0	0	100	82	8	1	0	182	139	13	2	0
August 2043	46	0	0	0	0	0	0	0	0	0	100	72	6	1	0	182	122	10	1	0
August 2044	41	0	0	0	0	0	0	0	0	0	100	63	4	0	0	182	106	8	1	0
August 2045	35	0	0	0	0	0	0	0	0	0	100	54	3	0	0	182	92	6	0	0
August 2046	28	0	0	0	0	0	0	0	0	0	100	46	3	0	0	182	78	4	0	0
August 2047	21	0	0	0	0	0	0	0	0	0	100	38	2	0	0	182	64	3	0	0
August 2048	13	0	0	0	0	0	0	0	0	0	100	30	1	0	0	182	52	2	0	0
August 2049	5	0	0	0	0	0	0	0	0	0	100	23	1	0	0	182	40	1	0	0
August 2050	0	0	0	0	0	0	0	0	0	0	95	17	1	0	0	162	29	1	0	0
August 2051	0	0	0	0	0	0	0	0	0	0	66	11	0	0	0	112	18	1	0	0
August 2052	0	0	0	0	0	0	0	0	0	0	34	5	0	0	0	58	8	0	0	0
August 2053	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	17.7	7.6	3.6	2.7	2.2	6.0	6.0	5.5	4.5	3.7	28.5	22.8	12.2	8.4	6.4	28.4	22.5	12.6	9.0	7.0

Security Group 4 PSA Prepayment Assumption Rates															
Distribution Date	Classes FN, IN, NG, NH, NJ, NK, NL and SN					Classes IJ, JA, JL, JM, JN, JP and JQ					Class JC				
	0%	100%	295%	450%	600%	0%	100%	295%	450%	600%	0%	100%	295%	450%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2024	99	98	95	93	91	99	97	93	91	88	100	100	100	100	100
August 2025	98	93	84	77	70	98	90	78	68	59	100	100	100	100	100
August 2026	97	87	69	56	45	96	82	57	40	25	100	100	100	100	100
August 2027	96	80	56	40	29	95	73	40	19	2	100	100	100	100	100
August 2028	95	75	45	29	18	93	65	25	3	0	100	100	100	100	49
August 2029	94	69	37	21	11	92	58	14	0	0	100	100	100	66	11
August 2030	92	64	30	15	7	90	50	4	0	0	100	100	100	32	0
August 2031	91	59	24	11	5	88	44	0	0	0	100	100	84	7	0
August 2032	89	54	19	8	3	86	37	0	0	0	100	100	57	0	0
August 2033	88	50	16	6	2	83	31	0	0	0	100	100	35	0	0
August 2034	86	46	13	4	1	81	26	0	0	0	100	100	18	0	0
August 2035	84	42	10	3	1	78	21	0	0	0	100	100	3	0	0
August 2036	82	38	8	2	0	75	16	0	0	0	100	100	0	0	0
August 2037	79	35	6	1	0	72	11	0	0	0	100	100	0	0	0
August 2038	77	32	5	1	0	68	6	0	0	0	100	100	0	0	0
August 2039	74	28	4	1	0	65	2	0	0	0	100	100	0	0	0
August 2040	71	26	3	0	0	60	0	0	0	0	100	93	0	0	0
August 2041	68	23	2	0	0	56	0	0	0	0	100	77	0	0	0
August 2042	64	20	2	0	0	51	0	0	0	0	100	62	0	0	0
August 2043	60	18	1	0	0	46	0	0	0	0	100	48	0	0	0
August 2044	56	16	1	0	0	40	0	0	0	0	100	35	0	0	0
August 2045	52	13	1	0	0	34	0	0	0	0	100	23	0	0	0
August 2046	47	11	1	0	0	28	0	0	0	0	100	11	0	0	0
August 2047	42	9	0	0	0	21	0	0	0	0	100	0	0	0	0
August 2048	36	8	0	0	0	13	0	0	0	0	100	0	0	0	0
August 2049	30	6	0	0	0	4	0	0	0	0	100	0	0	0	0
August 2050	23	4	0	0	0	0	0	0	0	0	80	0	0	0	0
August 2051	16	3	0	0	0	0	0	0	0	0	39	0	0	0	0
August 2052	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0
August 2053	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	20.5	11.6	5.8	4.2	3.3	17.6	7.6	3.6	2.7	2.3	27.7	20.0	9.5	6.6	5.1

Security Group 4 PSA Prepayment Assumption Rates															
Distribution Date	Class JD					Classes NA, NB, NC, ND, NE and NI					Class YJ				
	0%	100%	295%	450%	600%	0%	100%	295%	450%	600%	0%	100%	295%	450%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2024	100	100	100	100	100	99	97	95	92	90	100	100	100	100	100
August 2025	100	100	100	100	100	98	92	82	74	67	100	100	100	100	100
August 2026	100	100	100	100	100	97	85	65	52	40	100	100	100	100	100
August 2027	100	100	100	100	100	96	78	51	34	21	100	100	100	100	100
August 2028	100	100	100	100	100	95	72	40	22	9	100	100	100	100	67
August 2029	100	100	100	100	100	93	66	30	13	2	100	100	100	78	42
August 2030	100	100	100	100	75	92	60	22	6	0	100	100	100	56	27
August 2031	100	100	100	100	47	90	55	16	1	0	100	100	90	40	17
August 2032	100	100	100	81	30	88	49	11	0	0	100	100	72	29	11
August 2033	100	100	100	58	19	86	45	7	0	0	100	100	58	21	7
August 2034	100	100	100	41	12	84	40	3	0	0	100	100	47	15	4
August 2035	100	100	100	29	7	82	36	1	0	0	100	100	37	10	3
August 2036	100	100	85	21	5	80	32	0	0	0	100	100	30	7	2
August 2037	100	100	67	15	3	77	28	0	0	0	100	100	24	5	1
August 2038	100	100	53	10	2	74	24	0	0	0	100	100	19	4	1
August 2039	100	100	42	7	1	71	21	0	0	0	100	100	15	3	0
August 2040	100	100	33	5	1	68	18	0	0	0	100	95	12	2	0
August 2041	100	100	26	4	0	64	15	0	0	0	100	85	9	1	0
August 2042	100	100	20	2	0	61	12	0	0	0	100	76	7	1	0
August 2043	100	100	16	2	0	56	9	0	0	0	100	67	6	1	0
August 2044	100	100	12	1	0	52	7	0	0	0	100	58	4	0	0
August 2045	100	100	9	1	0	47	4	0	0	0	100	50	3	0	0
August 2046	100	100	7	0	0	42	2	0	0	0	100	42	2	0	0
August 2047	100	100	5	0	0	36	0	0	0	0	100	35	2	0	0
August 2048	100	80	3	0	0	29	0	0	0	0	100	28	1	0	0
August 2049	100	62	2	0	0	23	0	0	0	0	100	22	1	0	0
August 2050	100	45	1	0	0	15	0	0	0	0	87	16	1	0	0
August 2051	100	29	1	0	0	7	0	0	0	0	61	10	0	0	0
August 2052	89	13	0	0	0	0	0	0	0	0	31	5	0	0	0
August 2053	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average															
Life (years)	29.5	26.8	16.4	11.3	8.5	19.6	10.0	4.7	3.5	2.8	28.3	22.4	11.9	8.2	6.3

Security Group 5 PSA Prepayment Assumption Rates					
Distribution Date	Classes CF, CS, KS, LS, NS, PO, QS and S				
	0%	100%	295%	450%	600%
Initial Percent	100	100	100	100	100
August 2024	99	97	94	91	89
August 2025	98	92	82	74	66
August 2026	97	86	67	53	42
August 2027	96	80	54	38	27
August 2028	95	74	44	28	17
August 2029	94	68	36	20	11
August 2030	92	63	29	14	7
August 2031	91	58	23	10	4
August 2032	89	54	19	7	3
August 2033	88	49	15	5	2
August 2034	86	45	12	4	1
August 2035	84	41	10	3	1
August 2036	82	38	8	2	0
August 2037	79	34	6	1	0
August 2038	77	31	5	1	0
August 2039	74	28	4	1	0
August 2040	71	25	3	0	0
August 2041	68	23	2	0	0
August 2042	64	20	2	0	0
August 2043	60	18	1	0	0
August 2044	56	15	1	0	0
August 2045	52	13	1	0	0
August 2046	47	11	1	0	0
August 2047	42	9	0	0	0
August 2048	36	7	0	0	0
August 2049	30	6	0	0	0
August 2050	23	4	0	0	0
August 2051	16	3	0	0	0
August 2052	8	1	0	0	0
August 2053	0	0	0	0	0
Weighted Average					
Life (years)	20.5	11.4	5.7	4.1	3.2

