Offering Circular Supplement
(To Base Offering Circular dated July 1, 2023)

Ginnie Mae
Our Guaranty Matters

$3,700,738,541
Government National Mortgage Association
GINNIE MAE®
Guaranteed REMIC Pass-Through Securities and MX Securities
Ginnie Mae REMIC Trust 2024-110

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-16 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 July 30, 2024.

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

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

Class of REMIC Securities	Original Principal Balance(2)	Interest Rate	Principal Type(3)	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
Security Group 1						
NF(1)	$ 12,144,746	(5)	SC/PT	FLT	38384QTG3	April 2051
PF(1)	12,581,809	(5)	SC/PT	FLT	38384QTH1	September 2050
UF(1)	23,358,078	(5)	SC/PT	FLT	38384QTJ7	April 2051
VF(1)	26,227,293	(5)	SC/PT	FLT	38384QTK4	June 2051
Security Group 2						
CA(1)	23,818,000	4.50%	SEQ	FIX	38384QTL2	August 2050
CL(1)	3,082,000	4.50	SEQ	FIX	38384QTM0	January 2052
CV(1)	2,517,000	4.50	SEQ/AD	FIX	38384QTN8	August 2035
CZ(1)	3,916,334	4.50	SEQ	FIX/Z	38384QTP3	July 2054
FC	50,000,000	(5)	PT	FLT	38384QTQ1	July 2054
SC	50,000,000	(5)	NTL(PT)	INV/IO	38384QTR9	July 2054
Security Group 3						
FQ	75,000,000	(5)	PT	FLT	38384QTS7	July 2054
QA(1)	52,998,000	4.50	SEQ	FIX	38384QTT5	July 2050
QL(1)	6,989,000	4.50	SEQ	FIX	38384QTU2	December 2051
QV(1)	5,873,000	4.50	SEQ/AD	FIX	38384QTV0	August 2035
QZ(1)	9,140,000	4.50	SEQ	FIX/Z	38384QTW8	July 2054
SQ	75,000,000	(5)	NTL(PT)	INV/IO	38384QTX6	July 2054
Security Group 4						
AB(1)	43,579,000	4.50	SEQ	FIX	38384QTY4	April 2051
AL(1)	9,243,169	4.50	SEQ	FIX	38384QTZ1	July 2054
AM(1)	5,407,000	4.50	SEQ	FIX	38384QUA4	August 2052
AS	89,166,666	(5)	NTL(PT)	INV/IO	38384QUB2	July 2054
BA	50,000,000	5.50	PT	FIX	38384QUC0	July 2054
CS	137,833,334	(5)	NTL(PT)	INV/IO	38384QUD8	July 2054
FA	100,000,000	(5)	PT	FLT	38384QUE6	July 2054
FB	50,000,000	(5)	PT	FLT	38384QUF3	July 2054
FU	30,000,000	(5)	PT	FLT	38384QUG1	July 2054
FY(1)	77,000,000	(5)	PT	FLT	38384QUH9	July 2054
SU	30,000,000	(5)	NTL(PT)	INV/IO	38384QUJ5	July 2054
TB(1)	77,000,000	(5)	NTL(PT)	INV/IO	38384QUK2	July 2054
TC	1,083,333	(5)	PT	INV	38384QUL0	July 2054
TD	3,461,538	(5)	PT	INV	38384QUM8	July 2054
Security Group 5						
PT	76,000,000	6.00	PT	FIX	38384QUN6	July 2054
Security Group 6						
AF	84,905,919	(5)	SC/PT	FLT	38384QUP1	August 2053
TA	84,905,919	(5)	NTL(SC/PT)	INV/IO	38384QUQ9	August 2053
Security Group 7						
CF(1)	60,000,000	(5)	PT	FLT	38384QUR7	July 2054
GA(1)	28,225,000	4.50	SEQ	FIX	38384QUS5	June 2050
GM(1)	3,727,000	4.50	SEQ	FIX	38384QUT3	December 2051
GV(1)	3,149,000	4.50	SEQ/AD	FIX	38384QUU0	August 2035
GZ(1)	4,899,000	4.50	SEQ	FIX/Z	38384QUV8	July 2054
SG	60,000,000	(5)	NTL(PT)	INV/IO	38384QUW6	July 2054
TG(1)	60,000,000	(5)	NTL(PT)	INV/IO	38384QUX4	July 2054
Security Group 8						
EA(1)	28,033,000	4.50	SEQ	FIX	38384QUY2	April 2051
EY(1)	9,467,000	4.50	SEQ	FIX	38384QUZ9	July 2054
FE	75,000,000	(5)	PT	FLT	38384QVA3	July 2054
SE	75,000,000	(5)	NTL(PT)	INV/IO	38384QVB1	July 2054
Security Group 9						
DA(1)	31,820,000	4.50	SEQ	FIX	38384QVC9	April 2051
DY(1)	10,680,000	4.50	SEQ	FIX	38384QVD7	July 2054
FD	85,000,000	(5)	PT	FLT	38384QVE5	July 2054
SD	85,000,000	(5)	NTL(PT)	INV/IO	38384QVF2	July 2054
Security Group 10						
FT(1)	25,000,000	(5)	TAC/AD	FLT	38384QVG0	July 2064
IT(1)	25,000,000	(5)	NTL(TAC/AD)	INV/IO	38384QVH8	July 2064
SX(1)	25,000,000	(5)	NTL(TAC/AD)	INV/IO	38384QVJ4	July 2064
TF	25,000,000	(5)	TAC/AD	FLT	38384QVK1	July 2064
TI(1)	25,000,000	(5)	NTL(TAC/AD)	INV/IO	38384QVL9	July 2064
XS(1)	25,000,000	(5)	NTL(TAC/AD)	INV/IO	38384QVM7	July 2064
ZT	10,728,744	7.00	SUP	FIX/Z	38384QVN5	July 2064
Security Group 11						
DS(1)	230,000,000	(5)	NTL(PT)	INV/IO	38384QVP0	July 2064
FV(1)	230,000,000	(5)	PT	FLT	38384QVQ8	July 2064
TV(1)	230,000,000	(5)	NTL(PT)	INV/IO	38384QVR6	July 2064

(Cover continued on next page)

BMO

Ramirez & Co., Inc.

The date of this Offering Circular Supplement is July 24, 2024.

Class of REMIC Securities	Original Principal Balance(2)	Interest Rate	Principal Type(3)	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
Security Group 12						
B(1)	$ 29,271,000	5.00%	SEQ	FIX	38384QVS4	August 2052
BY(1)	5,729,000	5.00	SEQ	FIX	38384QVT2	July 2054
EF	140,000,000	(5)	PT	FLT	38384QVU9	July 2054
ES	90,000,000	(5)	NTL(PT)	INV/IO	38384QVV7	July 2054
IS	50,000,000	(5)	NTL(PT)	INV/IO	38384QVW5	July 2054
Security Group 13						
GF	110,000,000	(5)	PT	FLT	38384QVX3	July 2054
GS	88,444,057	(5)	NTL(PT)	INV/IO	38384QVY1	July 2054
SJ	21,555,943	(5)	NTL(PT)	INV/IO	38384QVZ8	July 2054
Security Group 14						
FH	250,000,000	(5)	PT	FLT	38384QWA2	July 2054
FJ	150,000,000	(5)	PT	FLT	38384QWB0	July 2054
SH	400,000,000	(5)	NTL(PT)	INV/IO	38384QWC8	July 2054
Security Group 15						
HA(1)	47,063,000	5.00	SEQ	FIX	38384QWD6	August 2052
HF	225,000,000	(5)	PT	FLT	38384QWE4	July 2054
HL(1)	4,270,000	5.00	SEQ	FIX	38384QWF1	July 2054
HN(1)	4,917,000	5.00	SEQ	FIX	38384QWG9	September 2053
HS(1)	75,000,000	(5)	NTL(PT)	INV/IO	38384QWH7	July 2054
SI(1)	150,000,000	(5)	NTL(PT)	INV/IO	38384QWJ3	July 2054
Security Group 16						
FN	100,000,000	(5)	PT	FLT	38384QWK0	July 2054
NA(1)	18,710,000	4.50	SEQ	FIX	38384QWL8	April 2051
NY(1)	6,290,000	4.50	SEQ	FIX	38384QWM6	July 2054
SN	100,000,000	(5)	NTL(PT)	INV/IO	38384QWN4	July 2054
Security Group 17						
MA	34,597,000	5.50	SEQ	FIX	38384QWP9	April 2050
MF(1)	50,000,000	(5)	PT	FLT	38384QWQ7	July 2054
MV(1)	6,922,914	5.50	SEQ/AD	FIX	38384QWR5	June 2035
MZ(1)	8,480,086	5.50	SEQ	FIX/Z	38384QWS3	July 2054
SM(1)	50,000,000	(5)	NTL(PT)	INV/IO	38384QWT1	July 2054
TM(1)	50,000,000	(5)	NTL(PT)	INV/IO	38384QWU8	July 2054
Security Group 18						
JF	188,132,744	(5)	PT	FLT	38384QWV6	July 2054
JS	188,132,744	(5)	NTL(PT)	INV/IO	38384QWW4	July 2054
Security Group 19						
KH	20,000,000	5.25	PT	FIX	38384QWX2	July 2054
KI	909,090	5.50	NTL(PT)	FIX/IO	38384QWY0	July 2054
Security Group 20						
FL	100,000,000	(5)	PT	FLT	38384QWZ7	July 2054
SL	100,000,000	(5)	NTL(PT)	INV/IO	38384QXA1	July 2054
Security Group 21						
LF	50,000,000	(5)	PT	FLT	38384QXB9	July 2054
LS	50,000,000	(5)	NTL(PT)	INV/IO	38384QXC7	July 2054
Security Group 22						
QF	50,000,000	(5)	PT	FLT	38384QXD5	July 2054
QS(1)	50,000,000	(5)	NTL(PT)	INV/IO	38384QXE3	July 2054
Security Group 23						
YS(1)	48,196,134	(5)	NTL(SC/PT)	INV/IO	38384QXF0	June 2054
Security Group 24						
JA(1)	110,764,000	3.00	SEQ	FIX	38384QXG8	February 2045
JL(1)	20,375,000	3.00	SEQ	FIX	38384QXH6	October 2049
JM(1)	22,465,000	3.00	SEQ	FIX	38384QXJ2	September 2047
JV(1)	15,525,000	3.00	AD/SEQ	FIX	38384QXK9	October 2035
JZ(1)	38,785,916	3.00	SEQ	FIX/Z	38384QXL7	July 2054
Security Group 25						
LA(1)	45,430,000	3.50	SEQ	FIX	38384QXM5	October 2045
LM(1)	9,144,000	3.50	SEQ	FIX	38384QXN3	April 2048
LV(1)	9,491,000	3.50	SEQ/AD	FIX	38384QXP8	October 2035
LZ(1)	19,751,192	3.50	SEQ	FIX/Z	38384QXQ6	July 2054
Security Group 26						
LD(1)	97,004,000	4.50	SEQ	FIX	38384QXR4	August 2049
LJ(1)	14,176,000	4.50	SEQ	FIX	38384QXS2	May 2051
VL(1)	11,498,000	4.50	AD/SEQ	FIX	38384QXT0	August 2035
ZL(1)	17,892,726	4.50	SEQ	FIX/Z	38384QXU7	July 2054
Security Group 27						
KF(1)	200,000,000	(5)	PT	FLT	38384QXV5	July 2054
TE(1)	200,000,000	(5)	NTL(PT)	INV/IO	38384QXW3	July 2054
TH(1)	200,000,000	(5)	NTL(PT)	INV/IO	38384QXX1	July 2054
WS(1)	200,000,000	(5)	NTL(PT)	INV/IO	38384QXY9	July 2054
Residual						
RR	0	0.00	NPR	NPR	38384QXZ6	July 2064

(1) These Securities may be exchanged for MX Securities described in Schedule I to this Supplement.

(2) Subject to increase as described under "Increase in Size" in this Supplement. The amount shown for each Notional Class (indicated by "NTL" under Principal Type) is its original Class Notional Balance and does not represent principal that will be paid.

(3) As defined under "Class Types" in Appendix I to the Base Offering Circular. The Class Notional Balance of each Notional Class will be reduced as shown under "Terms Sheet — Notional Classes" in this Supplement.

(4) *See "Yield, Maturity and Prepayment Considerations — Final Distribution Date" in this Supplement.*

(5) *See "Terms Sheet — Interest Rates" in this Supplement.*

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 1, 6 and 23 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: July 30, 2024

Distribution Date: The 20th day of each month or, if the 20th day is not a Business Day, the first Business Day thereafter, commencing in August 2024.

Trust Assets:

Trust Asset Group or Subgroup(2)	Trust Asset Type	Certificate Rate	Original Term To Maturity (in years)
1A	Underlying Certificate	(1)	(1)
1B	Underlying Certificate	(1)	(1)
1C	Underlying Certificate	(1)	(1)
1D	Underlying Certificate	(1)	(1)
2	Ginnie Mae II	6.000%	30
3	Ginnie Mae II	6.000%	30
4A	Ginnie Mae II	6.500%	30
4B	Ginnie Mae II	6.500%	30
5	Ginnie Mae II	6.000%	30
6	Underlying Certificate	(1)	(1)
7	Ginnie Mae II	6.000%	30
8	Ginnie Mae II	6.500%	30
9	Ginnie Mae II	6.500%	30
10	Ginnie Mae II	7.000%	40
11	Ginnie Mae II	7.000%	40
12A	Ginnie Mae II	7.000%	30
12B	Ginnie Mae II	7.000%	30
13A	Ginnie Mae II	7.500%	30
13B	Ginnie Mae II	7.500%	30
14A	Ginnie Mae II	7.500%	30
14B	Ginnie Mae II	7.500%	30
15A	Ginnie Mae II	7.000%	30
15B	Ginnie Mae II	7.000%	30
16	Ginnie Mae II	6.500%	30
17	Ginnie Mae II	6.000%	30

Trust Asset Group or Subgroup[2]	Trust Asset Type	Certificate Rate	Original Term To Maturity (in years)
18	Ginnie Mae II	7.000%	30
19	Ginnie Mae II	5.500%	30
20	Ginnie Mae II	6.500%	30
21	Ginnie Mae II	7.500%	30
22	Ginnie Mae II	6.500%	30
23	Underlying Certificate	(1)	(1)
24	Ginnie Mae II	3.000%	30
25	Ginnie Mae II	3.500%	30
26	Ginnie Mae II	4.500%	30
27	Ginnie Mae II	6.500%	30

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

(2) The Group 1, 4, 12, 13, 14 and 15 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 10, 11, 22 and 23, payments on each Group will be based solely on payments on the Trust Asset Group with the same numerical designation.

Assumed Characteristics of the Mortgage Loans Underlying the Group 2, 3, 4, 5, 7 through 22, 24, 25, 26 and 27 Trust Assets[1]:

Principal Balance	Weighted Average Remaining Term to Maturity (in months)	Weighted Average Loan Age (in months)	Weighted Average Mortgage Rate[2]
Group 2 Trust Assets			
$83,333,334	355	2	6.576%
Group 3 Trust Assets			
$150,000,000	359	1	6.525%
Subgroup 4A Trust Assets			
$133,750,000	357	1	7.045%
Subgroup 4B Trust Assets			
$236,024,040	357	1	7.045%
Group 5 Trust Assets			
$76,000,000	349	0	6.543%
Group 7 Trust Assets			
$100,000,000	359	1	6.597%
Group 8 Trust Assets			
$112,500,000	359	1	7.027%
Group 9 Trust Assets			
$127,500,000	359	1	6.933%

Principal Balance	Weighted Average Remaining Term to Maturity (in months)	Weighted Average Loan Age (in months)	Weighted Average Mortgage Rate[2]
Group 10 Trust Assets[3]			
$60,728,744	476	2	7.388%
Group 11 Trust Assets[3]			
$230,000,000	478	2	7.436%
Subgroup 12A Trust Assets			
$112,500,000	354	1	7.547%
Subgroup 12B Trust Assets			
$62,500,000	354	1	7.547%
Subgroup 13A Trust Assets			
$88,444,057	358	2	7.898%
Subgroup 13B Trust Assets			
$21,555,943	356	2	7.785%
Subgroup 14A Trust Assets			
$250,000,000	349	7	7.999%
Subgroup 14B Trust Assets			
$150,000,000	350	6	8.038%
Subgroup 15A Trust Assets			
$93,750,000	354	1	7.508%
Subgroup 15B Trust Assets			
$187,500,000	354	1	7.508%
Group 16 Trust Assets			
$125,000,000	358	1	7.001%
Group 17 Trust Assets			
$100,000,000	356	2	6.531%
Group 18 Trust Assets			
$188,132,744	348	10	7.442%
Group 19 Trust Assets			
$20,000,000	356	4	6.066%
Group 20 Trust Assets			
$100,000,000	345	12	6.993%
Group 21 Trust Assets			
$50,000,000	357	2	8.092%
Group 22 Trust Assets			
$50,000,000	348	10	7.033%
Group 24 Trust Assets[4]			
$207,914,916	303	55	3.473%
Group 25 Trust Assets[4]			
$83,816,192	288	69	3.948%
Group 26 Trust Assets[4]			
$140,570,726	278	79	4.918%
Group 27 Trust Assets			
$200,000,000	358	1	7.100%

[1] As of July 1, 2024.

(2) The Mortgage Loans underlying the Group 2, 3, 4, 5, 7 through 22, 24, 25, 26 and 27 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 10 and 11 Trust Assets are modified loans with terms greater than or equal to 361 but not more than 480 months from the pool issuance date.

(4) The Mortgage Loans underlying the Group 24, 25 and 26 Trust Assets may be re-performing Mortgage Loans that were previously repurchased from one or more pools of Mortgage Loans underlying one or more Ginnie Mae MBS Certificates.

The actual remaining terms to maturity, loan ages and Mortgage Rates of many of the Mortgage Loans underlying the Group 2, 3, 4, 5, 7 through 22, 24, 25, 26 and 27 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 1, 6 and 23 Trust Assets: See Exhibit A to this Supplement for certain information regarding the characteristics of the related Underlying Certificates.

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

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

Increased Minimum Denomination Classes: Each Class that constitutes an Interest Only 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 a 30-day compounded average of the Secured Overnight Financing Rate ("SOFR") (hereinafter referred to as "30-day Average SOFR") as follows:

Class	Interest Rate Formula(1)	Initial Interest Rate(2)	Minimum Rate	Maximum Rate	Delay (in days)	30-day Average SOFR for Minimum Interest Rate
Security Group 1						
F	30-day Average SOFR + 0.90%	6.24410%	0.90%	(3)	0	0.00%
NF(4)	30-day Average SOFR + 0.90%	6.24410%	0.90%	8.00%	0	0.00%
PF(5)	30-day Average SOFR + 0.90%	6.24410%	0.90%	8.00%	0	0.00%
UF(6)	30-day Average SOFR + 0.90%	6.24410%	0.90%	8.00%	0	0.00%
VF(7)	30-day Average SOFR + 0.90%	6.24410%	0.90%	8.00%	0	0.00%
Security Group 2						
FC	30-day Average SOFR + 1.00%	6.33501%	1.00%	7.00%	0	0.00%
SC	6.00% − 30-day Average SOFR	0.66499%	0.00%	6.00%	0	6.00%
Security Group 3						
FQ	30-day Average SOFR + 0.85%	6.19106%	0.85%	7.50%	0	0.00%
SQ	6.65% − 30-day Average SOFR	1.30894%	0.00%	6.65%	0	6.65%

Class	Interest Rate Formula(1)	Initial Interest Rate(2)	Minimum Rate	Maximum Rate	Delay (in days)	30-day Average SOFR for Minimum Interest Rate
Security Group 4						
AS	6.65% − 30-day Average SOFR	1.31465%	0.00%	6.65%	0	6.65%
BF	30-day Average SOFR + 1.00%	6.33535%	1.00%	7.00%	0	0.00%
CS	6.00% − 30-day Average SOFR	0.66525%	0.00%	6.00%	0	6.00%
FA	30-day Average SOFR + 0.85%	6.18535%	0.85%	7.50%	0	0.00%
FB	30-day Average SOFR + 1.05%	6.38370%	1.05%	7.50%	0	0.00%
FU	30-day Average SOFR + 1.10%	6.43671%	1.10%	6.75%	0	0.00%
FY	30-day Average SOFR + 0.80%	6.13535%	0.80%	7.00%	0	0.00%
SU	5.65% − 30-day Average SOFR	0.31329%	0.00%	5.65%	0	5.65%
TB	6.20% − 30-day Average SOFR	0.20000%	0.00%	0.20%	0	6.20%
TC	66.50% − (30-day Average SOFR x 10)	6.50000%	0.00%	6.50%	0	6.65%
TD	93.16666667% − (30-day Average SOFR x 14.44444445)	6.50000%	0.00%	6.50%	0	6.45%
Security Group 6						
AF	30-day Average SOFR + 0.85%	6.19410%	0.85%	7.50%	0	0.00%
TA	6.65% − 30-day Average SOFR	0.15000%	0.00%	0.15%	0	6.65%
Security Group 7						
CF	30-day Average SOFR + 0.90%	6.23501%	0.90%	7.00%	0	0.00%
FG	30-day Average SOFR + 1.05%	6.38501%	1.05%	7.00%	0	0.00%
SG	5.95% − 30-day Average SOFR	0.61499%	0.00%	5.95%	0	5.95%
TG	6.10% − 30-day Average SOFR	0.15000%	0.00%	0.15%	0	6.10%
Security Group 8						
FE	30-day Average SOFR + 0.85%	6.18535%	0.85%	7.50%	0	0.00%
SE	6.65% − 30-day Average SOFR	1.31465%	0.00%	6.65%	0	6.65%
Security Group 9						
FD	30-day Average SOFR + 0.85%	6.18535%	0.85%	7.50%	0	0.00%
SD	6.65% − 30-day Average SOFR	1.31465%	0.00%	6.65%	0	6.65%
Security Group 10						
FT	30-day Average SOFR + 0.95%	6.28808%	0.95%	7.00%	0	0.00%
FX	30-day Average SOFR + 1.05%	6.38808%	1.05%	7.00%	0	0.00%
IT	6.05% − 30-day Average SOFR	0.10000%	0.00%	0.10%	0	6.05%
ST	6.05% − 30-day Average SOFR	0.71192%	0.00%	6.05%	0	6.05%
SX	5.95% − 30-day Average SOFR	0.61192%	0.00%	5.95%	0	5.95%
TF	30-day Average SOFR + 0.95%	6.28808%	0.95%	7.00%	0	0.00%
TI	6.05% − 30-day Average SOFR	0.15000%	0.00%	0.15%	0	6.05%
TS	6.05% − 30-day Average SOFR	0.71192%	0.00%	6.05%	0	6.05%
XS	5.90% − 30-day Average SOFR	0.56192%	0.00%	5.90%	0	5.90%
Security Group 11						
DF	30-day Average SOFR + 1.10%	6.43601%	1.10%	7.00%	0	0.00%
DS	5.90% − 30-day Average SOFR	0.56399%	0.00%	5.90%	0	5.90%
FV	30-day Average SOFR + 1.00%	6.33601%	1.00%	7.00%	0	0.00%
TV	6.00% − 30-day Average SOFR	0.10000%	0.00%	0.10%	0	6.00%
Security Groups 10 and 11						
SY	5.90% − 30-day Average SOFR	0.56379%	0.00%	5.90%	0	5.90%
Security Group 12						
EF	30-day Average SOFR + 0.85%	6.18501%	0.85%	7.50%	0	0.00%
ES	6.65% − 30-day Average SOFR	1.31499%	0.00%	6.65%	0	6.65%
IS	6.65% − 30-day Average SOFR	1.31499%	0.00%	6.65%	0	6.65%
Security Group 13						
GF	30-day Average SOFR + 0.85%	6.18370%	0.85%	7.50%	0	0.00%
GS	6.65% − 30-day Average SOFR	1.31630%	0.00%	6.65%	0	6.65%
SJ	6.65% − 30-day Average SOFR	1.31630%	0.00%	6.65%	0	6.65%
Security Group 14						
FH	30-day Average SOFR + 0.85%	6.18501%	0.85%	7.50%	0	0.00%
FJ	30-day Average SOFR + 0.85%	6.18501%	0.85%	7.50%	0	0.00%
SH	6.65% − 30-day Average SOFR	1.31499%	0.00%	6.65%	0	6.65%
Security Group 15						
HF	30-day Average SOFR + 0.85%	6.18370%	0.85%	7.50%	0	0.00%
HS	6.65% − 30-day Average SOFR	1.31630%	0.00%	6.65%	0	6.65%
S	6.65% − 30-day Average SOFR	1.31630%	0.00%	6.65%	0	6.65%
SI	6.65% − 30-day Average SOFR	1.31630%	0.00%	6.65%	0	6.65%