**Security Group 6
PSA Prepayment Assumption Rates**

Distribution Date	Class HA					Class HB				
	0%	100%	215%	350%	500%	0%	100%	215%	350%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100
August 2024	99	96	94	91	88	100	100	100	100	100
August 2025	97	89	81	72	61	100	100	100	100	100
August 2026	96	80	64	48	31	100	100	100	100	100
August 2027	94	71	49	28	9	100	100	100	100	100
August 2028	92	63	37	13	0	100	100	100	100	84
August 2029	91	55	26	1	0	100	100	100	100	58
August 2030	89	47	16	0	0	100	100	100	79	40
August 2031	86	40	8	0	0	100	100	100	61	27
August 2032	84	34	1	0	0	100	100	100	47	19
August 2033	81	28	0	0	0	100	100	86	36	13
August 2034	79	22	0	0	0	100	100	73	28	9
August 2035	76	16	0	0	0	100	100	62	21	6
August 2036	73	11	0	0	0	100	100	52	16	4
August 2037	69	6	0	0	0	100	100	44	12	3
August 2038	66	2	0	0	0	100	100	36	9	2
August 2039	62	0	0	0	0	100	94	30	7	1
August 2040	57	0	0	0	0	100	84	25	5	1
August 2041	53	0	0	0	0	100	74	21	4	1
August 2042	48	0	0	0	0	100	66	17	3	0
August 2043	42	0	0	0	0	100	57	14	2	0
August 2044	37	0	0	0	0	100	49	11	2	0
August 2045	30	0	0	0	0	100	42	9	1	0
August 2046	24	0	0	0	0	100	35	7	1	0
August 2047	17	0	0	0	0	100	28	5	1	0
August 2048	9	0	0	0	0	100	22	4	0	0
August 2049	0	0	0	0	0	100	16	2	0	0
August 2050	0	0	0	0	0	78	11	2	0	0
August 2051	0	0	0	0	0	54	6	1	0	0
August 2052	0	0	0	0	0	28	1	0	0	0
August 2053	0	0	0	0	0	0	0	0	0	0
Weighted Average										
Life (years)	17.0	7.1	4.3	3.0	2.4	28.1	21.4	14.5	9.9	7.2

**Security Group 7
PSA Prepayment Assumption Rates**

Distribution Date	Class AC					Class CY				
	0%	100%	215%	350%	500%	0%	100%	215%	350%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100
August 2024	99	97	95	93	90	100	100	100	100	100
August 2025	98	92	85	77	69	100	100	100	100	100
August 2026	97	84	72	58	45	100	100	100	100	100
August 2027	95	77	60	42	27	100	100	100	100	100
August 2028	94	70	49	30	15	100	100	100	100	100
August 2029	92	64	41	21	6	100	100	100	100	100
August 2030	91	58	33	13	0	100	100	100	100	100
August 2031	89	53	26	7	0	100	100	100	100	70
August 2032	87	48	21	3	0	100	100	100	100	48
August 2033	85	43	16	0	0	100	100	100	95	33
August 2034	83	38	11	0	0	100	100	100	73	22
August 2035	81	34	8	0	0	100	100	100	56	15
August 2036	78	30	5	0	0	100	100	100	43	10
August 2037	75	26	2	0	0	100	100	100	33	7
August 2038	72	22	0	0	0	100	100	96	25	5
August 2039	69	19	0	0	0	100	100	80	19	3
August 2040	66	15	0	0	0	100	100	67	14	2
August 2041	62	12	0	0	0	100	100	55	11	1
August 2042	58	10	0	0	0	100	100	45	8	1
August 2043	54	7	0	0	0	100	100	37	6	1
August 2044	49	4	0	0	0	100	100	30	4	0
August 2045	44	2	0	0	0	100	100	24	3	0
August 2046	39	0	0	0	0	100	98	18	2	0
August 2047	33	0	0	0	0	100	81	14	2	0
August 2048	27	0	0	0	0	100	65	11	1	0
August 2049	20	0	0	0	0	100	50	8	1	0
August 2050	13	0	0	0	0	100	36	5	0	0
August 2051	5	0	0	0	0	100	22	3	0	0
August 2052	0	0	0	0	0	72	10	1	0	0
August 2053	0	0	0	0	0	0	0	0	0	0
Weighted Average										
Life (years)	19.1	9.5	5.7	4.0	3.0	29.3	26.1	19.4	13.5	9.7

**Security Groups 6 and 7
PSA Prepayment Assumption Rates**

Distribution Date	Class HY				
	0%	100%	215%	350%	500%
Initial Percent	100	100	100	100	100
August 2024	100	100	100	100	100
August 2025	100	100	100	100	100
August 2026	100	100	100	100	100
August 2027	100	100	100	100	100
August 2028	100	100	100	100	87
August 2029	100	100	100	100	66
August 2030	100	100	100	84	52
August 2031	100	100	100	69	36
August 2032	100	100	100	58	25
August 2033	100	100	89	49	17
August 2034	100	100	79	37	12
August 2035	100	100	70	29	8
August 2036	100	100	62	22	5
August 2037	100	100	55	17	4
August 2038	100	100	49	13	2
August 2039	100	95	41	10	2
August 2040	100	87	34	7	1
August 2041	100	80	28	5	1
August 2042	100	73	23	4	0
August 2043	100	66	18	3	0
August 2044	100	60	15	2	0
August 2045	100	54	12	2	0
August 2046	100	48	9	1	0
August 2047	100	39	7	1	0
August 2048	100	31	5	0	0
August 2049	100	23	4	0	0
August 2050	83	16	2	0	0
August 2051	64	9	1	0	0
August 2052	37	3	0	0	0
August 2053	0	0	0	0	0
Weighted Average Life (years)	28.4	22.4	15.5	10.6	7.7

**Security Group 8
PSA Prepayment Assumption Rates**

Distribution Date	Classes HL, HK and KA					Classes JY and KY				
	0%	100%	295%	450%	600%	0%	100%	295%	450%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100
August 2024	99	96	92	89	85	100	100	100	100	100
August 2025	97	89	74	63	53	100	100	100	100	100
August 2026	96	80	52	33	17	100	100	100	100	100
August 2027	94	70	33	10	0	100	100	100	100	85
August 2028	93	62	18	0	0	100	100	100	88	54
August 2029	91	54	5	0	0	100	100	100	63	34
August 2030	89	46	0	0	0	100	100	90	45	21
August 2031	87	39	0	0	0	100	100	73	32	13
August 2032	84	32	0	0	0	100	100	59	23	8
August 2033	82	25	0	0	0	100	100	47	17	5
August 2034	79	19	0	0	0	100	100	38	12	3
August 2035	76	14	0	0	0	100	100	30	8	2
August 2036	73	8	0	0	0	100	100	24	6	1
August 2037	69	3	0	0	0	100	100	19	4	1
August 2038	66	0	0	0	0	100	97	15	3	0
August 2039	62	0	0	0	0	100	87	12	2	0
August 2040	57	0	0	0	0	100	78	10	1	0
August 2041	52	0	0	0	0	100	70	7	1	0
August 2042	47	0	0	0	0	100	62	6	1	0
August 2043	41	0	0	0	0	100	55	4	0	0
August 2044	35	0	0	0	0	100	48	3	0	0
August 2045	29	0	0	0	0	100	41	3	0	0
August 2046	22	0	0	0	0	100	35	2	0	0
August 2047	14	0	0	0	0	100	29	1	0	0
August 2048	6	0	0	0	0	100	23	1	0	0
August 2049	0	0	0	0	0	93	18	1	0	0
August 2050	0	0	0	0	0	72	13	0	0	0
August 2051	0	0	0	0	0	50	8	0	0	0
August 2052	0	0	0	0	0	26	4	0	0	0
August 2053	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	16.9	6.9	3.3	2.5	2.0	27.9	21.2	11.0	7.6	5.8

**Security Group 9
PSA Prepayment Assumption Rates**

Distribution Date	Class MA					Class MY				
	0%	100%	295%	450%	600%	0%	100%	295%	450%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100
August 2024	99	96	92	89	85	100	100	100	100	100
August 2025	98	89	75	64	54	100	100	100	100	100
August 2026	96	79	53	34	19	100	100	100	100	100
August 2027	95	70	34	12	0	100	100	100	100	90
August 2028	93	61	19	0	0	100	100	100	92	56
August 2029	91	53	7	0	0	100	100	100	66	35
August 2030	89	45	0	0	0	100	100	94	47	22
August 2031	87	38	0	0	0	100	100	75	34	14
August 2032	85	31	0	0	0	100	100	60	24	9
August 2033	82	24	0	0	0	100	100	48	17	5
August 2034	80	18	0	0	0	100	100	39	12	3
August 2035	77	13	0	0	0	100	100	31	8	2
August 2036	74	7	0	0	0	100	100	24	6	1
August 2037	70	2	0	0	0	100	100	19	4	1
August 2038	67	0	0	0	0	100	94	15	3	0
August 2039	63	0	0	0	0	100	83	12	2	0
August 2040	58	0	0	0	0	100	73	9	1	0
August 2041	54	0	0	0	0	100	64	7	1	0
August 2042	49	0	0	0	0	100	55	5	1	0
August 2043	43	0	0	0	0	100	47	4	0	0
August 2044	37	0	0	0	0	100	39	3	0	0
August 2045	31	0	0	0	0	100	32	2	0	0
August 2046	24	0	0	0	0	100	25	1	0	0
August 2047	16	0	0	0	0	100	18	1	0	0
August 2048	8	0	0	0	0	100	12	1	0	0
August 2049	0	0	0	0	0	99	6	0	0	0
August 2050	0	0	0	0	0	77	0	0	0	0
August 2051	0	0	0	0	0	53	0	0	0	0
August 2052	0	0	0	0	0	28	0	0	0	0
August 2053	0	0	0	0	0	0	0	0	0	0
Weighted Average										
Life (years)	17.2	6.8	3.3	2.5	2.1	28.1	20.0	11.0	7.7	5.9