Class	Interest Rate Formula(1)	Initial Interest Rate(2)	Minimum Rate	Maximum Rate	Delay (in days)	30-day Average SOFR for Minimum Interest Rate
Security Group 16						
FN	30-day Average SOFR + 1.02%	6.35535%	1.02%	7.00%	0	0.00%
SN	5.98% − 30-day Average SOFR	0.64465%	0.00%	5.98%	0	5.98%
Security Group 17						
FM	30-day Average SOFR + 1.25%	6.50000%	1.25%	6.50%	0	0.00%
MF	30-day Average SOFR + 1.20%	6.50000%	1.20%	6.50%	0	0.00%
MS	5.30% − 30-day Average SOFR	0.00000%	0.00%	5.30%	0	5.30%
SM	5.25% − 30-day Average SOFR	0.00000%	0.00%	5.25%	0	5.25%
TM	5.30% − 30-day Average SOFR	0.00000%	0.00%	0.05%	0	5.30%
Security Group 18						
JF	30-day Average SOFR + 1.00%	6.33640%	1.00%	7.00%	0	0.00%
JS	6.00% − 30-day Average SOFR	0.66360%	0.00%	6.00%	0	6.00%
Security Group 20						
FL	30-day Average SOFR + 1.30%	6.50000%	1.30%	6.50%	0	0.00%
SL	5.20% − 30-day Average SOFR	0.00000%	0.00%	5.20%	0	5.20%
Security Group 21						
LF	30-day Average SOFR + 0.80%	6.13576%	0.80%	7.50%	0	0.00%
LS	6.70% − 30-day Average SOFR	1.36424%	0.00%	6.70%	0	6.70%
Security Group 22						
QF	30-day Average SOFR + 1.35%	6.50000%	1.35%	6.50%	0	0.00%
QS	5.15% − 30-day Average SOFR	0.00000%	0.00%	5.15%	0	5.15%
Security Group 23						
YS	5.15% − 30-day Average SOFR	0.00000%	0.00%	5.15%	0	5.15%
Security Groups 22 and 23						
SK	5.15% − 30-day Average SOFR	0.00000%	0.00%	5.15%	0	5.15%
Security Group 27						
FW	30-day Average SOFR + 1.10%	6.44106%	1.10%	6.50%	0	0.00%
KF	30-day Average SOFR + 1.00%	6.34106%	1.00%	6.50%	0	0.00%
KS	5.50% − 30-day Average SOFR	0.15894%	0.00%	5.50%	0	5.50%
SW	5.40% − 30-day Average SOFR	0.05894%	0.00%	5.40%	0	5.40%
TE	5.40% − 30-day Average SOFR	0.05894%	0.00%	0.10%	0	5.40%
TH	5.50% − 30-day Average SOFR	0.10000%	0.00%	0.10%	0	5.50%
WF	30-day Average SOFR + 1.20%	6.50000%	1.20%	6.50%	0	0.00%
WS	5.30% − 30-day Average SOFR	0.00000%	0.00%	5.30%	0	5.30%

(1) 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 maximum rate for Class F for any Accrual Period is the equivalent annualized rate derived by aggregating the accrued interest on its related REMIC Classes for such Accrual Period expressed as a percentage of its outstanding principal balance for such Accrual Period.

(4) In the event that the previously issued certificate backing the related Subgroup 1D Underlying Certificate is retired before the related Ginnie Mae II MBS Certificate backing the Subgroup 1D Underlying Certificate (as could result from an optional termination of the related Underlying Trust with respect to such previously issued certificate by the Underlying Trustee, for example), the Interest Rate will be reduced to 3/8 of the payments to which it would otherwise have been entitled.

(5) In the event that the previously issued certificate backing the related Subgroup 1C Underlying Certificate is retired before the related Ginnie Mae II MBS Certificate backing the Subgroup 1C Underlying Certificate (as could result from an optional termination of the related Underlying Trust with respect to such previously issued certificate by the Underlying Trustee, for example), the Interest Rate will be reduced to 3/8 of the payments to which it would otherwise have been entitled.

(6) In the event that the previously issued certificate backing the related Subgroup 1B Underlying Certificate is retired before the related Ginnie Mae II MBS Certificate backing the Subgroup 1B Underlying Certificate (as could result from an optional termination of the related Underlying Trust with respect to such previously issued certificate by the Underlying Trustee, for example), the Interest Rate will be reduced to 3/8 of the payments to which it would otherwise have been entitled.

(7) In the event that the previously issued certificate backing the related Subgroup 1A Underlying Certificate is retired before the related Ginnie Mae II MBS Certificate backing the Subgroup 1A Underlying Certificate (as could result from an optional termination of the related Underlying Trust with respect to such previously issued certificate by the Underlying Trustee, for example), the Interest Rate will be reduced to 3/8 of the payments to which it would otherwise have been entitled.

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 Subgroup 1A Principal Distribution Amount, the Subgroup 1B Principal Distribution Amount, the Subgroup 1C Principal Distribution Amount and the Subgroup 1D Principal Distribution Amount will be allocated as follows:

- The Subgroup 1A Principal Distribution Amount to VF, until retired
- The Subgroup 1B Principal Distribution Amount to UF, until retired
- The Subgroup 1C Principal Distribution Amount to PF, until retired
- The Subgroup 1D Principal Distribution Amount to NF, until retired

SECURITY GROUP 2

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

- The CZ Accrual Amount, sequentially, to CV and CZ, in that order, until retired
- 59.99999952% of the Group 2 Principal Distribution Amount to FC, until retired
- 40.00000048% of the Group 2 Principal Distribution Amount, sequentially, to CA, CL, CV and CZ, in that order, until retired

SECURITY GROUP 3

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

- The QZ Accrual Amount, sequentially, to QV and QZ, in that order, until retired
- 50% of the Group 3 Principal Distribution Amount to FQ, until retired
- 50% of the Group 3 Principal Distribution Amount, sequentially, to QA, QL, QV and QZ, in that order, until retired

SECURITY GROUP 4

The Subgroup 4A Principal Distribution Amount and the Subgroup 4B Principal Distribution Amount will be allocated as follows:

- 66.6666661682% of the Subgroup 4A Principal Distribution Amount and 4.5899282124% of the Subgroup 4B Principal Distribution Amount to FA, until retired
- 33.3333338318% of the Subgroup 4A Principal Distribution Amount and 5.7815445410% of the Subgroup 4B Principal Distribution Amount, sequentially, to AB, AM and AL, in that order, until retired
- 89.6285272466% of the Subgroup 4B Principal Distribution Amount, concurrently, to BA, FB, FU, FY, TC and TD, pro rata, until retired

SECURITY GROUP 5

The Group 5 Principal Distribution Amount will be allocated to PT, until retired

SECURITY GROUP 6

The Group 6 Principal Distribution Amount will be allocated to AF, until retired

SECURITY GROUP 7

The Group 7 Principal Distribution Amount and the GZ Accrual Amount will be allocated as follows:

- The GZ Accrual Amount, sequentially, to GV and GZ, in that order, until retired
- 60% of the Group 7 Principal Distribution Amount to CF, until retired
- 40% of the Group 7 Principal Distribution Amount, sequentially, to GA, GM, GV and GZ, in that order, until retired

SECURITY GROUP 8

The Group 8 Principal Distribution Amount will be allocated, concurrently, as follows:

- 66.6666666667% to FE, until retired
- 33.3333333333%, sequentially, to EA and EY, in that order, until retired

SECURITY GROUP 9

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

- 66.6666666667% to FD, until retired
- 33.3333333333%, sequentially, to DA and DY, in that order, until retired

SECURITY GROUP 10

The Group 10 Principal Distribution Amount and the ZT Accrual Amount will be allocated in the following order of priority:

1. Concurrently, to FT and TF, pro rata, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date

2. To ZT, until retired

3. Concurrently, to FT and TF, pro rata, without regard to their Aggregate Scheduled Principal Balance, until retired

SECURITY GROUP 11

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

SECURITY GROUP 12

The Group 12 Principal Distribution Amount will be allocated, concurrently, as follows:

- 80% to EF, until retired
- 20%, sequentially, to B and BY, in that order, until retired

SECURITY GROUP 13

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

SECURITY GROUP 14

The Subgroup 14A Principal Distribution Amount and the Subgroup 14B Principal Distribution Amount will be allocated as follows:

- 40% of the Subgroup 14A Principal Distribution Amount and 100% of the Subgroup 14B Principal Distribution Amount to FH, until retired
- 60% of the Subgroup 14A Principal Distribution Amount to FJ, until retired

SECURITY GROUP 15

The Group 15 Principal Distribution Amount will be allocated, concurrently, as follows:

- 80% to HF, until retired
- 20%, sequentially, to HA, HN and HL, in that order, until retired

SECURITY GROUP 16

The Group 16 Principal Distribution Amount will be allocated, concurrently, as follows:

- 80% to FN, until retired
- 20%, sequentially, to NA and NY, in that order, until retired

SECURITY GROUP 17

The Group 17 Principal Distribution Amount and the MZ Accrual Amount will be allocated as follows:

- The MZ Accrual Amount, sequentially, to MV and MZ, in that order, until retired
- 50% of the Group 17 Principal Distribution Amount to MF, until retired
- 50% of the Group 17 Principal Distribution Amount, sequentially, to MA, MV and MZ, in that order, until retired

SECURITY GROUP 18

The Group 18 Principal Distribution Amount will be allocated to JF, until retired

SECURITY GROUP 19

The Group 19 Principal Distribution Amount will be allocated to KH, until retired

SECURITY GROUP 20

The Group 20 Principal Distribution Amount will be allocated to FL, until retired

SECURITY GROUP 21

The Group 21 Principal Distribution Amount will be allocated to LF, until retired

SECURITY GROUP 22

The Group 22 Principal Distribution Amount will be allocated to QF, until retired

SECURITY GROUP 24

The Group 24 Principal Distribution Amount and the JZ Accrual Amount will be allocated as follows:

- The JZ Accrual Amount, sequentially, to JV and JZ, in that order, until retired
- The Group 24 Principal Distribution Amount, sequentially, to JA, JM, JL, JV and JZ, in that order, until retired

SECURITY GROUP 25

The Group 25 Principal Distribution Amount and the LZ Accrual Amount will be allocated as follows:

- The LZ Accrual Amount, sequentially, to LV and LZ, in that order, until retired
- The Group 25 Principal Distribution Amount, sequentially, to LA, LM, LV and LZ, in that order, until retired

SECURITY GROUP 26

The Group 26 Principal Distribution Amount and the ZL Accrual Amount will be allocated as follows:

- The ZL Accrual Amount, sequentially, to VL and ZL, in that order, until retired

• The Group 26 Principal Distribution Amount, sequentially, to LD, LJ, VL and ZL, in that order, until retired

SECURITY GROUP 27

The Group 27 Principal Distribution Amount will be allocated to KF, until retired

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

Security Group		Structuring Rate
	TAC Classes	
10	FT and TF (in the aggregate)	400% PSA

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

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

Class	Original Class Notional Balance	Represents Approximately
Security Group 2		
SC	$ 50,000,000	100% of FC (PT Class)
Security Group 3		
IQ	$ 14,996,750	25% of QA and QL (in the aggregate) (SEQ Classes)
QI	13,249,500	25% of QA (SEQ Class)
SQ	75,000,000	100% of FQ (PT Class)
Security Group 4		
AI	$ 3,352,230	7.6923076923% of AB (SEQ Class)
AS	89,166,666	66.6666661682% of the Subgroup 4A Trust Assets
CS	$ 10,833,334	4.5899282124% of the Subgroup 4B Trust Assets
	127,000,000	100% of FB and FY (in the aggregate) (PT Classes)
	$137,833,334	
I	4,479,166	7.6923076923% of AB, AL and AM (in the aggregate) (SEQ Classes)
IA	3,768,153	7.6923076923% of AB and AM (in the aggregate) (SEQ Classes)
SU	30,000,000	100% of FU (PT Class)
TB	77,000,000	100% of FY (PT Class)
Security Group 6		
TA	$ 84,905,919	100% of AF (SC/PT Class)

Class	Original Class Notional Balance	Represents Approximately
Security Group 7		
GI	$ 7,056,250	25% of GA (SEQ Class)
IG	7,988,000	25% of GA and GM (in the aggregate) (SEQ Classes)
SG	60,000,000	100% of CF (PT Class)
TG	60,000,000	100% of CF (PT Class)
Security Group 8		
EI	$ 2,156,384	7.6923076923% of EA (SEQ Class)
IE	2,884,615	7.6923076923% of EA and EY (in the aggregate) (SEQ Classes)
SE	75,000,000	100% of FE (PT Class)
Security Group 9		
DI	$ 2,447,692	7.6923076923% of DA (SEQ Class)
ID	3,269,230	7.6923076923 of DA and DY (in the aggregate) (SEQ Classes)
SD	85,000,000	100% of FD (PT Class)
Security Group 10		
IT	$ 25,000,000	100% of FT (TAC/AD Class)
ST	25,000,000	100% of FT (TAC/AD Class)
SX	25,000,000	100% of FT (TAC/AD Class)
TI	25,000,000	100% of TF (TAC/AD Class)
TS	50,000,000	100% of FT and TF (in the aggregate) (TAC/AD Classes)
XS	25,000,000	100% of TF (TAC/AD Class)
Security Group 11		
DS	$230,000,000	100% of FV (PT Class)
TV	230,000,000	100% of FV (PT Class)
Security Groups 10 and 11		
SY	$230,000,000	100% of FV (PT Class)
	25,000,000	100% of TF (TAC/AD Class)
	$255,000,000	
Security Group 12		
BI	$ 4,181,571	14.2857142857% of B (SEQ Class)
ES	90,000,000	80% of the Subgroup 12A Trust Assets
IB	5,000,000	14.2857142857% of B and BY (in the aggregate) (SEQ Classes)
IS	50,000,000	80% of the Subgroup 12B Trust Assets
Security Group 13		
GS	$ 88,444,057	100% of the Subgroup 13A Trust Assets
SJ	21,555,943	100% of the Subgroup 13B Trust Assets
Security Group 14		
SH	$400,000,000	100% of FH and FJ (in the aggregate) (PT Classes)
Security Group 15		
HI	$ 3,712,857	7.1428571429% of HA and HN (in the aggregate) (SEQ Classes)
HS	75,000,000	80% of the Subgroup 15A Trust Assets
IH	4,017,857	7.1428571429% of HA, HL and HN (in the aggregate) (SEQ Classes)
S	225,000,000	80% of the Group 15 Trust Assets
SI	150,000,000	80% of the Subgroup 15B Trust Assets
Security Group 16		
IN	$ 1,923,076	7.6923076923% of NA and NY (in the aggregate) (SEQ Classes)
NI	1,439,230	7.6923076923% of NA (SEQ Class)
SN	100,000,000	100% of FN (PT Class)