**Security Groups 8 and 9
PSA Prepayment Assumption Rates**

Distribution Date	Class NY				
	0%	100%	295%	450%	600%
Initial Percent	100	100	100	100	100
August 2024	100	100	100	100	100
August 2025	100	100	100	100	100
August 2026	100	100	100	100	100
August 2027	100	100	100	100	87
August 2028	100	100	100	89	55
August 2029	100	100	100	64	34
August 2030	100	100	91	46	22
August 2031	100	100	74	33	14
August 2032	100	100	59	23	8
August 2033	100	100	48	17	5
August 2034	100	100	38	12	3
August 2035	100	100	31	8	2
August 2036	100	100	24	6	1
August 2037	100	100	19	4	1
August 2038	100	96	15	3	0
August 2039	100	86	12	2	0
August 2040	100	77	9	1	0
August 2041	100	68	7	1	0
August 2042	100	60	6	1	0
August 2043	100	52	4	0	0
August 2044	100	45	3	0	0
August 2045	100	38	2	0	0
August 2046	100	32	2	0	0
August 2047	100	26	1	0	0
August 2048	100	20	1	0	0
August 2049	95	14	1	0	0
August 2050	74	9	0	0	0
August 2051	51	6	0	0	0
August 2052	27	3	0	0	0
August 2053	0	0	0	0	0
Weighted Average					
Life (years)	28.0	20.8	11.0	7.6	5.9

Security Group 10 PSA Prepayment Assumption Rates					
Distribution Date	Classes 1A, JS and SE				
	0%	100%	150%	300%	400%
Initial Percent	100	100	100	100	100
August 2024	98	92	89	80	74
August 2025	95	84	79	64	55
August 2026	93	77	70	51	41
August 2027	90	70	62	41	30
August 2028	87	64	54	32	22
August 2029	84	58	48	26	16
August 2030	81	52	42	20	12
August 2031	78	47	37	16	9
August 2032	74	42	32	12	6
August 2033	71	38	27	10	5
August 2034	67	34	24	8	3
August 2035	63	30	20	6	2
August 2036	58	26	17	4	2
August 2037	54	23	14	3	1
August 2038	49	20	12	3	1
August 2039	45	17	10	2	1
August 2040	39	14	8	1	0
August 2041	34	11	6	1	0
August 2042	28	9	5	1	0
August 2043	23	7	3	0	0
August 2044	17	5	2	0	0
August 2045	11	3	1	0	0
August 2046	5	1	1	0	0
August 2047	1	0	0	0	0
August 2048	0	0	0	0	0
August 2049	0	0	0	0	0
Weighted Average Life (years)	13.9	8.7	7.1	4.3	3.3

Security Group 11 PSA Prepayment Assumption Rates															
Distribution Date	Class 1B					Class 1C					Class 1K				
	0%	100%	150%	300%	400%	0%	100%	150%	300%	400%	0%	100%	150%	300%	400%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2024	98	92	89	80	74	98	92	89	80	74	98	92	89	80	74
August 2025	96	85	79	64	55	96	84	79	64	55	96	85	79	64	55
August 2026	94	78	70	52	41	93	77	70	51	41	93	78	70	51	41
August 2027	91	71	63	41	30	91	71	62	41	30	91	71	62	41	30
August 2028	89	65	55	33	22	88	64	55	33	22	88	65	55	33	22
August 2029	86	59	49	26	17	85	59	48	26	16	86	59	49	26	16
August 2030	83	54	43	21	12	82	53	42	20	12	83	54	43	21	12
August 2031	80	49	38	16	9	79	48	37	16	9	80	49	37	16	9
August 2032	77	44	33	13	7	76	43	32	13	6	77	44	33	13	6
August 2033	74	40	29	10	5	72	39	28	10	5	73	39	29	10	5
August 2034	71	36	25	8	3	69	35	24	8	3	70	35	25	8	3
August 2035	67	32	22	6	2	65	31	21	6	2	66	31	21	6	2
August 2036	64	28	19	5	2	61	27	18	5	2	62	28	18	5	2
August 2037	60	25	16	4	1	57	24	15	4	1	58	25	16	4	1
August 2038	56	22	14	3	1	53	21	13	3	1	54	21	13	3	1
August 2039	51	19	11	2	1	48	18	11	2	1	50	18	11	2	1
August 2040	47	16	9	2	0	43	15	9	1	0	45	16	9	2	0
August 2041	42	14	8	1	0	38	13	7	1	0	40	13	7	1	0
August 2042	37	11	6	1	0	33	10	6	1	0	35	11	6	1	0
August 2043	32	9	5	1	0	28	8	4	1	0	30	9	5	1	0
August 2044	26	7	4	0	0	22	6	3	0	0	24	7	3	0	0
August 2045	21	5	3	0	0	17	4	2	0	0	19	5	2	0	0
August 2046	14	3	2	0	0	12	3	1	0	0	14	3	2	0	0
August 2047	8	2	1	0	0	8	2	1	0	0	8	2	1	0	0
August 2048	2	0	0	0	0	3	1	0	0	0	3	1	0	0	0
August 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
August 2050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	15.2	9.2	7.4	4.4	3.3	14.7	9.0	7.3	4.4	3.3	14.9	9.1	7.4	4.4	3.3

**Security Groups 10 and 11
PSA Prepayment Assumption Rates**

<u>Distribution Date</u>	<u>Class HS</u>				
	<u>0%</u>	<u>100%</u>	<u>150%</u>	<u>300%</u>	<u>400%</u>
Initial Percent	100	100	100	100	100
August 2024	98	92	89	80	74
August 2025	95	84	79	64	55
August 2026	93	77	70	51	41
August 2027	91	71	62	41	30
August 2028	88	64	55	33	22
August 2029	85	59	48	26	16
August 2030	82	53	42	20	12
August 2031	79	48	37	16	9
August 2032	76	43	32	13	6
August 2033	72	39	28	10	5
August 2034	69	35	24	8	3
August 2035	65	31	21	6	2
August 2036	61	27	18	5	2
August 2037	57	24	15	4	1
August 2038	53	21	13	3	1
August 2039	48	18	11	2	1
August 2040	43	15	9	1	0
August 2041	38	13	7	1	0
August 2042	33	10	5	1	0
August 2043	27	8	4	1	0
August 2044	22	6	3	0	0
August 2045	16	4	2	0	0
August 2046	11	3	1	0	0
August 2047	6	1	1	0	0
August 2048	2	0	0	0	0
August 2049	0	0	0	0	0
August 2050	0	0	0	0	0
Weighted Average Life (years)	14.6	9.0	7.3	4.4	3.3

**Security Group 12
PSA Prepayment Assumption Rates**

<u>Distribution Date</u>	<u>Classes FV and SV</u>				
	<u>0%</u>	<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>
Initial Percent	100	100	100	100	100
August 2024	99	98	95	93	91
August 2025	98	93	84	77	70
August 2026	97	87	69	56	45
August 2027	96	80	56	40	29
August 2028	95	75	45	29	18
August 2029	94	69	37	21	11
August 2030	92	64	30	15	7
August 2031	91	59	24	11	5
August 2032	89	54	19	8	3
August 2033	88	50	16	6	2
August 2034	86	46	13	4	1
August 2035	84	42	10	3	1
August 2036	82	38	8	2	0
August 2037	79	35	6	1	0
August 2038	77	32	5	1	0
August 2039	74	28	4	1	0
August 2040	71	26	3	0	0
August 2041	68	23	2	0	0
August 2042	64	20	2	0	0
August 2043	60	18	1	0	0
August 2044	56	16	1	0	0
August 2045	52	13	1	0	0
August 2046	47	11	1	0	0
August 2047	42	9	0	0	0
August 2048	36	8	0	0	0
August 2049	30	6	0	0	0
August 2050	23	4	0	0	0
August 2051	16	3	0	0	0
August 2052	8	1	0	0	0
August 2053	0	0	0	0	0
Weighted Average Life (years)	20.5	11.6	5.8	4.2	3.3

**Security Groups 3 and 12
PSA Prepayment Assumption Rates**

<u>Distribution Date</u>	<u>Class PS</u>				
	<u>0%</u>	<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>
Initial Percent	100	100	100	100	100
August 2024	99	98	95	93	91
August 2025	98	93	83	76	69
August 2026	97	86	68	55	45
August 2027	96	80	55	40	28
August 2028	95	74	45	29	18
August 2029	94	69	36	21	11
August 2030	92	64	29	15	7
August 2031	91	59	24	11	4
August 2032	89	54	19	8	3
August 2033	88	50	15	5	2
August 2034	86	46	12	4	1
August 2035	84	42	10	3	1
August 2036	82	38	8	2	0
August 2037	79	35	6	1	0
August 2038	77	31	5	1	0
August 2039	74	28	4	1	0
August 2040	71	25	3	0	0
August 2041	68	23	2	0	0
August 2042	64	20	2	0	0
August 2043	60	18	1	0	0
August 2044	56	16	1	0	0
August 2045	52	13	1	0	0
August 2046	47	11	1	0	0
August 2047	42	9	0	0	0
August 2048	36	8	0	0	0
August 2049	30	6	0	0	0
August 2050	23	4	0	0	0
August 2051	16	3	0	0	0
August 2052	8	1	0	0	0
August 2053	0	0	0	0	0
Weighted Average Life (years)	20.5	11.5	5.8	4.2	3.3

**Security Group 13
PSA Prepayment Assumption Rates**

<u>Distribution Date</u>	<u>Classes FP and SP</u>				
	<u>0%</u>	<u>100%</u>	<u>360%</u>	<u>600%</u>	<u>800%</u>
Initial Percent	100	100	100	100	100
August 2024	99	97	91	86	82
August 2025	98	92	76	62	52
August 2026	98	85	59	39	27
August 2027	97	79	45	25	14
August 2028	95	73	35	16	7
August 2029	94	68	27	10	4
August 2030	93	63	21	6	2
August 2031	92	58	16	4	1
August 2032	90	53	12	2	0
August 2033	89	49	9	2	0
August 2034	87	45	7	1	0
August 2035	85	41	6	1	0
August 2036	83	37	4	0	0
August 2037	81	34	3	0	0
August 2038	78	31	2	0	0
August 2039	75	28	2	0	0
August 2040	72	25	1	0	0
August 2041	69	22	1	0	0
August 2042	66	20	1	0	0
August 2043	62	17	1	0	0
August 2044	58	15	0	0	0
August 2045	53	13	0	0	0
August 2046	49	11	0	0	0
August 2047	43	9	0	0	0
August 2048	37	7	0	0	0
August 2049	31	5	0	0	0
August 2050	24	4	0	0	0
August 2051	17	2	0	0	0
August 2052	9	1	0	0	0
August 2053	0	0	0	0	0
Weighted Average Life (years)	20.8	11.3	4.7	3.1	2.4