Class	Original Class Notional Balance	Represents Approximately
Security Group 17		
MS	$ 50,000,000	100% of MF (PT Class)
SM	50,000,000	100% of MF (PT Class)
TM	50,000,000	100% of MF (PT Class)
Security Group 18		
JS	$188,132,744	100% of JF (PT Class)
Security Group 19		
KI	$ 909,090	4.5454545455% of KH (PT Class)
Security Group 20		
SL	$100,000,000	100% of FL (PT Class)
Security Group 21		
LS	$ 50,000,000	100% of LF (PT Class)
Security Group 22		
QS	$ 50,000,000	100% of QF (PT Class)
Security Groups 22 and 23		
SK	$ 50,000,000	100% of QF (PT Class)
	48,196,134	100% of the Group 23 Trust Assets
	$ 98,196,134	
Security Group 23		
YS	$ 48,196,134	100% of the Group 23 Trust Assets
Security Group 26		
LI	$ 37,060,000	33.3333333333% of LD and LJ (in the aggregate) (SEQ Classes)
Security Group 27		
KS	$200,000,000	100% of KF (PT Class)
SW	200,000,000	100% of KF (PT Class)
TE	200,000,000	100% of KF (PT Class)
TH	200,000,000	100% of KF (PT Class)
WS	200,000,000	100% of KF (PT Class)

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

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

RISK FACTORS

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

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

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

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

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

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

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

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

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

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

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

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

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

The rate of payments on the underlying certificates will directly affect the rate of payments on the group 1, 6 and 23 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 documents, the trust assets underlying the underlying certificates included in trust asset group 1 are also previously issued certificates that represent beneficial ownership interests in separate trusts. The rate of payments on the previously issued certificates backing these underlying certificates will directly affect the timing and rate of payments on the group 1 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 these underlying certificates.

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 and the Class F 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 and the Class F securities may fluctuate more than debt securities linked to less volatile indices.

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

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

Interest on the floating rate and inverse floating rate securities will be determined using a replacement rate if 30-day Average SOFR is no longer available, which could adversely affect the value of your investment in the floating rate and inverse floating rate and the Class F securities. 30-day Average SOFR is published by the Federal Reserve Bank of New York based on data received from other sources, and neither Ginnie Mae nor the trustee has any control over its determination, calculation or publication. The activities of the Federal Reserve Bank of New York may directly affect prevailing 30-day Average SOFR in unpredictable ways. There can be no guarantee that 30-day Average SOFR will not be discontinued or fundamentally altered in a manner that is materially adverse to the interests of holders of securities indexed to 30-day Average SOFR. If the manner in which 30-day Average SOFR is calculated is changed or if 30-day Average SOFR is discontinued, that change or discontinuance may result in a reduction of the amount of interest payable on applicable SOFR-Based Classes and the trading prices of such Classes.

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

If 30-day Average SOFR is no longer published or cannot be used, the amount of interest payable on the floating rate and inverse floating rate securities and the Class F 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 and the Class F securities, which could adversely affect the return on, value of, and market for, the floating rate and inverse floating rate securities and the Class F securities. Furthermore, there can be no assurance that the characteristics of any replacement rate will be similar to 30-day Average SOFR or that any replacement rate will produce the economic equivalent of 30-day Average SOFR.

The securities may not be a suitable investment for you. The securities, especially the group 1, 6 and 23 securities and, in particular, the support, interest 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 2, 3, 4, 5, 7 through 22, 24, 25, 26 and 27)

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 1, 6 and 23)

The Group 1, 6 and 23 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 2, 3, 4, 5, 7 through 22, 24, 25, 26 and 27 Trust Assets are expected to have, on a weighted average basis, the characteristics set forth in the Terms Sheet under "Assumed Characteristics of the Mortgage Loans Underlying the Group 2, 3, 4, 5, 7 through 22, 24, 25, 26 and 27 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 an Accrual Class) on any Class for any Distribution Date will consist of 30 days' interest on its Class Principal Balance (or Class Notional Balance) as of the related Record Date.
- Investors can calculate the amount of interest to be distributed (or accrued in the case of an Accrual Class) on each Class of Securities for any Distribution Date by using the Class Factors published in the preceding month. *See "— Class Factors" below.*

Categories of Classes

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

Accrual Periods

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

Class	Accrual Period
Fixed Rate Classes	The calendar month preceding the related Distribution Date
Floating Rate and Inverse Floating Rate 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

Fixed Rate Classes

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

Floating Rate and Inverse Floating Rate Classes

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

The Interest Rate for the Floating Rate and Inverse Floating Rate Classes will be based on 30-day Average SOFR. The Trustee or its agent will determine 30-day Average SOFR as described under "Description of the Securities — Interest Rate Indices — Determination of 30-day Average SOFR" in the Base Offering Circular. In the case of the Group 1, 6 and 23 Securities, the Trustee or its agent will use the same values of 30-day Average SOFR as are used for the related Underlying Certificates.

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

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

Accrual Classes

Each of Classes CZ, GZ, JZ, LZ, MZ, QZ, ZL and ZT is an Accrual Class. Interest will accrue on the Accrual Classes and be distributed as described under "Terms Sheet — Accrual Classes" in this Supplement.

Principal Distributions

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

Categories of Classes

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

Notional Classes

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

Residual Securities

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

Class Factors

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

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

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

Termination

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

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

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

Modification and Exchange

All or a portion of the Classes of REMIC Securities specified on the front cover may be exchanged for a proportionate interest in the related MX Class or Classes shown on Schedule I to this Supplement. Similarly, all or a portion of the related MX Class or Classes may be exchanged for proportionate interests in the related Class or Classes of REMIC Securities and, in the case of Combinations 6, 9, 11, 13, 14, 17, 21, 22, 23, 24, 25, 31, 32, 34, 36, 37, 38 and 54, 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 6, 9, 11, 13, 14, 17, 21, 22, 23, 24, 25, 31, 32, 34, 36, 37, 38 and 54, 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 or notional balances of the Securities to be included in the exchange and the proposed exchange date. The notice is required to be delivered to the Trustee by email to USBGNMATeam@USBank.com or in writing at its Corporate Trust Office at U.S. Bank National Association, One Federal Street, 3rd Floor, Boston, MA 02110, Attention: Ginnie Mae REMIC Program Agency Group 2024-110. The Trustee may be contacted by telephone at (617) 603-6451 and by fax at (617) 603-6644.

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

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

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

YIELD, MATURITY AND PREPAYMENT CONSIDERATIONS

General

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

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

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

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

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

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

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

Investors in the Group 1, 6 and 23 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 1, 6 and 23 securities*" in this Supplement.

Accretion Directed Classes

Classes CV, FT, GV, JV, LV, MV, QV, TF and VL are Accretion Directed Classes. The related Accrual Amounts will be applied to making principal distributions on those Classes as described in this Supplement. Each of Classes IT, SX, TI and XS is a Notional Class whose Class Notional Balance is determined by reference to the Class Principal Balance of the related Accretion Directed Class shown under "Terms Sheet — Notional Classes" in this Supplement.

Each of the Accretion Directed Classes (other than Classes JV and VL) 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. Classes CV, GV, JV, LV, MV, QV and VL will have principal payment stability only through the prepayment rate shown in the table below. Classes FT and TF are not listed in the table below because, although they are entitled to receive payments from the related Accrual Amount, they do not have principal payment stability through any constant prepayment rate significantly higher than 0% PSA.

The Accretion Directed Classes are entitled to principal payments in an amount equal to interest accrued on the related Accrual Classes. With respect to the Classes listed in the table below, the Weighted Average Life of each such Class 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 an Accretion Directed Class 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 Lives of Classes CV, GV, JV, LV, MV, QV and VL, will be reduced at prepayment speeds higher than the constant rates shown in the table below. *See "Yield, Maturity and Prepayment Considerations — Decrement Tables" in this Supplement.*

Accretion Directed Classes

Security Group	Class	Maximum Weighted Average Life (in years)(1)	Final Distribution Date	Prepayment Rate at or below
2	CV	6.0	August 2035	226% PSA
3	QV	6.0	August 2035	223% PSA
7	GV	6.0	August 2035	223% PSA
17	MV	6.0	June 2035	160% PSA
24	JV	5.9	October 2035	133% PSA
25	LV	6.0	October 2035	90% PSA
26	VL	6.0	August 2035	165% PSA

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

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

Securities that Receive Principal on the Basis of Schedules

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

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

Security Group		Initial Effective Rate
	TAC Classes	
10	FT and TF (in the aggregate)	400% PSA

- The principal payment stability of the TAC Classes will be supported by the Support Class.

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

There is no assurance that the related Mortgage Loans will have the characteristics assumed in the Modeling Assumptions, which were used to determine the initial Effective Rate. If the initial Effective Rate was calculated using the actual characteristics of the related Mortgage Loans, the initial Effective Rate could differ from that shown in the above table, or an initial Effective Rate might not exist. Therefore, even if the Mortgage Loans were to prepay at a constant rate at the initial Effective Rate shown for any Class in the above table, that Class could fail to receive Scheduled Payments.

Moreover, the related Mortgage Loans will not prepay at any *constant* rate. Non-constant prepayment rates can cause any TAC Class not to receive Scheduled Payments, even if prepayment rates average the Effective Rate for that Class. Further, the Effective Rate for any TAC Class can change or cease to exist, depending on the actual characteristics of the related Mortgage Loans.

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

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

Assumability

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

Final Distribution Date

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

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

Modeling Assumptions

Unless otherwise indicated, the tables that follow have been prepared on the basis of the 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 2, 3, 4, 5, 7 through 22, 24, 25, 26 and 27 Trust Assets have the assumed characteristics shown under "Assumed Characteristics of the Mortgage Loans Underlying the Group 2, 3, 4, 5, 7 through 22, 24, 25, 26 and 27 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 2, 3, 4, 5, 7, 8, 9, 12 through 22, 24, 25, 26 or 27 Trust Asset is assumed to have an original and a remaining term to maturity of 360 months, each Mortgage Loan underlying a Group 10 or 11 Trust Asset is assumed to have an original and a remaining term to maturity of 480 months and each Mortgage Loan underlying a Group 2, 3, 4, 5, 7 through 22, 24, 25, 26 or 27 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 August 2024.

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

5. The Closing Date for the Securities is July 30, 2024.

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

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

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

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

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

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

Decrement Tables

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

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

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

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

(a) multiplying the net reduction, if any, of the Class Principal Balance (or the net reduction of the Class Notional Balance, in the case of a Notional Class) from one Distribution Date to the next Distribution Date by the number of years from the date of issuance thereof to the related Distribution Date,

(b) summing the results, and

(c) dividing the sum by the aggregate amount of the assumed net reductions in principal balance or notional balance, as applicable, referred to in clause (a).

The information shown for each Notional Class is for illustrative purposes only, as a Notional Class is not entitled to distributions of principal and has no Weighted Average Life. The Weighted Average

Life shown for each Notional Class has been calculated on the assumption that a reduction in the Class Notional Balance thereof is a distribution of principal.