**Security Group 14
PSA Prepayment Assumption Rates**

Distribution Date	Classes CA, CB, CD, CE, CG, CI, DF, EF, FQ, GF, GS, IX, MS, SJ, SQ, UI and XI					Classes IQ, QJ, QL, QM, QN and QP					Classes QA, QD, QE, QG, QH and QI				
	0%	100%	295%	450%	600%	0%	100%	295%	450%	600%	0%	100%	295%	450%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2024	99	98	95	93	91	99	97	94	92	89	99	97	93	91	88
August 2025	98	93	84	77	70	98	92	80	72	64	98	90	78	68	59
August 2026	97	87	69	56	45	97	84	62	47	34	96	82	57	40	25
August 2027	96	80	56	40	29	95	76	46	28	13	95	73	39	18	2
August 2028	95	75	45	29	18	94	69	34	14	0	93	65	25	3	0
August 2029	94	69	37	21	11	92	62	23	4	0	92	57	13	0	0
August 2030	92	64	30	15	7	91	56	15	0	0	90	50	4	0	0
August 2031	91	59	24	11	5	89	50	8	0	0	88	44	0	0	0
August 2032	89	54	19	8	3	87	44	2	0	0	86	37	0	0	0
August 2033	88	50	16	6	2	85	39	0	0	0	83	31	0	0	0
August 2034	86	46	13	4	1	83	34	0	0	0	81	26	0	0	0
August 2035	84	42	10	3	1	80	29	0	0	0	78	20	0	0	0
August 2036	82	38	8	2	0	78	25	0	0	0	75	15	0	0	0
August 2037	79	35	6	1	0	75	21	0	0	0	72	11	0	0	0
August 2038	77	32	5	1	0	72	17	0	0	0	68	6	0	0	0
August 2039	74	28	4	1	0	68	13	0	0	0	64	2	0	0	0
August 2040	71	26	3	0	0	65	10	0	0	0	60	0	0	0	0
August 2041	68	23	2	0	0	61	6	0	0	0	56	0	0	0	0
August 2042	64	20	2	0	0	57	3	0	0	0	51	0	0	0	0
August 2043	60	18	1	0	0	52	0	0	0	0	46	0	0	0	0
August 2044	56	16	1	0	0	47	0	0	0	0	40	0	0	0	0
August 2045	52	13	1	0	0	42	0	0	0	0	34	0	0	0	0
August 2046	47	11	1	0	0	36	0	0	0	0	27	0	0	0	0
August 2047	42	9	0	0	0	29	0	0	0	0	20	0	0	0	0
August 2048	36	8	0	0	0	22	0	0	0	0	12	0	0	0	0
August 2049	30	6	0	0	0	15	0	0	0	0	4	0	0	0	0
August 2050	23	4	0	0	0	7	0	0	0	0	0	0	0	0	0
August 2051	16	3	0	0	0	0	0	0	0	0	0	0	0	0	0
August 2052	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0
August 2053	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	20.5	11.6	5.8	4.2	3.3	18.7	8.8	4.2	3.1	2.5	17.6	7.6	3.6	2.7	2.3

PSA Prepayment Assumption Rates

Distribution Date	Class QB					Class QC					Class QY				
	0%	100%	295%	450%	600%	0%	100%	295%	450%	600%	0%	100%	295%	450%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2024	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2025	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2026	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2027	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2028	100	100	100	100	4	100	100	100	100	100	100	100	100	100	67
August 2029	100	100	100	35	0	100	100	100	100	64	100	100	100	77	42
August 2030	100	100	100	0	0	100	100	100	85	41	100	100	100	55	26
August 2031	100	100	67	0	0	100	100	100	61	25	100	100	89	40	17
August 2032	100	100	18	0	0	100	100	100	44	16	100	100	72	28	10
August 2033	100	100	0	0	0	100	100	88	31	10	100	100	58	20	7
August 2034	100	100	0	0	0	100	100	71	22	6	100	100	46	14	4
August 2035	100	100	0	0	0	100	100	57	16	4	100	100	37	10	3
August 2036	100	100	0	0	0	100	100	45	11	2	100	100	30	7	2
August 2037	100	100	0	0	0	100	100	36	8	1	100	100	24	5	1
August 2038	100	100	0	0	0	100	100	29	6	1	100	100	19	4	1
August 2039	100	100	0	0	0	100	100	23	4	1	100	100	15	3	0
August 2040	100	84	0	0	0	100	100	18	3	0	100	94	12	2	0
August 2041	100	55	0	0	0	100	100	14	2	0	100	84	9	1	0
August 2042	100	28	0	0	0	100	100	11	1	0	100	75	7	1	0
August 2043	100	2	0	0	0	100	100	8	1	0	100	66	5	1	0
August 2044	100	0	0	0	0	100	88	6	1	0	100	58	4	0	0
August 2045	100	0	0	0	0	100	76	5	0	0	100	50	3	0	0
August 2046	100	0	0	0	0	100	64	4	0	0	100	42	2	0	0
August 2047	100	0	0	0	0	100	54	3	0	0	100	35	2	0	0
August 2048	100	0	0	0	0	100	43	2	0	0	100	28	1	0	0
August 2049	100	0	0	0	0	100	33	1	0	0	100	22	1	0	0
August 2050	61	0	0	0	0	100	24	1	0	0	86	16	1	0	0
August 2051	0	0	0	0	0	92	15	0	0	0	60	10	0	0	0
August 2052	0	0	0	0	0	48	7	0	0	0	31	5	0	0	0
August 2053	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	27.2	18.2	8.4	5.8	4.6	28.9	24.6	13.7	9.5	7.2	28.3	22.4	11.9	8.2	6.3

Security Group 15 PSA Prepayment Assumption Rates					
Distribution Date	Classes FW and SW				
	0%	100%	360%	600%	800%
Initial Percent	100	100	100	100	100
August 2024	99	97	93	89	85
August 2025	98	92	78	66	57
August 2026	98	86	61	42	30
August 2027	97	80	47	27	15
August 2028	95	74	37	17	8
August 2029	94	69	28	11	4
August 2030	93	64	22	7	2
August 2031	92	59	17	4	1
August 2032	90	54	13	3	1
August 2033	89	50	10	2	0
August 2034	87	46	8	1	0
August 2035	85	42	6	1	0
August 2036	83	38	4	0	0
August 2037	81	35	3	0	0
August 2038	78	32	3	0	0
August 2039	75	29	2	0	0
August 2040	72	26	1	0	0
August 2041	69	23	1	0	0
August 2042	66	20	1	0	0
August 2043	62	18	1	0	0
August 2044	58	16	0	0	0
August 2045	53	14	0	0	0
August 2046	49	12	0	0	0
August 2047	43	10	0	0	0
August 2048	37	8	0	0	0
August 2049	31	6	0	0	0
August 2050	24	4	0	0	0
August 2051	17	3	0	0	0
August 2052	9	1	0	0	0
August 2053	0	0	0	0	0
Weighted Average Life (years)	20.8	11.6	4.9	3.2	2.5

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,
- in the case of the Group 10 and 11 Securities, the investor's own projection of payment rates on the Underlying Certificates under a variety of scenarios and
- in the case of a Floating Rate or an Inverse Floating Rate Class, the investor's own projection of levels of CME Term SOFR or 30-day Average SOFR, as applicable, under a variety of scenarios.

No representation is made regarding Mortgage Loan prepayment rates, Underlying Certificate payment rates, CME Term SOFR levels, 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 (especially the Principal Only Class), 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.

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

The interest rate formulas for Classes HS, JS, SE and SK, which are based on CME Term SOFR, have been adjusted to account for the spread adjustment applied to the related Underlying Certificates in connection with LIBOR transition. *See “Underlying Certificates” in the Base Offering Circular.* The minimum and maximum rate for Classes HS, JS, SE and SK, however, are based on the minimum and maximum rate for the related Underlying Certificates. This means that the spread adjustment may impact whether the minimum or maximum rate for Classes HS, JS, SE and SK is reached.

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 CME Term SOFR or 30-day Average SOFR, as applicable.

The Mortgage Loans will not prepay at any constant rate until maturity, and it is unlikely that CME Term SOFR or 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

1. 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 (in the case of interest-bearing Classes), 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 CME Term SOFR or 30-day Average SOFR, as applicable, and (2) the purchase price of each Class (expressed as a percentage of Original Class Principal Balance or original Class Notional Balance) plus accrued interest (in the case of interest-bearing Classes) 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 AS to Prepayments Assumed Price 3.25%*

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>
4.10884%	44.0%	36.7%	29.1%	24.0%
5.10884%	9.1%	0.6%	(8.3)%	(14.3)%
5.35442%	0.1%	(8.6)%	(17.8)%	(24.2)%
5.60000% and above	**	**	**	**

Sensitivity of Class DI to Prepayments Assumed Price 14.75%*

<u>PSA Prepayment Assumption Rates</u>				
<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>	<u>609%</u>
39.9%	29.1%	17.0%	8.8%	0.0%

Sensitivity of Class ES to Prepayments Assumed Price 3.95%*

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>
4.10884%	39.0%	31.5%	23.8%	18.6%
5.10884%	10.3%	1.9%	(6.9)%	(12.9)%
5.42942%	0.9%	(7.9)%	(17.1)%	(23.4)%
5.75000% and above	**	**	**	**

Sensitivity of Class SA to Prepayments Assumed Price 4.0%*

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>
4.10884%	42.9%	35.5%	27.9%	22.8%
5.10884%	14.3%	6.1%	(2.5)%	(8.4)%
5.50442%	3.1%	(5.6)%	(14.7)%	(21.0)%
5.90000% and above	**	**	**	**

Sensitivity of Class SX to Prepayments Assumed Price 1.0%*

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>
5.600% and below	2,336.8%	2,322.8%	2,308.7%	2,299.2%
5.675%	806.2%	798.6%	790.9%	785.7%
5.750% and above	**	**	**	**

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

** Indicates that investors will suffer a loss of virtually all of their investment.

Sensitivity of Class XS to Prepayments
Assumed Price 1.0%*

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>
5.750% and below	2,336.8%	2,322.8%	2,308.7%	2,299.2%
5.825%	806.2%	798.6%	790.9%	785.7%
5.900% and above	**	**	**	**

SECURITY GROUP 2

Sensitivity of Class BS to Prepayments
Assumed Price 3.3%*

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>
3.85%	31.9%	22.0%	13.8%	5.7%
4.85%	(3.9)%	(15.2)%	(24.6)%	(34.3)%
4.95%	(9.6)%	(20.8)%	(30.3)%	(40.0)%
5.05% and above	**	**	**	**

Sensitivity of Class IL to Prepayments
Assumed Price 17.2%*

<u>PSA Prepayment Assumption Rates</u>				
<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>528%</u>	<u>600%</u>
32.1%	18.2%	6.1%	0.1%	(5.4)%

Sensitivity of Class IS to Prepayments
Assumed Price 16.5%*

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>
5.80% and below	36.5%	27.1%	19.4%	11.8%
5.84%	13.7%	3.2%	(5.5)%	(14.2)%
5.88% and above	**	**	**	**

Sensitivity of Class IT to Prepayments
Assumed Price 17.15%*

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>
5.880% and below	34.7%	25.2%	17.4%	9.8%
6.015%	12.8%	2.2%	(6.5)%	(15.2)%
6.150% and above	**	**	**	**

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

** Indicates that investors will suffer a loss of virtually all of their investment.

Sensitivity of Class LI to Prepayments
Assumed Price 15.65%*

PSA Prepayment Assumption Rates				
<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>507%</u>	<u>600%</u>
35.2%	18.8%	5.0%	0.1%	(7.6)%

Sensitivity of Class MI to Prepayments
Assumed Price 20.4%*

PSA Prepayment Assumption Rates				
<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>	<u>619%</u>
27.0%	17.1%	9.0%	1.0%	0.0%

Sensitivity of Class SC to Prepayments
Assumed Price 3.0%*

<u>30-day Average SOFR</u>	PSA Prepayment Assumption Rates			
	<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>
3.85%	36.1%	26.5%	18.7%	11.0%
4.85%	(3.0)%	(14.2)%	(23.6)%	(33.2)%
4.95%	(8.9)%	(20.1)%	(29.6)%	(39.2)%
5.05% and above	**	**	**	**

Sensitivity of Class SI to Prepayments
Assumed Price 13.9%*

<u>30-day Average SOFR</u>	PSA Prepayment Assumption Rates			
	<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>
5.050% and below	44.0%	34.8%	27.4%	20.0%
5.075%	17.3%	7.0%	(1.5)%	(10.0)%
5.100% and above	**	**	**	**

Sensitivity of Class SL to Prepayments
Assumed Price 5.0%*

<u>30-day Average SOFR</u>	PSA Prepayment Assumption Rates			
	<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>
4.17245%	28.0%	18.1%	10.1%	2.2%
5.17245%	5.0%	(6.0)%	(15.0)%	(24.2)%
5.48623%	(3.4)%	(14.6)%	(24.0)%	(33.5)%
5.80000% and above	**	**	**	**

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

** Indicates that investors will suffer a loss of virtually all of their investment.

Sensitivity of Class SM to Prepayments
Assumed Price 3.15%*

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>
3.85%	33.9%	24.2%	16.2%	8.3%
4.85%	(3.5)%	(14.7)%	(24.1)%	(33.7)%
4.95%	(9.3)%	(20.5)%	(29.9)%	(39.6)%
5.05% and above	**	**	**	**

Sensitivity of Class ST to Prepayments
Assumed Price 16.75%*

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>
5.8% and below	35.8%	26.3%	18.6%	11.0%
5.9%	13.3%	2.8%	(5.9)%	(14.6)%
6.0% and above	**	**	**	**

Sensitivity of Class TI to Prepayments
Assumed Price 12.25%*

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>
5.05% and below	52.7%	43.5%	35.9%	28.5%
5.10%	21.5%	11.1%	2.6%	(5.9)%
5.15% and above	**	**	**	**

SECURITY GROUP 3

Sensitivity of Class SB to Prepayments
Assumed Price 1.4%*

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>
3.5%	91.7%	83.7%	77.2%	70.8%
4.5%	6.9%	(3.9)%	(12.9)%	(22.0)%
4.6%	(2.2)%	(13.4)%	(22.7)%	(32.2)%
4.7% and above	**	**	**	**

Sensitivity of Class SG to Prepayments
Assumed Price 3.4%*

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>
4.1162%	51.5%	42.6%	35.3%	28.2%
5.1162%	17.3%	7.0%	(1.5)%	(10.0)%
5.5081%	3.8%	(7.2)%	(16.3)%	(25.6)%
5.9000% and above	**	**	**	**

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

** Indicates that investors will suffer a loss of virtually all of their investment.

Sensitivity of Class SH to Prepayments
Assumed Price 1.75%*

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>
3.75%	70.2%	61.7%	54.9%	48.2%
4.75%	3.5%	(7.5)%	(16.7)%	(25.9)%
4.85%	(4.4)%	(15.6)%	(25.0)%	(34.6)%
4.95% and above	**	**	**	**

Sensitivity of Class TS to Prepayments
Assumed Price 8.4%*

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>
4.700% and below	81.2%	72.9%	66.3%	59.8%
4.825%	34.7%	25.2%	17.4%	9.7%
4.950% and above	**	**	**	**

SECURITY GROUP 4

Sensitivity of Class IJ to Prepayments
Assumed Price 13.15%*

<u>PSA Prepayment Assumption Rates</u>				
<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>	<u>691%</u>
44.8%	30.1%	17.8%	6.5%	0.0%

Sensitivity of Class IN to Prepayments
Assumed Price 17.6%*

<u>PSA Prepayment Assumption Rates</u>				
<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>	<u>770%</u>
32.9%	23.6%	16.0%	8.6%	0.0%

Sensitivity of Class NI to Prepayments
Assumed Price 15.75%*

<u>PSA Prepayment Assumption Rates</u>				
<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>	<u>717%</u>
37.1%	26.1%	16.6%	7.2%	0.0%

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

** Indicates that investors will suffer a loss of virtually all of their investment.

Sensitivity of Class SN to Prepayments
Assumed Price 3.3%*

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>
4.22165%	44.2%	35.3%	28.2%	21.2%
5.22165%	9.2%	(1.4)%	(10.1)%	(18.8)%
5.48583%	(0.8)%	(11.8)%	(21.0)%	(30.4)%
5.75000% and above	**	**	**	**

SECURITY GROUP 5

Sensitivity of Class CS to Prepayments
Assumed Price 5.25%*

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>
4.18048%	24.3%	14.1%	5.7%	(2.7)%
5.18048%	2.3%	(8.9)%	(18.2)%	(27.6)%
5.45524%	(5.2)%	(16.5)%	(25.9)%	(35.6)%
5.73000% and above	**	**	**	**

Sensitivity of Class KS to Prepayments
Assumed Price 86.2%*

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>
4.18048%	6.6%	8.1%	9.2%	10.2%
5.18048%	3.2%	4.6%	5.8%	6.8%
5.45524%	2.3%	3.7%	4.8%	5.8%
5.73000% and above	1.4%	2.8%	3.9%	4.9%

Sensitivity of Class LS to Prepayments
Assumed Price 91.4%*

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>
4.18048%	7.6%	8.4%	9.0%	9.6%
5.18048%	3.2%	4.0%	4.7%	5.3%
5.45524%	2.0%	2.8%	3.5%	4.1%
5.73000% and above	0.8%	1.7%	2.3%	2.9%

Sensitivity of Class NS to Prepayments
Assumed Price 96.7%*

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>
4.18048%	8.4%	8.6%	8.9%	9.1%
5.18048%	3.1%	3.4%	3.7%	3.9%
5.45524%	1.7%	2.0%	2.3%	2.5%
5.73000% and above	0.3%	0.6%	0.9%	1.1%

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

** Indicates that investors will suffer a loss of virtually all of their investment.

Sensitivity of Class PO to Prepayments
Assumed Price 70.45%

PSA Prepayment Assumption Rates			
100%	295%	450%	600%
3.4%	7.0%	9.8%	12.3%

Sensitivity of Class QS to Prepayments
Assumed Price 138.0%*

30-day Average SOFR	PSA Prepayment Assumption Rates			
	100%	295%	450%	600%
4.18048%	13.0%	10.3%	8.2%	6.3%
5.18048%	3.0%	0.4%	(1.7)%	(3.6)%
5.45524%	0.2%	(2.3)%	(4.4)%	(6.3)%
5.73000% and above	(2.6)%	(5.0)%	(7.1)%	(9.0)%