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

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

Security Group 1
PSA Prepayment Assumption Rates

Distribution Date	Class F 0%	Class F 100%	Class F 120%	Class F 250%	Class F 400%	Class NF 0%	Class NF 100%	Class NF 120%	Class NF 250%	Class NF 400%	Class PF 0%	Class PF 100%	Class PF 120%	Class PF 250%	Class PF 400%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2025	98	92	90	83	74	98	92	91	83	74	98	92	90	83	74
July 2026	95	84	82	69	55	95	84	82	69	55	95	84	82	69	55
July 2027	92	77	74	57	41	92	77	74	57	41	92	77	74	57	41
July 2028	90	70	66	47	30	90	70	66	47	30	90	70	66	47	30
July 2029	87	64	60	38	22	87	64	60	38	22	87	64	60	38	22
July 2030	84	58	53	32	16	84	58	54	32	16	84	58	53	32	16
July 2031	81	52	48	26	12	81	52	48	26	12	81	52	48	26	12
July 2032	77	47	43	21	9	78	47	43	21	9	77	47	43	21	9
July 2033	74	43	38	17	6	74	43	38	17	6	74	43	38	17	6
July 2034	71	38	34	14	5	71	38	34	14	5	71	38	34	14	5
July 2035	67	34	30	11	3	67	34	30	11	3	67	34	30	11	3
July 2036	64	30	26	9	2	64	30	26	9	2	64	30	26	9	2
July 2037	60	27	23	7	2	60	27	23	7	2	60	27	23	7	2
July 2038	56	24	20	6	1	56	24	20	6	1	56	24	20	6	1
July 2039	52	21	17	5	1	52	21	17	5	1	52	21	17	5	1
July 2040	48	18	14	4	1	48	18	15	4	1	48	18	14	4	1
July 2041	43	15	12	3	0	44	15	12	3	0	43	15	12	3	0
July 2042	39	13	10	2	0	39	13	10	2	0	39	13	10	2	0
July 2043	34	11	8	2	0	35	11	8	2	0	34	11	8	2	0
July 2044	30	9	7	1	0	30	9	7	1	0	30	9	7	1	0
July 2045	25	7	5	1	0	25	7	5	1	0	25	7	5	1	0
July 2046	19	5	4	1	0	20	5	4	1	0	19	5	4	1	0
July 2047	14	3	3	0	0	15	4	3	0	0	14	3	3	0	0
July 2048	9	2	1	0	0	9	2	2	0	0	9	2	1	0	0
July 2049	3	1	0	0	0	3	1	1	0	0	3	1	0	0	0
July 2050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
July 2051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	14.6	8.9	8.2	5.0	3.3	14.7	8.9	8.2	5.0	3.3	14.6	8.9	8.2	5.0	3.3

PSA Prepayment Assumption Rates

Distribution Date	Class UF 0%	Class UF 100%	Class UF 120%	Class UF 250%	Class UF 400%	Class VF 0%	Class VF 100%	Class VF 120%	Class VF 250%	Class VF 400%
Initial Percent	100	100	100	100	100	100	100	100	100	100
July 2025	98	92	91	83	74	97	92	90	83	74
July 2026	95	84	82	69	55	95	84	82	69	55
July 2027	92	77	74	57	41	92	77	74	57	40
July 2028	90	70	66	47	30	89	70	66	47	30
July 2029	87	64	60	38	22	87	64	60	38	22
July 2030	84	58	54	32	16	84	58	53	32	16
July 2031	81	52	48	26	12	81	52	48	26	12
July 2032	78	47	43	21	9	77	47	43	21	9
July 2033	74	43	38	17	6	74	42	38	17	6
July 2034	71	38	34	14	5	71	38	33	14	5
July 2035	67	34	30	11	3	67	34	29	11	3
July 2036	64	30	26	9	2	63	30	26	9	2
July 2037	60	27	23	7	2	60	27	23	7	2
July 2038	56	24	20	6	1	56	23	20	6	1
July 2039	52	21	17	5	1	52	20	17	5	1
July 2040	48	18	15	4	1	47	18	14	4	1
July 2041	44	15	12	3	0	43	15	12	3	0
July 2042	39	13	10	2	0	39	13	10	2	0
July 2043	35	11	8	2	0	34	10	8	2	0
July 2044	30	9	7	1	0	29	8	7	1	0
July 2045	25	7	5	1	0	24	7	5	1	0
July 2046	20	5	4	1	0	19	5	4	1	0
July 2047	15	4	3	0	0	14	3	2	0	0
July 2048	9	2	2	0	0	8	2	1	0	0
July 2049	3	1	1	0	0	2	1	0	0	0
July 2050	0	0	0	0	0	0	0	0	0	0
July 2051	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	14.7	8.9	8.2	5.0	3.3	14.5	8.9	8.2	5.0	3.3

Security Group 2
PSA Prepayment Assumption Rates

Distribution Date	Class CA					Class CB					Class CL					Classes CT, FC and SC				
	0%	100%	300%	450%	600%	0%	100%	300%	450%	600%	0%	100%	300%	450%	600%	0%	100%	300%	450%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2025	99	96	91	88	84	99	97	92	89	86	100	100	100	100	100	99	97	94	91	89
July 2026	97	89	74	63	52	98	90	77	67	58	100	100	100	100	100	98	92	81	73	66
July 2027	96	80	52	35	19	96	82	58	42	28	100	100	100	100	100	97	85	66	53	42
July 2028	94	71	35	14	0	95	74	42	24	9	100	100	100	100	78	96	79	53	38	27
July 2029	92	63	20	0	0	93	67	29	10	0	100	100	100	89	0	95	73	43	28	17
July 2030	91	55	9	0	0	92	60	19	1	0	100	100	100	5	0	93	68	35	20	11
July 2031	89	47	0	0	0	90	54	11	0	0	100	100	93	0	0	92	62	28	14	7
July 2032	86	41	0	0	0	88	47	4	0	0	100	100	34	0	0	90	58	22	10	4
July 2033	84	34	0	0	0	86	42	0	0	0	100	100	0	0	0	89	53	18	7	3
July 2034	82	28	0	0	0	84	36	0	0	0	100	100	0	0	0	87	49	14	5	2
July 2035	79	22	0	0	0	81	31	0	0	0	100	100	0	0	0	85	44	12	4	1
July 2036	76	17	0	0	0	79	26	0	0	0	100	100	0	0	0	83	41	9	3	1
July 2037	73	12	0	0	0	76	22	0	0	0	100	100	0	0	0	80	37	7	2	0
July 2038	69	7	0	0	0	73	18	0	0	0	100	100	0	0	0	78	34	6	1	0
July 2039	66	3	0	0	0	70	14	0	0	0	100	100	0	0	0	75	30	5	1	0
July 2040	62	0	0	0	0	66	10	0	0	0	100	87	0	0	0	73	27	4	1	0
July 2041	57	0	0	0	0	62	6	0	0	0	100	56	0	0	0	70	24	3	0	0
July 2042	53	0	0	0	0	58	3	0	0	0	100	27	0	0	0	66	22	2	0	0
July 2043	48	0	0	0	0	54	0	0	0	0	100	0	0	0	0	63	19	2	0	0
July 2044	42	0	0	0	0	49	0	0	0	0	100	0	0	0	0	59	17	1	0	0
July 2045	37	0	0	0	0	44	0	0	0	0	100	0	0	0	0	55	15	1	0	0
July 2046	31	0	0	0	0	38	0	0	0	0	100	0	0	0	0	50	13	1	0	0
July 2047	24	0	0	0	0	33	0	0	0	0	100	0	0	0	0	46	11	1	0	0
July 2048	17	0	0	0	0	26	0	0	0	0	100	0	0	0	0	40	9	0	0	0
July 2049	9	0	0	0	0	19	0	0	0	0	100	0	0	0	0	35	7	0	0	0
July 2050	1	0	0	0	0	12	0	0	0	0	100	0	0	0	0	29	5	0	0	0
July 2051	0	0	0	0	0	4	0	0	0	0	34	0	0	0	0	22	4	0	0	0
July 2052	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	2	0	0	0
July 2053	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	1	0	0	0
July 2054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	17.0	7.1	3.3	2.5	2.1	18.1	8.3	3.8	2.8	2.3	26.8	17.2	7.8	5.5	4.3	20.2	11.3	5.6	4.0	3.2

PSA Prepayment Assumption Rates

Distribution Date	Class CV					Class CY					Class CZ					Class YC				
	0%	100%	300%	450%	600%	0%	100%	300%	450%	600%	0%	100%	300%	450%	600%	0%	100%	300%	450%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2025	93	93	93	93	93	100	100	100	100	100	105	105	105	105	105	100	100	100	100	100
July 2026	85	85	85	85	85	100	100	100	100	100	109	109	109	109	109	100	100	100	100	100
July 2027	78	78	78	78	78	100	100	100	100	100	114	114	114	114	114	100	100	100	100	100
July 2028	69	69	69	69	69	100	100	100	100	100	120	120	120	120	120	100	100	100	100	93
July 2029	61	61	61	61	26	100	100	100	100	87	125	125	125	125	125	100	100	100	96	59
July 2030	52	52	52	52	0	100	100	100	100	54	131	131	131	131	89	100	100	100	69	37
July 2031	43	43	43	0	0	100	100	100	73	34	137	137	137	120	56	100	100	98	50	23
July 2032	33	33	33	0	0	100	100	100	52	21	143	143	143	86	35	100	100	79	35	15
July 2033	22	22	5	0	0	100	100	93	37	13	150	150	150	62	22	100	100	63	25	9
July 2034	12	12	0	0	0	100	100	75	27	8	157	157	123	44	14	100	100	50	18	6
July 2035	1	1	0	0	0	100	100	60	19	5	164	164	98	31	9	100	100	40	13	4
July 2036	0	0	0	0	0	100	100	48	13	3	164	164	78	22	5	100	100	32	9	2
July 2037	0	0	0	0	0	100	100	38	10	2	164	164	62	16	3	100	100	26	6	1
July 2038	0	0	0	0	0	100	100	30	7	1	164	164	49	11	2	100	100	20	5	1
July 2039	0	0	0	0	0	100	100	24	5	1	164	164	39	8	1	100	100	16	3	1
July 2040	0	0	0	0	0	100	100	19	3	0	164	164	30	5	1	100	96	13	2	0
July 2041	0	0	0	0	0	100	100	14	2	0	164	164	24	4	0	100	86	10	2	0
July 2042	0	0	0	0	0	100	100	11	2	0	164	164	18	3	0	100	76	8	1	0
July 2043	0	0	0	0	0	100	100	9	1	0	164	164	14	2	0	100	67	6	1	0
July 2044	0	0	0	0	0	100	87	7	1	0	164	144	11	1	0	100	59	4	1	0
July 2045	0	0	0	0	0	100	76	5	0	0	164	125	8	1	0	100	51	3	0	0
July 2046	0	0	0	0	0	100	65	4	0	0	164	107	6	1	0	100	44	3	0	0
July 2047	0	0	0	0	0	100	55	3	0	0	164	90	5	0	0	100	37	2	0	0
July 2048	0	0	0	0	0	100	45	2	0	0	164	74	3	0	0	100	30	1	0	0
July 2049	0	0	0	0	0	100	36	1	0	0	164	59	2	0	0	100	24	1	0	0
July 2050	0	0	0	0	0	100	27	1	0	0	164	44	1	0	0	100	18	1	0	0
July 2051	0	0	0	0	0	100	19	1	0	0	164	31	1	0	0	79	13	0	0	0
July 2052	0	0	0	0	0	81	11	0	0	0	132	19	0	0	0	54	8	0	0	0
July 2053	0	0	0	0	0	42	4	0	0	0	69	7	0	0	0	28	3	0	0	0
July 2054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	6.0	6.0	5.7	4.8	4.0	28.8	23.7	12.9	9.0	6.8	28.8	23.7	13.3	9.6	7.4	28.1	21.6	11.3	7.9	6.0

Security Group 3
PSA Prepayment Assumption Rates

	Classes FQ, Q and SQ					Classes IQ, QG, QH, QJ, QK and QM					Classes QA, QB, QC, QD, QE and QI					Class QL				
Distribution Date	**0%**	**100%**	**300%**	**450%**	**600%**	**0%**	**100%**	**300%**	**450%**	**600%**	**0%**	**100%**	**300%**	**450%**	**600%**	**0%**	**100%**	**300%**	**450%**	**600%**
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2025	99	97	94	92	90	99	97	93	90	87	99	96	92	89	86	100	100	100	100	100
July 2026	98	92	82	75	68	98	91	78	69	60	97	89	75	65	55	100	100	100	100	100
July 2027	97	86	67	55	44	96	82	59	43	29	96	80	53	36	20	100	100	100	100	100
July 2028	96	80	54	39	27	95	75	43	24	9	94	71	35	14	0	100	100	100	100	80
July 2029	95	74	44	28	17	93	67	30	10	0	92	63	20	0	0	100	100	100	88	0
July 2030	93	68	35	20	11	92	60	19	0	0	90	55	8	0	0	100	100	100	3	0
July 2031	92	63	28	15	7	90	54	11	0	0	88	48	0	0	0	100	100	90	0	0
July 2032	90	58	23	10	4	88	47	4	0	0	86	41	0	0	0	100	100	30	0	0
July 2033	89	53	18	7	3	86	42	0	0	0	84	34	0	0	0	100	100	0	0	0
July 2034	87	49	15	5	2	83	36	0	0	0	81	28	0	0	0	100	100	0	0	0
July 2035	85	45	12	4	1	81	31	0	0	0	79	22	0	0	0	100	100	0	0	0
July 2036	83	41	9	3	1	78	26	0	0	0	76	17	0	0	0	100	100	0	0	0
July 2037	80	37	7	2	0	76	22	0	0	0	72	11	0	0	0	100	100	0	0	0
July 2038	78	34	6	1	0	73	17	0	0	0	69	7	0	0	0	100	100	0	0	0
July 2039	75	31	5	1	0	69	13	0	0	0	65	2	0	0	0	100	100	0	0	0
July 2040	73	28	4	1	0	66	10	0	0	0	61	0	0	0	0	100	83	0	0	0
July 2041	70	25	3	0	0	62	6	0	0	0	57	0	0	0	0	100	52	0	0	0
July 2042	66	22	2	0	0	58	3	0	0	0	52	0	0	0	0	100	23	0	0	0
July 2043	63	20	2	0	0	53	0	0	0	0	47	0	0	0	0	100	0	0	0	0
July 2044	59	17	1	0	0	49	0	0	0	0	42	0	0	0	0	100	0	0	0	0
July 2045	55	15	1	0	0	43	0	0	0	0	36	0	0	0	0	100	0	0	0	0
July 2046	50	13	1	0	0	38	0	0	0	0	30	0	0	0	0	100	0	0	0	0
July 2047	46	11	1	0	0	32	0	0	0	0	23	0	0	0	0	100	0	0	0	0
July 2048	40	9	0	0	0	26	0	0	0	0	16	0	0	0	0	100	0	0	0	0
July 2049	35	7	0	0	0	19	0	0	0	0	8	0	0	0	0	100	0	0	0	0
July 2050	29	6	0	0	0	11	0	0	0	0	0	0	0	0	0	96	0	0	0	0
July 2051	22	4	0	0	0	3	0	0	0	0	0	0	0	0	0	26	0	0	0	0
July 2052	16	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
July 2053	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
July 2054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	20.2	11.4	5.7	4.1	3.3	18.1	8.3	3.9	2.9	2.4	16.9	7.1	3.4	2.5	2.1	26.7	17.1	7.7	5.4	4.3