Sensitivity of Class S to Prepayments
Assumed Price 81.0%*

30-day Average SOFR	PSA Prepayment Assumption Rates			
	100%	295%	450%	600%
4.18048%	5.7%	7.7%	9.3%	10.8%
5.18048%	3.3%	5.3%	6.9%	8.4%
5.45524%	2.6%	4.7%	6.3%	7.7%
5.73000% and above	2.0%	4.0%	5.6%	7.1%

SECURITY GROUP 8

Sensitivity of Class HI to Prepayments
Assumed Price 5.5%*

PSA Prepayment Assumption Rates				
100%	295%	450%	600%	2,353%
132.0%	119.9%	109.7%	99.7%	0.0%

SECURITY GROUP 10

Sensitivity of Class IA to Prepayments
Assumed Price 14.25%*

CME Term SOFR	PSA Prepayment Assumption Rates			
	100%	150%	300%	400%
5.93552% and below	23.4%	19.8%	8.9%	1.2%
6.01052%	5.5%	2.3%	(7.9)%	(15.0)%
6.08552% and above	**	**	**	**

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

** Indicates that investors will suffer a loss of virtually all of their investment.

Sensitivity of Class JS to Prepayments
Assumed Price 8.0%*

<u>CME Term SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>150%</u>	<u>300%</u>	<u>400%</u>
4.31398%	12.5%	9.2%	(1.3)%	(8.6)%
5.31398%	(2.4)%	(5.6)%	(15.4)%	(22.2)%
5.69975%	(10.1)%	(13.2)%	(22.6)%	(29.2)%
6.08552% and above	**	**	**	**

Sensitivity of Class SE to Prepayments
Assumed Price 7.5%*

<u>CME Term SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>150%</u>	<u>300%</u>	<u>400%</u>
4.31398%	11.9%	8.6%	(1.9)%	(9.2)%
5.31398%	(4.4)%	(7.5)%	(17.2)%	(23.9)%
5.62475%	(11.5)%	(14.5)%	(23.9)%	(30.4)%
5.93552% and above	**	**	**	**

SECURITY GROUP 11

Sensitivity of Class IB to Prepayments
Assumed Price 14.0%*

<u>CME Term SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>150%</u>	<u>300%</u>	<u>400%</u>
5.93552% and below	24.5%	20.9%	9.9%	2.2%
5.98552%	6.5%	3.2%	(7.0)%	(14.1)%
6.03552% and above	**	**	**	**

Sensitivity of Class IC to Prepayments
Assumed Price 7.0%*

<u>CME Term SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>150%</u>	<u>300%</u>	<u>400%</u>
5.93552% and below	62.4%	58.3%	45.6%	36.8%
5.96052%	24.9%	21.3%	10.3%	2.6%
5.98552% and above	**	**	**	**

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

** Indicates that investors will suffer a loss of virtually all of their investment.

Sensitivity of Class SK to Prepayments
Assumed Price 7.7%*

<u>CME Term SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>150%</u>	<u>300%</u>	<u>400%</u>
4.31398%	11.7%	8.4%	(2.1)%	(9.4)%
5.31398%	(4.0)%	(7.1)%	(16.8)%	(23.6)%
5.62475%	(10.8)%	(13.9)%	(23.3)%	(29.8)%
5.93552% and above	**	**	**	**

SECURITY GROUPS 10 AND 11

Sensitivity of Class HS to Prepayments
Assumed Price 7.65%*

<u>CME Term SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>150%</u>	<u>300%</u>	<u>400%</u>
4.31398%	11.7%	8.4%	(2.1)%	(9.4)%
5.31398%	(4.1)%	(7.3)%	(17.0)%	(23.7)%
5.62475%	(11.1)%	(14.1)%	(23.5)%	(30.0)%
5.93552% and above	**	**	**	**

SECURITY GROUP 12

Sensitivity of Class SV to Prepayments
Assumed Price 1.5%*

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>
3.5%	84.7%	77.0%	70.9%	64.8%
4.5%	5.9%	(4.9)%	(13.8)%	(22.7)%
4.6%	(2.9)%	(13.9)%	(23.2)%	(32.6)%
4.7% and above	**	**	**	**

SECURITY GROUPS 3 AND 12

Sensitivity of Class PS to Prepayments
Assumed Price 1.45%*

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>
3.5%	88.1%	80.2%	73.9%	67.7%
4.5%	6.4%	(4.4)%	(13.4)%	(22.4)%
4.6%	(2.5)%	(13.6)%	(23.0)%	(32.4)%
4.7% and above	**	**	**	**

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

** Indicates that investors will suffer a loss of virtually all of their investment.

SECURITY GROUP 13

Sensitivity of Class SP to Prepayments Assumed Price 2.5%*

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>360%</u>	<u>600%</u>	<u>800%</u>
4.10145%	70.1%	57.0%	44.4%	33.6%
5.10145%	22.7%	8.2%	(6.0)%	(18.4)%
5.45073%	6.6%	(8.6)%	(23.7)%	(37.2)%
5.80000% and above	**	**	**	**

SECURITY GROUP 14

Sensitivity of Class CI to Prepayments Assumed Price 20.7%*

<u>PSA Prepayment Assumption Rates</u>				
<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>	<u>626%</u>
26.6%	16.9%	9.1%	1.4%	0.0%

Sensitivity of Class GS to Prepayments Assumed Price 4.65%*

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>
4.2216%	32.2%	22.9%	15.3%	7.8%
5.2216%	7.5%	(3.1)%	(12.0)%	(20.8)%
5.5608%	(1.8)%	(12.9)%	(22.1)%	(31.5)%
5.9000% and above	**	**	**	**

Sensitivity of Class IQ to Prepayments Assumed Price 17.5%*

<u>PSA Prepayment Assumption Rates</u>				
<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>528%</u>	<u>600%</u>
31.4%	17.7%	5.9%	0.0%	(5.2)%

Sensitivity of Class IX to Prepayments Assumed Price 5.0%*

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>
5.80% and below	165.3%	158.7%	153.3%	148.1%
5.85%	71.9%	64.0%	57.6%	51.4%
5.90% and above	**	**	**	**

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

** Indicates that investors will suffer a loss of virtually all of their investment.

Sensitivity of Class MS to Prepayments
Assumed Price 4.6%*

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>
4.2216%	30.1%	20.7%	13.0%	5.5%
5.2216%	5.1%	(5.7)%	(14.7)%	(23.7)%
5.5108%	(3.4)%	(14.4)%	(23.7)%	(33.2)%
5.8000% and above	**	**	**	**

Sensitivity of Class QI to Prepayments
Assumed Price 16.0%*

<u>PSA Prepayment Assumption Rates</u>				
<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>505%</u>	<u>600%</u>
34.2%	18.0%	4.6%	0.0%	(7.5)%

Sensitivity of Class SJ to Prepayments
Assumed Price 4.5%*

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>
4.2216%	28.4%	18.9%	11.1%	3.5%
5.2216%	2.6%	(8.2)%	(17.3)%	(26.5)%
5.4608%	(4.9)%	(16.0)%	(25.3)%	(34.9)%
5.7000% and above	**	**	**	**

Sensitivity of Class SQ to Prepayments
Assumed Price 4.4%*

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>
4.2216%	26.6%	17.0%	9.2%	1.5%
5.2216%	0.0%	(11.0)%	(20.2)%	(29.5)%
5.4108%	(6.8)%	(17.9)%	(27.2)%	(36.8)%
5.6000% and above	**	**	**	**

Sensitivity of Class UI to Prepayments
Assumed Price 5.0%*

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>
5.60% and below	165.3%	158.7%	153.3%	148.1%
5.65%	71.9%	64.0%	57.6%	51.4%
5.70% and above	**	**	**	**

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

** Indicates that investors will suffer a loss of virtually all of their investment.

Sensitivity of Class XI to Prepayments
Assumed Price 5.0%*

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>
5.70% and below	165.3%	158.7%	153.3%	148.1%
5.75%	71.9%	64.0%	57.6%	51.4%
5.80% and above	**	**	**	**

SECURITY GROUP 15

Sensitivity of Class SW to Prepayments
Assumed Price 5.85%*

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>360%</u>	<u>600%</u>	<u>800%</u>
4.22165%	19.6%	5.6%	(8.1)%	(19.9)%
5.22165%	(0.6)%	(15.8)%	(30.9)%	(44.5)%
5.46083%	(7.1)%	(22.3)%	(37.6)%	(51.7)%
5.70000% and above	**	**	**	**

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

** Indicates that investors will suffer a loss of virtually all of their investment.

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.

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 Principal Only, 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:

<u>Group(s)</u>	<u>PSA</u>
1	250%
2, 3, 4, 5, 8, 9, 12 and 14	295%
6 and 7	215%
10 and 11	150%
13 and 15	360%

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 CME Term SOFR, Adjusted CME Term SOFR or 30-day Average SOFR at any time after the date of this Supplement. See *“Certain United States Federal Income Tax Consequences” in the Base Offering Circular.*

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

Residual Securities

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

The Residual Securities generally will be treated as “residual interests” in a REMIC for domestic building and loan associations and as “real estate assets” for REITs, as described in “Certain United States Federal Income Tax Consequences” in the Base Offering Circular, but will not be treated as debt for United States federal income tax purposes. Instead, the Holders of the Residual Securities will be required to report, and will be taxed on, their pro rata shares of the taxable income or loss of the Trust REMICs, and these requirements will continue until there are no outstanding regular interests in the respective Trust REMICs. Thus, Residual Holders will have taxable income attributable to the Residual Securities even though they will not receive principal or interest distributions with respect to the Residual Securities, which could result in a negative after-tax return for the Residual Holders. Even though the Holders of the Residual Securities are not entitled to any stated principal or interest payments on the Residual Securities, the Trust REMICs may have substantial taxable income in certain periods, and offsetting tax losses may not occur until much later periods. Accordingly, the Holders of the Residual Securities may experience substantial adverse tax timing consequences. Prospective investors are urged to consult their own tax advisors and consider the after-tax effect of ownership of the Residual Securities and the suitability of the Residual Securities to their investment objectives.