PSA Prepayment Assumption Rates

	Class QV					Class QY					Class QZ					Class YQ				
Distribution Date	**0%**	**100%**	**300%**	**450%**	**600%**	**0%**	**100%**	**300%**	**450%**	**600%**	**0%**	**100%**	**300%**	**450%**	**600%**	**0%**	**100%**	**300%**	**450%**	**600%**
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2025	93	93	93	93	93	100	100	100	100	100	105	105	105	105	105	100	100	100	100	100
July 2026	85	85	85	85	85	100	100	100	100	100	109	109	109	109	109	100	100	100	100	100
July 2027	78	78	78	78	78	100	100	100	100	100	114	114	114	114	114	100	100	100	100	100
July 2028	69	69	69	69	69	100	100	100	100	100	120	120	120	120	120	100	100	100	100	94
July 2029	61	61	61	61	26	100	100	100	100	87	125	125	125	125	125	100	100	100	96	59
July 2030	52	52	52	52	0	100	100	100	100	54	131	131	131	131	89	100	100	100	69	37
July 2031	43	43	43	0	0	100	100	100	73	34	137	137	137	119	56	100	100	97	50	23
July 2032	33	33	33	0	0	100	100	100	52	21	143	143	143	85	35	100	100	78	35	15
July 2033	22	22	1	0	0	100	100	92	37	13	150	150	150	61	22	100	100	63	25	9
July 2034	12	12	0	0	0	100	100	73	26	8	157	157	121	43	14	100	100	50	18	6
July 2035	1	1	0	0	0	100	100	59	19	5	164	164	96	31	9	100	100	40	13	4
July 2036	0	0	0	0	0	100	100	47	13	3	164	164	77	22	5	100	100	32	9	2
July 2037	0	0	0	0	0	100	100	37	9	2	164	164	61	16	3	100	100	25	6	1
July 2038	0	0	0	0	0	100	100	29	7	1	164	164	48	11	2	100	100	20	5	1
July 2039	0	0	0	0	0	100	100	23	5	1	164	164	38	8	1	100	100	16	3	1
July 2040	0	0	0	0	0	100	100	18	3	0	164	164	30	5	1	100	94	12	2	0
July 2041	0	0	0	0	0	100	100	14	2	0	164	164	24	4	0	100	85	10	2	0
July 2042	0	0	0	0	0	100	100	11	2	0	164	164	18	3	0	100	76	8	1	0
July 2043	0	0	0	0	0	100	98	9	1	0	164	161	14	2	0	100	67	6	1	0
July 2044	0	0	0	0	0	100	86	7	1	0	164	142	11	1	0	100	59	5	1	0
July 2045	0	0	0	0	0	100	75	5	1	0	164	123	8	1	0	100	51	3	0	0
July 2046	0	0	0	0	0	100	65	4	0	0	164	106	6	1	0	100	44	3	0	0
July 2047	0	0	0	0	0	100	55	3	0	0	164	90	5	0	0	100	37	2	0	0
July 2048	0	0	0	0	0	100	45	2	0	0	164	74	3	0	0	100	31	1	0	0
July 2049	0	0	0	0	0	100	36	1	0	0	164	60	2	0	0	100	25	1	0	0
July 2050	0	0	0	0	0	100	28	1	0	0	164	46	2	0	0	99	19	1	0	0
July 2051	0	0	0	0	0	100	20	1	0	0	164	33	1	0	0	77	14	0	0	0
July 2052	0	0	0	0	0	78	13	0	0	0	128	21	1	0	0	53	9	0	0	0
July 2053	0	0	0	0	0	40	6	0	0	0	66	10	0	0	0	27	4	0	0	0
July 2054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	6.0	6.0	5.7	4.8	4.0	28.7	23.8	12.9	9.0	6.8	28.7	23.8	13.3	9.6	7.4	28.1	21.7	11.2	7.9	6.0

Security Group 4
PSA Prepayment Assumption Rates

Distribution Date	Classes A, AN, AP, AQ and I					Classes AB, AC, AD, AE and AI					Classes AG, AH, AJ, AK and IA					Class AL				
	0%	100%	386%	600%	800%	0%	100%	386%	600%	800%	0%	100%	386%	600%	800%	0%	100%	386%	600%	800%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2025	99	97	93	90	87	99	97	91	87	83	99	97	92	88	84	100	100	100	100	100
July 2026	98	93	78	68	59	98	90	71	57	45	98	91	74	62	51	100	100	100	100	100
July 2027	97	86	60	44	31	96	82	46	25	8	97	84	52	33	18	100	100	100	100	100
July 2028	96	80	45	28	16	95	73	27	3	0	96	76	35	14	0	100	100	100	100	100
July 2029	95	74	34	17	8	93	65	12	0	0	94	69	22	2	0	100	100	100	100	51
July 2030	94	69	26	11	4	92	58	1	0	0	93	63	12	0	0	100	100	100	69	26
July 2031	92	63	20	7	2	90	51	0	0	0	91	56	5	0	0	100	100	100	43	13
July 2032	91	58	15	4	1	88	44	0	0	0	89	51	0	0	0	100	100	93	27	7
July 2033	89	54	11	3	1	86	38	0	0	0	87	45	0	0	0	100	100	70	17	3
July 2034	88	49	8	2	0	84	33	0	0	0	85	40	0	0	0	100	100	53	11	2
July 2035	86	45	6	1	0	81	27	0	0	0	83	35	0	0	0	100	100	40	7	1
July 2036	84	42	5	1	0	78	22	0	0	0	81	30	0	0	0	100	100	30	4	0
July 2037	82	38	4	0	0	76	17	0	0	0	78	26	0	0	0	100	100	22	3	0
July 2038	79	34	3	0	0	72	12	0	0	0	75	22	0	0	0	100	100	16	2	0
July 2039	77	31	2	0	0	69	8	0	0	0	72	18	0	0	0	100	100	12	1	0
July 2040	74	28	1	0	0	65	4	0	0	0	69	15	0	0	0	100	100	9	1	0
July 2041	71	25	1	0	0	61	0	0	0	0	66	11	0	0	0	100	100	7	0	0
July 2042	68	23	1	0	0	57	0	0	0	0	62	8	0	0	0	100	100	5	0	0
July 2043	64	20	1	0	0	52	0	0	0	0	58	5	0	0	0	100	100	3	0	0
July 2044	60	18	0	0	0	47	0	0	0	0	53	2	0	0	0	100	100	3	0	0
July 2045	56	15	0	0	0	42	0	0	0	0	48	0	0	0	0	100	97	2	0	0
July 2046	52	13	0	0	0	36	0	0	0	0	43	0	0	0	0	100	83	1	0	0
July 2047	47	11	0	0	0	29	0	0	0	0	37	0	0	0	0	100	70	1	0	0
July 2048	42	9	0	0	0	22	0	0	0	0	31	0	0	0	0	100	58	1	0	0
July 2049	36	7	0	0	0	15	0	0	0	0	24	0	0	0	0	100	47	0	0	0
July 2050	30	6	0	0	0	7	0	0	0	0	17	0	0	0	0	100	36	0	0	0
July 2051	23	4	0	0	0	0	0	0	0	0	9	0	0	0	0	100	25	0	0	0
July 2052	16	3	0	0	0	0	0	0	0	0	0	0	0	0	0	100	16	0	0	0
July 2053	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	53	7	0	0	0
July 2054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	20.5	11.5	4.7	3.3	2.6	17.8	7.7	3.0	2.2	1.9	18.9	9.0	3.4	2.5	2.1	29.1	24.9	11.2	7.4	5.5

PSA Prepayment Assumption Rates

Distribution Date	Class AM					Class AS					Class AY				
	0%	100%	386%	600%	800%	0%	100%	386%	600%	800%	0%	100%	386%	600%	800%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2025	100	100	100	100	100	99	97	93	90	87	100	100	100	100	100
July 2026	100	100	100	100	100	98	93	78	68	59	100	100	100	100	100
July 2027	100	100	100	100	100	97	86	60	44	31	100	100	100	100	100
July 2028	100	100	100	100	1	96	80	45	28	16	100	100	100	100	63
July 2029	100	100	100	17	0	95	74	34	17	8	100	100	100	69	32
July 2030	100	100	100	0	0	94	69	26	11	4	100	100	100	44	17
July 2031	100	100	41	0	0	92	63	20	7	2	100	100	78	27	8
July 2032	100	100	0	0	0	91	58	15	4	1	100	100	59	17	4
July 2033	100	100	0	0	0	89	54	11	3	1	100	100	44	11	2
July 2034	100	100	0	0	0	88	49	8	2	0	100	100	33	7	1
July 2035	100	100	0	0	0	86	45	6	1	0	100	100	25	4	1
July 2036	100	100	0	0	0	84	42	5	1	0	100	100	19	3	0
July 2037	100	100	0	0	0	82	38	4	0	0	100	100	14	2	0
July 2038	100	100	0	0	0	79	34	3	0	0	100	100	10	1	0
July 2039	100	100	0	0	0	77	31	2	0	0	100	100	8	1	0
July 2040	100	100	0	0	0	74	28	1	0	0	100	100	6	0	0
July 2041	100	100	0	0	0	71	25	1	0	0	100	100	4	0	0
July 2042	100	72	0	0	0	68	23	1	0	0	100	90	3	0	0
July 2043	100	45	0	0	0	64	20	1	0	0	100	80	2	0	0
July 2044	100	19	0	0	0	60	18	0	0	0	100	70	2	0	0
July 2045	100	0	0	0	0	56	15	0	0	0	100	61	1	0	0
July 2046	100	0	0	0	0	52	13	0	0	0	100	52	1	0	0
July 2047	100	0	0	0	0	47	11	0	0	0	100	44	1	0	0
July 2048	100	0	0	0	0	42	9	0	0	0	100	37	0	0	0
July 2049	100	0	0	0	0	36	7	0	0	0	100	29	0	0	0
July 2050	100	0	0	0	0	30	6	0	0	0	100	23	0	0	0
July 2051	81	0	0	0	0	23	4	0	0	0	93	16	0	0	0
July 2052	4	0	0	0	0	16	3	0	0	0	64	10	0	0	0
July 2053	0	0	0	0	0	8	1	0	0	0	34	4	0	0	0
July 2054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	27.4	18.9	6.9	4.7	3.6	20.5	11.5	4.7	3.3	2.6	28.5	22.7	9.6	6.4	4.8

Security Group 4
PSA Prepayment Assumption Rates

Distribution Date	Classes BA, BF, FB, FU, FY, SU, TB, TC and TD					Class CS					Class FA				
	0%	100%	386%	600%	800%	0%	100%	386%	600%	800%	0%	100%	386%	600%	800%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2025	99	97	93	90	87	99	97	93	90	87	99	97	93	90	87
July 2026	98	93	78	68	59	98	93	78	68	59	98	93	78	68	59
July 2027	97	86	60	44	31	97	86	60	44	31	97	86	60	44	31
July 2028	96	80	45	28	16	96	80	45	28	16	96	80	45	28	16
July 2029	95	74	34	17	8	95	74	34	17	8	95	74	34	17	8
July 2030	94	69	26	11	4	94	69	26	11	4	94	69	26	11	4
July 2031	92	63	20	7	2	92	63	20	7	2	92	63	20	7	2
July 2032	91	58	15	4	1	91	58	15	4	1	91	58	15	4	1
July 2033	89	54	11	3	1	89	54	11	3	1	89	54	11	3	1
July 2034	88	49	8	2	0	88	49	8	2	0	88	49	8	2	0
July 2035	86	45	6	1	0	86	45	6	1	0	86	45	6	1	0
July 2036	84	42	5	1	0	84	42	5	1	0	84	42	5	1	0
July 2037	82	38	4	0	0	82	38	4	0	0	82	38	4	0	0
July 2038	79	34	3	0	0	79	34	3	0	0	79	34	3	0	0
July 2039	77	31	2	0	0	77	31	2	0	0	77	31	2	0	0
July 2040	74	28	1	0	0	74	28	1	0	0	74	28	1	0	0
July 2041	71	25	1	0	0	71	25	1	0	0	71	25	1	0	0
July 2042	68	23	1	0	0	68	23	1	0	0	68	23	1	0	0
July 2043	64	20	1	0	0	64	20	1	0	0	64	20	1	0	0
July 2044	60	18	0	0	0	60	18	0	0	0	60	18	0	0	0
July 2045	56	15	0	0	0	56	15	0	0	0	56	15	0	0	0
July 2046	52	13	0	0	0	52	13	0	0	0	52	13	0	0	0
July 2047	47	11	0	0	0	47	11	0	0	0	47	11	0	0	0
July 2048	42	9	0	0	0	42	9	0	0	0	42	9	0	0	0
July 2049	36	7	0	0	0	36	7	0	0	0	36	7	0	0	0
July 2050	30	6	0	0	0	30	6	0	0	0	30	6	0	0	0
July 2051	23	4	0	0	0	23	4	0	0	0	23	4	0	0	0
July 2052	16	3	0	0	0	16	3	0	0	0	16	3	0	0	0
July 2053	8	1	0	0	0	8	1	0	0	0	8	1	0	0	0
July 2054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	20.5	11.5	4.7	3.3	2.6	20.5	11.5	4.7	3.3	2.6	20.5	11.5	4.7	3.3	2.6