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

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

MX Securities

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

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

ERISA MATTERS

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

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

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

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

See “ERISA Considerations” in the Base Offering Circular.

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

LEGAL INVESTMENT CONSIDERATIONS

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

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

See “Legal Investment Considerations” in the Base Offering Circular.

PLAN OF DISTRIBUTION

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

INCREASE IN SIZE

Before the Closing Date, Ginnie Mae, the Trustee and the Sponsor may agree to increase the size of this offering. In that event, the Securities will have the same characteristics as described in this Supplement, except that the Original Class Principal Balance (or original Class Notional Balance) 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 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						
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 Number	Final Distribution Date(4)
Security Group 1								
Combination 1								
FA	\$63,695,566	AF	\$ 63,695,566	PT	(5)	FLT	38384CWR6	August 2063
XS	1,469,897							
Combination 2								
AS	\$63,695,566	SA	\$ 63,695,566	NTL(PT)	(5)	INV/IO	38384CWS4	August 2063
SX	1,469,897							
XS	1,469,897							
Combination 3								
FA	\$63,695,566	BF	\$ 63,695,566	PT	(5)	FLT	38384CWT2	August 2063
SX	1,469,897							
XS	1,469,897							
Combination 4								
AS	\$63,695,566	ES	\$ 63,695,566	NTL(PT)	(5)	INV/IO	38384CWU9	August 2063
SX	1,469,897							
Combination 5(6)								
DA	\$25,633,000	DC	\$ 25,633,000	SEQ	4.00%	FIX	38384CWV7	January 2061
		DE	25,633,000	SEQ	4.25	FIX	38384CWW5	January 2061
		DG	25,633,000	SEQ	4.50	FIX	38384CWX3	January 2061
		DH	25,633,000	SEQ	4.75	FIX	38384CWY1	January 2061
		DI	5,915,307	NTL(SEQ)	6.50	FIX/IO	38384CWZ8	January 2061
		DJ	25,633,000	SEQ	5.00	FIX	38384CXA2	January 2061
		DK	25,633,000	SEQ	5.25	FIX	38384CXB0	January 2061
		DL	21,971,142	SEQ	5.75	FIX	38384CXC8	January 2061
		DM	19,224,750	SEQ	6.00	FIX	38384CXD6	January 2061

REMIC Securities			MX Securities					
Class	Original Class Principal Balance or Class Notional Balance	Related MX Class	Maximum Original Class Principal Balance or Class Notional Balance(2)	Principal Type(3)	Interest Rate	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
Security Group 2								
Combination 6								
LB	\$ 4,652,000	LY	\$ 13,058,000	SEQ	5.50%	FIX	38384CXE4	August 2053
LC	8,406,000							
Combination 7(6)								
LA	\$36,942,000	L	\$ 50,000,000	PT	5.50%	FIX	38384CXF1	August 2053
LB	4,652,000	M	50,000,000	PT	4.00	FIX	38384CXG9	August 2053
LC	8,406,000	MI	11,538,461	NTL(PT)	6.50	FIX/IO	38384CXH7	August 2053
		MN	50,000,000	PT	4.50	FIX	38384CXJ3	August 2053
		MP	50,000,000	PT	5.00	FIX	38384CXK0	August 2053
		MT	37,500,000	PT	6.00	FIX	38384CXL8	August 2053
Combination 8								
BS	\$32,291,568	SM	\$ 85,875,000	NTL(PT)	(5)	INV/IO	38384CXM6	August 2053
SC	53,583,432							
Combination 9								
IT	\$ 2,076,923	FL	\$ 50,000,000	PT	(5)	FLT	38384CXN4	August 2053
IF	50,000,000							
Combination 10(6)								
LA	\$36,942,000	IL	\$ 9,598,615	NTL(SEQ)	6.50%	FIX/IO	38384CXP9	August 2051
LB	4,652,000	LK	41,594,000	SEQ	4.00	FIX	38384CXQ7	August 2051
		LN	41,594,000	SEQ	4.50	FIX	38384CXR5	August 2051
		LP	41,594,000	SEQ	5.00	FIX	38384CXS3	August 2051
		LQ	41,594,000	SEQ	5.50	FIX	38384CXT1	August 2051
		LT	31,195,500	SEQ	6.00	FIX	38384CXU8	August 2051
Combination 11(6)								
LA	\$36,942,000	LD	\$ 36,942,000	SEQ	4.00%	FIX	38384CXV6	April 2050
		LE	36,942,000	SEQ	4.50	FIX	38384CXW4	April 2050
		LG	36,942,000	SEQ	5.00	FIX	38384CXX2	April 2050
		LH	36,942,000	SEQ	5.50	FIX	38384CXY0	April 2050
		LI	8,525,076	NTL(SEQ)	6.50	FIX/IO	38384CXZ7	April 2050
		IJ	27,706,500	SEQ	6.00	FIX	38384CYA1	April 2050

REMIC Securities			MX Securities					
Class	Original Class Principal Balance or Class Notional Balance	Related MX Class	Maximum Original Class Principal Balance or Class Notional Balance(2)	Principal Type(3)	Interest Rate	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
Combination 12								
MF	\$50,000,000	FM	\$ 50,000,000	PT	(5)	FLT	38384CYB9	August 2053
ST	1,538,461							
Security Group 3								
Combination 13								
SB	\$25,000,000	SH	\$ 25,000,000	NLT(PT)	(5)	INV/IO	38384CYC7	August 2053
TS	961,538							
Combination 14								
GV	\$ 5,115,000	AY	\$ 11,375,843	SEQ	5.50%	FIX	38384CYD5	August 2053
GZ	6,260,843							
Combination 15								
GV	\$ 5,115,000	BY	\$ 13,043,000	SEQ	5.50%	FIX	38384CYE3	August 2053
GY	1,667,157							
GZ	6,260,843							
Security Group 4								
Combination 16(6)								
JA	\$73,196,000	IJ	\$ 16,891,384	NLT(SEQ)	6.50%	FIX/IO	38384CYF0	February 2050
		JL	73,196,000	SEQ	4.50	FIX	38384CYG8	February 2050
		JM	73,196,000	SEQ	5.00	FIX	38384CYH6	February 2050
		JN	73,196,000	SEQ	5.50	FIX	38384CYJ2	February 2050
		JP	73,196,000	SEQ	6.00	FIX	38384CYK9	February 2050
		JQ	54,897,000	SEQ	6.50	FIX	38384CYL7	February 2050
Combination 17(6)								
JA	\$73,196,000	NA	\$ 90,506,000	SEQ	4.50%	FIX	38384CYM5	July 2052
JC	17,310,000	NB	90,506,000	SEQ	5.00	FIX	38384CYN3	July 2052
		NC	90,506,000	SEQ	5.50	FIX	38384CYP8	July 2052
		ND	90,506,000	SEQ	6.00	FIX	38384CYQ6	July 2052
		NE	67,879,500	SEQ	6.50	FIX	38384CYR4	July 2052
		NI	20,886,000	NLT(SEQ)	6.50	FIX/IO	38384CYS2	July 2052

REMIC Securities			MX Securities					
Class	Original Class Principal Balance or Class Notional Balance	Related MX Class	Maximum Original Class Principal Balance or Class Notional Balance(2)	Principal Type(3)	Interest Rate	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
Combination 18(6)								
JA	\$73,196,000	IN	\$ 23,076,923	NTL(PT)	6.50%	FIX/IO	38384CYT0	August 2053
JC	17,310,000	NG	100,000,000	PT	4.50	FIX	38384CYU7	August 2053
JD	9,494,000	NH	100,000,000	PT	5.00	FIX	38384CYV5	August 2053
		NJ	100,000,000	PT	5.50	FIX	38384CYW3	August 2053
		NK	100,000,000	PT	6.00	FIX	38384CYX1	August 2053
		NL	75,000,000	PT	6.50	FIX	38384CYY9	August 2053
Combination 19								
JC	\$17,310,000	YJ	\$ 26,804,000	SEQ	6.00%	FIX	38384CZV6	August 2053
JD	9,494,000							
Security Group 5								
Combination 20								
CS	\$ 7,830,390	S	\$ 3,915,195	PT	(5)	INV	38384CZA0	August 2053
PO	3,915,195							
Combination 21								
CS	\$11,745,585	KS	\$ 3,915,195	PT	(5)	INV	38384CZB8	August 2053
PO	3,915,195							
Combination 22								
CS	\$50,897,529	QS	\$ 3,915,195	PT	(5)	INV	38384CZC6	August 2053
PO	3,915,195							
Combination 23								
CS	\$15,660,780	LS	\$ 3,915,195	PT	(5)	INV	38384CZD4	August 2053
PO	3,915,195							
Combination 24								
CS	\$19,575,975	NS	\$ 3,915,195	PT	(5)	INV	38384CZE2	August 2053
PO	3,915,195							
Security Groups 6 and 7								
Combination 25(7)								
CY	\$ 2,636,405	HY	\$ 12,679,858	SEQ	6.00%	FIX	38384CZF9	August 2053
HB	10,043,453							