Security Group 5
PSA Prepayment Assumption Rates

Distribution Date	Class PT				
	0%	100%	300%	450%	600%
Initial Percent	100	100	100	100	100
July 2025	99	98	95	93	91
July 2026	98	93	83	76	70
July 2027	97	86	68	56	45
July 2028	96	80	55	40	28
July 2029	95	74	44	29	18
July 2030	93	68	36	21	11
July 2031	92	63	29	15	7
July 2032	90	58	23	11	4
July 2033	89	53	18	8	3
July 2034	87	49	15	5	2
July 2035	85	44	12	4	1
July 2036	83	41	9	3	1
July 2037	80	37	7	2	0
July 2038	78	33	6	1	0
July 2039	75	30	5	1	0
July 2040	73	27	4	1	0
July 2041	70	24	3	0	0
July 2042	66	21	2	0	0
July 2043	63	19	2	0	0
July 2044	59	16	1	0	0
July 2045	55	14	1	0	0
July 2046	50	12	1	0	0
July 2047	46	10	1	0	0
July 2048	40	8	0	0	0
July 2049	35	6	0	0	0
July 2050	29	5	0	0	0
July 2051	22	3	0	0	0
July 2052	16	2	0	0	0
July 2053	8	0	0	0	0
July 2054	0	0	0	0	0
Weighted Average Life (years)	20.2	11.3	5.7	4.2	3.3

Security Group 6
PSA Prepayment Assumption Rates

Distribution Date	Classes AF and TA					
	0%	100%	300%	480%	750%	1,000%
Initial Percent	100	100	100	100	100	100
July 2025	99	95	88	82	73	64
July 2026	98	89	73	59	41	27
July 2027	96	83	59	42	22	11
July 2028	95	76	47	29	12	4
July 2029	94	71	38	20	7	2
July 2030	92	65	31	14	4	1
July 2031	90	60	25	10	2	0
July 2032	89	56	20	7	1	0
July 2033	87	51	16	5	1	0
July 2034	84	47	13	3	0	0
July 2035	82	43	10	2	0	0
July 2036	80	39	8	2	0	0
July 2037	77	36	6	1	0	0
July 2038	75	32	5	1	0	0
July 2039	72	29	4	1	0	0
July 2040	68	26	3	0	0	0
July 2041	65	23	2	0	0	0
July 2042	61	21	2	0	0	0
July 2043	57	18	1	0	0	0
July 2044	53	16	1	0	0	0
July 2045	49	14	1	0	0	0
July 2046	44	12	1	0	0	0
July 2047	39	10	0	0	0	0
July 2048	33	8	0	0	0	0
July 2049	27	6	0	0	0	0
July 2050	21	4	0	0	0	0
July 2051	14	3	0	0	0	0
July 2052	7	1	0	0	0	0
July 2053	0	0	0	0	0	0
July 2054	0	0	0	0	0	0
Weighted Average Life (years)	19.0	10.8	5.1	3.3	2.1	1.6

Security Group 7
PSA Prepayment Assumption Rates

Distribution Date	Classes CF, FG, G, SG and TG					Classes GA, GB, GC, GD, GE and GI					Classes GH, GJ, GK, GN, GP and IG					Class GM				
	0%	100%	300%	450%	600%	0%	100%	300%	450%	600%	0%	100%	300%	450%	600%	0%	100%	300%	450%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2025	99	97	94	92	90	99	96	92	89	86	99	97	93	90	87	100	100	100	100	100
July 2026	98	92	82	75	68	97	89	75	65	55	98	91	78	69	60	100	100	100	100	100
July 2027	97	86	67	55	44	96	80	53	36	20	96	82	59	43	29	100	100	100	100	100
July 2028	96	80	54	39	28	94	71	35	14	0	95	75	43	24	9	100	100	100	100	79
July 2029	95	74	44	28	17	92	63	20	0	0	93	67	30	10	0	100	100	100	87	0
July 2030	93	68	35	20	11	90	55	8	0	0	92	60	19	0	0	100	100	100	2	0
July 2031	92	63	28	15	7	88	48	0	0	0	90	54	10	0	0	100	100	89	0	0
July 2032	90	58	23	10	4	86	41	0	0	0	88	47	3	0	0	100	100	30	0	0
July 2033	89	53	18	7	3	84	34	0	0	0	86	42	0	0	0	100	100	0	0	0
July 2034	87	49	15	5	2	81	28	0	0	0	83	36	0	0	0	100	100	0	0	0
July 2035	85	45	12	4	1	79	22	0	0	0	81	31	0	0	0	100	100	0	0	0
July 2036	83	41	9	3	1	76	17	0	0	0	78	26	0	0	0	100	100	0	0	0
July 2037	80	37	7	2	0	72	11	0	0	0	76	22	0	0	0	100	100	0	0	0
July 2038	78	34	6	1	0	69	7	0	0	0	73	17	0	0	0	100	100	0	0	0
July 2039	75	31	5	1	0	65	2	0	0	0	69	13	0	0	0	100	100	0	0	0
July 2040	73	28	4	1	0	61	0	0	0	0	66	10	0	0	0	100	82	0	0	0
July 2041	70	25	3	0	0	57	0	0	0	0	62	6	0	0	0	100	52	0	0	0
July 2042	66	22	2	0	0	52	0	0	0	0	58	3	0	0	0	100	23	0	0	0
July 2043	63	20	2	0	0	47	0	0	0	0	53	0	0	0	0	100	0	0	0	0
July 2044	59	17	1	0	0	42	0	0	0	0	49	0	0	0	0	100	0	0	0	0
July 2045	55	15	1	0	0	36	0	0	0	0	43	0	0	0	0	100	0	0	0	0
July 2046	50	13	1	0	0	30	0	0	0	0	38	0	0	0	0	100	0	0	0	0
July 2047	46	11	1	0	0	23	0	0	0	0	32	0	0	0	0	100	0	0	0	0
July 2048	40	9	0	0	0	16	0	0	0	0	25	0	0	0	0	100	0	0	0	0
July 2049	35	7	0	0	0	8	0	0	0	0	18	0	0	0	0	100	0	0	0	0
July 2050	29	6	0	0	0	0	0	0	0	0	11	0	0	0	0	94	0	0	0	0
July 2051	22	4	0	0	0	0	0	0	0	0	3	0	0	0	0	25	0	0	0	0
July 2052	16	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
July 2053	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
July 2054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	20.2	11.4	5.7	4.1	3.3	16.9	7.1	3.4	2.5	2.1	18.1	8.3	3.9	2.9	2.4	26.7	17.1	7.7	5.4	4.3

Security Group 7
PSA Prepayment Assumption Rates

Distribution Date	Class GV 0%	100%	300%	450%	600%	Class GY 0%	100%	300%	450%	600%	Class GZ 0%	100%	300%	450%	600%	Class YG 0%	100%	300%	450%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2025	93	93	93	93	93	100	100	100	100	100	105	105	105	105	105	100	100	100	100	100
July 2026	85	85	85	85	85	100	100	100	100	100	109	109	109	109	109	100	100	100	100	100
July 2027	78	78	78	78	78	100	100	100	100	100	114	114	114	114	114	100	100	100	100	100
July 2028	69	69	69	69	69	100	100	100	100	100	120	120	120	120	120	100	100	100	100	93
July 2029	61	61	61	61	25	100	100	100	100	86	125	125	125	125	125	100	100	100	96	59
July 2030	52	52	52	52	0	100	100	100	100	54	131	131	131	131	89	100	100	100	69	37
July 2031	43	43	43	0	0	100	100	100	72	34	137	137	137	119	56	100	100	97	49	23
July 2032	33	33	33	0	0	100	100	100	52	21	143	143	143	85	35	100	100	78	35	15
July 2033	22	22	0	0	0	100	100	91	37	13	150	150	150	61	22	100	100	62	25	9
July 2034	12	12	0	0	0	100	100	73	26	8	157	157	120	43	14	100	100	50	18	6
July 2035	1	1	0	0	0	100	100	58	19	5	164	164	96	31	9	100	100	40	13	4
July 2036	0	0	0	0	0	100	100	47	13	3	164	164	77	22	5	100	100	32	9	2
July 2037	0	0	0	0	0	100	100	37	9	2	164	164	61	16	3	100	100	25	6	1
July 2038	0	0	0	0	0	100	100	29	7	1	164	164	48	11	2	100	100	20	5	1
July 2039	0	0	0	0	0	100	100	23	5	1	164	164	38	8	1	100	100	16	3	1
July 2040	0	0	0	0	0	100	100	18	3	0	164	164	30	5	1	100	94	12	2	0
July 2041	0	0	0	0	0	100	100	14	2	0	164	164	23	4	0	100	85	10	2	0
July 2042	0	0	0	0	0	100	100	11	2	0	164	164	18	3	0	100	76	8	1	0
July 2043	0	0	0	0	0	100	98	9	1	0	164	161	14	2	0	100	67	6	1	0
July 2044	0	0	0	0	0	100	86	7	1	0	164	142	11	1	0	100	59	5	1	0
July 2045	0	0	0	0	0	100	75	5	1	0	164	123	8	1	0	100	51	3	0	0
July 2046	0	0	0	0	0	100	65	4	0	0	164	106	6	1	0	100	44	3	0	0
July 2047	0	0	0	0	0	100	55	3	0	0	164	90	5	0	0	100	37	2	0	0
July 2048	0	0	0	0	0	100	45	2	0	0	164	74	3	0	0	100	31	1	0	0
July 2049	0	0	0	0	0	100	36	1	0	0	164	60	2	0	0	100	25	1	0	0
July 2050	0	0	0	0	0	100	28	1	0	0	164	46	2	0	0	98	19	1	0	0
July 2051	0	0	0	0	0	100	20	1	0	0	164	33	1	0	0	76	14	0	0	0
July 2052	0	0	0	0	0	77	13	0	0	0	127	21	1	0	0	53	9	0	0	0
July 2053	0	0	0	0	0	40	6	0	0	0	66	10	0	0	0	27	4	0	0	0
July 2054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	6.0	6.0	5.7	4.8	4.0	28.7	23.8	12.9	9.0	6.8	28.7	23.8	13.3	9.6	7.4	28.1	21.7	11.2	7.9	6.0

Security Group 8
PSA Prepayment Assumption Rates

Distribution Date	Classes E, EG, EH, EJ, FE, IE and SE 0%	100%	300%	480%	750%	1,000%	Classes EA, EB, EC, ED and EI 0%	100%	300%	480%	750%	1,000%	Class EY 0%	100%	300%	480%	750%	1,000%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2025	99	97	95	92	88	84	99	97	93	89	84	78	100	100	100	100	100	100
July 2026	98	93	83	74	61	50	98	90	77	65	48	33	100	100	100	100	100	100
July 2027	97	86	67	52	34	21	96	82	56	36	12	0	100	100	100	100	100	82
July 2028	96	80	54	37	18	8	95	73	39	16	0	0	100	100	100	100	73	32
July 2029	95	74	44	26	10	3	93	65	25	1	0	0	100	100	100	100	40	13
July 2030	94	69	36	18	5	1	92	58	14	0	0	0	100	100	100	72	21	5
July 2031	92	63	29	13	3	0	90	51	5	0	0	0	100	100	100	50	12	2
July 2032	91	59	23	9	2	0	88	45	0	0	0	0	100	100	91	35	6	1
July 2033	89	54	19	6	1	0	86	38	0	0	0	0	100	100	73	25	3	0
July 2034	88	50	15	4	0	0	84	33	0	0	0	0	100	100	59	17	2	0
July 2035	86	45	12	3	0	0	81	27	0	0	0	0	100	100	47	12	1	0
July 2036	84	42	10	2	0	0	78	22	0	0	0	0	100	100	38	8	1	0
July 2037	82	38	8	1	0	0	76	17	0	0	0	0	100	100	30	6	0	0
July 2038	79	35	6	1	0	0	72	12	0	0	0	0	100	100	24	4	0	0
July 2039	77	31	5	1	0	0	69	8	0	0	0	0	100	100	19	3	0	0
July 2040	74	28	4	0	0	0	65	4	0	0	0	0	100	100	15	2	0	0
July 2041	71	25	3	0	0	0	61	0	0	0	0	0	100	100	12	1	0	0
July 2042	68	23	2	0	0	0	57	0	0	0	0	0	100	90	9	1	0	0
July 2043	64	20	2	0	0	0	52	0	0	0	0	0	100	80	7	1	0	0
July 2044	60	18	1	0	0	0	47	0	0	0	0	0	100	70	5	0	0	0
July 2045	56	16	1	0	0	0	42	0	0	0	0	0	100	61	4	0	0	0
July 2046	52	13	1	0	0	0	36	0	0	0	0	0	100	53	3	0	0	0
July 2047	47	11	1	0	0	0	29	0	0	0	0	0	100	45	2	0	0	0
July 2048	42	9	0	0	0	0	22	0	0	0	0	0	100	37	2	0	0	0
July 2049	36	8	0	0	0	0	15	0	0	0	0	0	100	30	1	0	0	0
July 2050	30	6	0	0	0	0	6	0	0	0	0	0	100	23	1	0	0	0
July 2051	23	4	0	0	0	0	0	0	0	0	0	0	93	17	0	0	0	0
July 2052	16	3	0	0	0	0	0	0	0	0	0	0	64	11	0	0	0	0
July 2053	8	1	0	0	0	0	0	0	0	0	0	0	33	5	0	0	0	0
July 2054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	20.5	11.5	5.7	3.9	2.7	2.2	17.8	7.7	3.6	2.6	1.9	1.6	28.5	22.7	12.0	7.9	5.1	3.9