REMIC Securities		MX Securities						
Class	Original Class Principal Balance or Class Notional Balance	Related MX Class	Maximum Original Class Principal Balance or Class Notional Balance(2)	Principal Type(3)	Interest Rate	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
Security Groups 8 and 9								
Combination 26(7)								
JY	\$ 9,224,163	NY	\$ 13,584,191	SEQ	6.50%	FIX	38384CZG7	August 2053
MY	4,360,028							
Security Group 10								
Combination 27								
IA	\$ 1,486,248	JS	\$ 44,587,455	NTL(SC/PT)	(5)	INV/IO	38384CZH5	September 2048
SE	44,587,455							
Security Groups 10 and 11								
Combination 28(7)								
SE	\$44,587,455	HS	\$132,005,604	NTL(SC/PT)	(5)	INV/IO	38384CZJ1	September 2049
SK	87,418,149							
Security Groups 3 and 12								
Combination 29(7)								
SB	\$25,000,000	PS	\$ 50,000,000	NTL(PT)	(5)	INV/IO	38384CZK8	August 2053
SV	25,000,000							
Security Group 14								
Combination 30								
FQ	\$50,000,000	DF	\$ 50,000,000	PT	(5)	FLT	38384CZL6	August 2053
IX	769,230							
UI	769,230							
XI	769,230							
Combination 31(6)								
QA	\$36,452,000	QD	\$ 36,452,000	SEQ	4.00%	FIX	38384CZM4	February 2050
		QE	36,452,000	SEQ	4.50	FIX	38384CZN2	February 2050
		QG	36,452,000	SEQ	5.00	FIX	38384CZP7	February 2050
		QH	36,452,000	SEQ	5.50	FIX	38384CZQ5	February 2050
		QI	11,216,000	NTL(SEQ)	6.50	FIX/IO	38384CZR3	February 2050
Combination 32								
FQ	\$50,000,000	EF	\$ 50,000,000	PT	(5)	FLT	38384CZS1	August 2053
IX	769,230							
XI	769,230							

REMIC Securities			MX Securities					
Class	Original Class Principal Balance or Class Notional Balance	Related MX Class	Maximum Original Class Principal Balance or Class Notional Balance(2)	Principal Type(3)	Interest Rate	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
Combination 33								
FQ	\$50,000,000	GF	\$ 50,000,000	PT	(5)	FLT	38384CZT9	August 2053
IX	769,230							
Combination 34								
SQ	\$50,000,000	SJ	\$ 50,000,000	NTL(PT)	(5)	INV/IO	38384CZU6	August 2053
UI	769,230							
Combination 35								
IX	\$ 769,230	GS	\$ 50,000,000	NTL(PT)	(5)	INV/IO	38384CZV4	August 2053
SQ	50,000,000							
UI	769,230							
XI	769,230							
Combination 36								
QB	\$ 4,707,000	QY	\$ 13,548,000	SEQ	6.00%	FIX	38384CZW2	August 2053
QC	8,841,000							
Combination 37(6)								
QA	\$36,452,000	CA	\$ 50,000,000	PT	4.00%	FIX	38384CZX0	August 2053
QB	4,707,000	CB	50,000,000	PT	4.50	FIX	38384CZY8	August 2053
QC	8,841,000	CD	50,000,000	PT	5.00	FIX	38384CZZ5	August 2053
		CE	50,000,000	PT	5.50	FIX	38384CA25	August 2053
		CG	50,000,000	PT	6.00	FIX	38384CA33	August 2053
		CI	15,384,615	NTL(PT)	6.50	FIX/IO	38384CA41	August 2053
Combination 38(6)								
QA	\$36,452,000	IQ	\$ 12,664,307	NTL(SEQ)	6.50%	FIX/IO	38384CA58	June 2051
QB	4,707,000	QJ	41,159,000	SEQ	4.00	FIX	38384CA66	June 2051
		QL	41,159,000	SEQ	4.50	FIX	38384CA74	June 2051
		QM	41,159,000	SEQ	5.00	FIX	38384CA82	June 2051
		QN	41,159,000	SEQ	5.50	FIX	38384CA90	June 2051
		QP	41,159,000	SEQ	6.00	FIX	38384CB24	June 2051
Combination 39								
SQ	\$50,000,000	MS	\$ 50,000,000	NTL(PT)	(5)	INV/IO	38384CB32	August 2053
UI	769,230							
XI	769,230							

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- (1) All exchanges must comply with minimum denomination restrictions.
 - (2) 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.
 - (4) See “*Yield, Maturity and Prepayment Considerations — Final Distribution Date*” in this Supplement.
 - (5) The Interest Rate will be calculated as described under “Terms Sheet — Interest Rates” in this Supplement.
 - (6) In the case of Combinations 5, 7, 10, 11, 16, 17, 18, 31, 37 and 38, various subcombinations are permitted. See “*Description of the Securities — Modifications and Exchange*” in the Base Offering Circular for a discussion of subcombinations.
 - (7) Derived from REMIC classes relating to separate Groups.

Underlying Certificates

Trust Asset Group or Subgroup	Issuer	Series	Class	Issue Date	CUSIP Number	Interest Rate	Interest Type(I)	Final Distribution Date	Principal Type(U)	Original Notional Balance of Class	Underlying Certificate Factor(2)	Notional Balance in Trust	Percentage of Class in Trust	Ginnie Mae I or II
10	Ginnie Mae	2017-134	SB(3)	September 29, 2017	38380GGH40	(4)	INV/IO	September 2047	NUL(PT)	\$112,907,283	0.21245974	\$13,365,264.99	55.7158770706%	II
10	Ginnie Mae	2017-139	SA	September 29, 2017	38380HEG3	(4)	INV/IO	August 2047	NUL(PT)	34,721,644	0.20670412	10,076,559.70	97.8111635497	II
10	Ginnie Mae	2017-163	SC	November 30, 2017	38380KIX1	(4)	INV/IO	November 2047	NUL(PT)	22,495,999	0.32092382	7,220,785.63	100.0000000000	II
10	Ginnie Mae	2018-079	SB	June 29, 2018	38380XDN4	(4)	INV/IO	June 2048	NUL(PT)	23,976,884	0.19959308	4,785,620.13	100.0000000000	II
10	Ginnie Mae	2018-122	SE	September 28, 2018	38380YR23	(4)	INV/IO	September 2048	NUL(PT)	46,173,700	0.25070980	2,660,134.77	22.9793453849	II
10	Ginnie Mae	2018-124	SN(3)	September 28, 2018	38380YZ27	(4)	INV/IO	September 2048	NUL(PT)	43,333,333	0.34944019	6,479,090.07	42.7877126368	II
11A	Ginnie Mae	2019-071	SD(3)	June 28, 2019	38381WJP4	(4)	INV/IO	June 2049	NUL(PT)	68,361,428	0.27159788	18,566,818.92	100.0000000000	II
11B	Ginnie Mae	2019-061	S(3)(5)	May 30, 2019	38381VSN6	(4)	INV/IO	December 2045	NUL(SC/PT)	26,111,984	0.36834844	9,618,308.57	100.0000000000	II
11B	Ginnie Mae	2019-083	SM(3)	June 28, 2019	38381WYN2	(4)	INV/IO	June 2049	NUL(PT/PAC/AD)	43,307,136	0.25951628	10,630,341.16	94.5851879930	II
11B	Ginnie Mae	2019-083	JS	July 30, 2019	38381XAJ5	(4)	INV/IO	July 2049	NUL(PAC/AD)	74,671,125	0.28739975	3,912,660.20	18.2319470880	II
11B	Ginnie Mae	2019-092	SL	July 30, 2019	38381WR26	(4)	INV/IO	July 2049	NUL(PT)	38,142,281	0.35610335	13,582,594.04	100.0000000000	II
11B	Ginnie Mae	2019-115	SE	September 30, 2019	38381YUG7	(4)	INV/IO	September 2049	NUL(PT)	33,600,000	0.24056110	8,082,852.96	100.0000000000	II
11C	Ginnie Mae	2019-001	SN(3)	January 30, 2019	38381BZG2	(4)	INV/IO	January 2049	NUL(PT)	66,924,667	0.22087742	3,106,861.79	21.0176615447	II
11C	Ginnie Mae	2019-098	SJ	August 30, 2019	38381YCR3	(4)	INV/IO	August 2049	NUL(PAC/AD)	48,825,252	0.32812423	16,020,748.22	100.0000000000	II
11C	Ginnie Mae	2019-103	SC	August 30, 2019	38381XX50	(4)	INV/IO	August 2049	NUL(PT)	67,047,619	0.33556905	3,896,963.38	17.3205255805	II

- (1) As defined under “Class Types” in Appendix I to the Base Offering Circular.
- (2) Underlying Certificate Factors are as of August 2023.
- (3) MX Class.
- (4) The Interest Rate will be calculated as described under “Terms Sheet — Interest Rates” in the related Underlying Certificate Disclosure Document.
- (5) Class S is backed by previously issued Ginnie Mae REMIC certificates, one of which is further backed by a previously issued Ginnie Mae MX certificate, as outlined below:
 - REMIC Class CS from 2015-178
 - REMIC Class GS from 2019-023, further backed by:
 - o MX Class SJ from 2015-063



\$1,167,115,715

**Government National
Mortgage Association**

GINNIE MAE®

**Guaranteed REMIC
Pass-Through Securities
and MX Securities
Ginnie Mae REMIC Trust 2023-113**

OFFERING CIRCULAR SUPPLEMENT
August 24, 2023



Ramirez & Co., Inc.