Security Group 9
PSA Prepayment Assumption Rates

Distribution Date	Classes D, DH, DJ, DK, FD, ID and SD					Classes DA, DB, DC, DE, DG and DI					Class DY				
	0%	100%	385%	600%	800%	0%	100%	385%	600%	800%	0%	100%	385%	600%	800%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2025	99	97	93	90	87	99	97	91	87	83	100	100	100	100	100
July 2026	98	93	78	68	59	98	90	71	57	45	100	100	100	100	100
July 2027	97	86	60	44	31	96	82	47	25	8	100	100	100	100	100
July 2028	96	80	46	28	16	95	73	27	3	0	100	100	100	100	63
July 2029	95	74	34	17	8	93	65	13	0	0	100	100	100	69	32
July 2030	94	69	26	11	4	92	58	1	0	0	100	100	100	44	17
July 2031	92	63	20	7	2	90	51	0	0	0	100	100	79	27	8
July 2032	91	58	15	4	1	88	44	0	0	0	100	100	59	17	4
July 2033	89	54	11	3	1	86	38	0	0	0	100	100	45	11	2
July 2034	88	49	8	2	0	84	33	0	0	0	100	100	34	7	1
July 2035	86	45	6	1	0	81	27	0	0	0	100	100	25	4	1
July 2036	84	42	5	1	0	78	22	0	0	0	100	100	19	3	0
July 2037	82	38	4	0	0	76	17	0	0	0	100	100	14	2	0
July 2038	79	34	3	0	0	72	12	0	0	0	100	100	10	1	0
July 2039	77	31	2	0	0	69	8	0	0	0	100	100	8	1	0
July 2040	74	28	1	0	0	65	4	0	0	0	100	100	6	0	0
July 2041	71	25	1	0	0	61	0	0	0	0	100	100	4	0	0
July 2042	68	23	1	0	0	57	0	0	0	0	100	90	3	0	0
July 2043	64	20	1	0	0	52	0	0	0	0	100	80	2	0	0
July 2044	60	18	0	0	0	47	0	0	0	0	100	70	2	0	0
July 2045	56	15	0	0	0	42	0	0	0	0	100	61	1	0	0
July 2046	52	13	0	0	0	36	0	0	0	0	100	53	1	0	0
July 2047	47	11	0	0	0	29	0	0	0	0	100	45	1	0	0
July 2048	42	9	0	0	0	22	0	0	0	0	100	37	0	0	0
July 2049	36	8	0	0	0	15	0	0	0	0	100	30	0	0	0
July 2050	30	6	0	0	0	7	0	0	0	0	100	23	0	0	0
July 2051	23	4	0	0	0	0	0	0	0	0	93	17	0	0	0
July 2052	16	3	0	0	0	0	0	0	0	0	65	11	0	0	0
July 2053	8	1	0	0	0	0	0	0	0	0	34	5	0	0	0
July 2054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	20.5	11.5	4.7	3.3	2.6	17.8	7.7	3.0	2.2	1.9	28.5	22.7	9.6	6.4	4.8

Security Group 10
PSA Prepayment Assumption Rates

Distribution Date	Classes FT, FX, IT, ST, SX, TF, TI, TS and XS						Class ZT					
	0%	100%	350%	600%	900%	1,200%	0%	100%	350%	600%	900%	1,200%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100
July 2025	98	96	91	90	90	90	107	107	107	88	58	28
July 2026	96	89	72	69	64	48	115	115	115	57	0	0
July 2027	94	80	50	45	30	14	123	123	123	35	0	0
July 2028	91	71	32	26	14	4	132	132	132	35	0	0
July 2029	89	62	17	13	6	1	142	142	142	37	0	0
July 2030	86	54	4	5	3	0	152	152	152	40	0	0
July 2031	83	46	0	0	1	0	163	163	135	40	0	0
July 2032	80	38	0	0	1	0	175	175	106	25	0	0
July 2033	76	30	0	0	0	0	187	187	83	16	0	0
July 2034	73	22	0	0	0	0	201	201	65	10	0	0
July 2035	69	15	0	0	0	0	215	215	51	6	0	0
July 2036	64	7	0	0	0	0	231	231	40	4	0	0
July 2037	60	0	0	0	0	0	248	246	31	3	0	0
July 2038	55	0	0	0	0	0	266	228	24	2	0	0
July 2039	49	0	0	0	0	0	285	212	19	1	0	0
July 2040	44	0	0	0	0	0	305	196	15	1	0	0
July 2041	37	0	0	0	0	0	328	181	11	0	0	0
July 2042	31	0	0	0	0	0	351	167	9	0	0	0
July 2043	24	0	0	0	0	0	377	154	7	0	0	0
July 2044	16	0	0	0	0	0	404	142	5	0	0	0
July 2045	8	0	0	0	0	0	433	130	4	0	0	0
July 2046	0	0	0	0	0	0	458	119	3	0	0	0
July 2047	0	0	0	0	0	0	447	109	2	0	0	0
July 2048	0	0	0	0	0	0	435	99	2	0	0	0
July 2049	0	0	0	0	0	0	421	90	1	0	0	0
July 2050	0	0	0	0	0	0	407	81	1	0	0	0
July 2051	0	0	0	0	0	0	391	73	1	0	0	0
July 2052	0	0	0	0	0	0	374	65	1	0	0	0
July 2053	0	0	0	0	0	0	355	58	0	0	0	0
July 2054	0	0	0	0	0	0	335	51	0	0	0	0
July 2055	0	0	0	0	0	0	312	44	0	0	0	0
July 2056	0	0	0	0	0	0	288	38	0	0	0	0
July 2057	0	0	0	0	0	0	262	32	0	0	0	0
July 2058	0	0	0	0	0	0	233	27	0	0	0	0
July 2059	0	0	0	0	0	0	202	21	0	0	0	0
July 2060	0	0	0	0	0	0	168	16	0	0	0	0
July 2061	0	0	0	0	0	0	131	12	0	0	0	0
July 2062	0	0	0	0	0	0	91	7	0	0	0	0
July 2063	0	0	0	0	0	0	48	3	0	0	0	0
July 2064	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	13.7	6.6	3.2	3.0	2.6	2.1	33.2	23.1	10.5	4.6	1.1	0.8

	Security Group 11 PSA Prepayment Assumption Rates					
	Classes DF, DS, FV and TV					
Distribution Date	0%	100%	350%	600%	900%	1,200%
Initial Percent . . .	100	100	100	100	100	100
July 2025	100	98	94	89	84	79
July 2026	99	93	80	67	53	39
July 2027	99	87	63	43	25	11
July 2028	99	82	49	27	11	3
July 2029	98	76	39	17	5	1
July 2030	98	71	31	11	2	0
July 2031	97	67	24	7	1	0
July 2032	97	62	19	4	0	0
July 2033	96	58	15	3	0	0
July 2034	95	54	12	2	0	0
July 2035	95	50	9	1	0	0
July 2036	94	47	7	1	0	0
July 2037	93	44	6	0	0	0
July 2038	92	40	4	0	0	0
July 2039	91	37	3	0	0	0
July 2040	90	35	3	0	0	0
July 2041	89	32	2	0	0	0
July 2042	87	30	2	0	0	0
July 2043	86	27	1	0	0	0
July 2044	84	25	1	0	0	0
July 2045	83	23	1	0	0	0
July 2046	81	21	1	0	0	0
July 2047	79	19	0	0	0	0
July 2048	77	18	0	0	0	0
July 2049	74	16	0	0	0	0
July 2050	72	14	0	0	0	0
July 2051	69	13	0	0	0	0
July 2052	66	12	0	0	0	0
July 2053	63	10	0	0	0	0
July 2054	59	9	0	0	0	0
July 2055	55	8	0	0	0	0
July 2056	51	7	0	0	0	0
July 2057	46	6	0	0	0	0
July 2058	41	5	0	0	0	0
July 2059	36	4	0	0	0	0
July 2060	30	3	0	0	0	0
July 2061	23	2	0	0	0	0
July 2062	16	1	0	0	0	0
July 2063	8	1	0	0	0	0
July 2064	0	0	0	0	0	0
Weighted Average Life (years)	29.6	13.6	5.2	3.3	2.3	1.8

Security Groups 10 and 11
PSA Prepayment Assumption Rates

Distribution Date	Class SY 0%	100%	350%	600%	900%	1,200%
Initial Percent	100	100	100	100	100	100
July 2025	100	98	93	89	85	80
July 2026	99	93	79	67	54	40
July 2027	98	87	62	43	25	12
July 2028	98	81	48	27	11	3
July 2029	97	75	37	17	5	1
July 2030	97	70	28	10	2	0
July 2031	96	65	22	6	1	0
July 2032	95	60	17	4	0	0
July 2033	94	55	13	3	0	0
July 2034	93	51	10	2	0	0
July 2035	92	47	8	1	0	0
July 2036	91	43	6	1	0	0
July 2037	90	39	5	0	0	0
July 2038	88	36	4	0	0	0
July 2039	87	34	3	0	0	0
July 2040	85	31	2	0	0	0
July 2041	84	29	2	0	0	0
July 2042	82	27	1	0	0	0
July 2043	80	25	1	0	0	0
July 2044	78	23	1	0	0	0
July 2045	75	21	1	0	0	0
July 2046	73	19	1	0	0	0
July 2047	71	17	0	0	0	0
July 2048	69	16	0	0	0	0
July 2049	67	14	0	0	0	0
July 2050	65	13	0	0	0	0
July 2051	62	12	0	0	0	0
July 2052	60	10	0	0	0	0
July 2053	57	9	0	0	0	0
July 2054	53	8	0	0	0	0
July 2055	50	7	0	0	0	0
July 2056	46	6	0	0	0	0
July 2057	42	5	0	0	0	0
July 2058	37	4	0	0	0	0
July 2059	32	4	0	0	0	0
July 2060	27	3	0	0	0	0
July 2061	21	2	0	0	0	0
July 2062	15	1	0	0	0	0
July 2063	8	1	0	0	0	0
July 2064	0	0	0	0	0	0
Weighted Average Life (years)	28.1	12.9	5.0	3.2	2.4	1.9

Security Group 12

PSA Prepayment Assumption Rates

Distribution Date	Classes B, BC, BD, BE, BG and BI						Classes BH, BJ, BK, BL, BN, EF and IB						Class BY					
	0%	100%	350%	580%	900%	1,200%	0%	100%	350%	580%	900%	1,200%	0%	100%	350%	580%	900%	1,200%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2025	99	97	93	88	83	77	99	98	94	90	85	81	100	100	100	100	100	100
July 2026	98	91	76	63	46	31	98	93	80	69	55	42	100	100	100	100	100	100
July 2027	97	84	56	34	11	0	98	86	63	45	26	12	100	100	100	100	100	76
July 2028	96	76	39	15	0	0	97	80	49	29	12	3	100	100	100	100	71	21
July 2029	95	69	26	3	0	0	95	74	38	19	5	1	100	100	100	100	32	6
July 2030	93	63	16	0	0	0	94	69	30	12	2	0	100	100	100	73	15	2
July 2031	92	57	8	0	0	0	93	64	23	8	1	0	100	100	100	47	7	0
July 2032	90	51	2	0	0	0	92	59	18	5	0	0	100	100	100	30	3	0
July 2033	88	45	0	0	0	0	90	54	14	3	0	0	100	100	85	19	1	0
July 2034	86	40	0	0	0	0	89	50	11	2	0	0	100	100	66	12	1	0
July 2035	84	35	0	0	0	0	87	46	8	1	0	0	100	100	51	8	0	0
July 2036	82	31	0	0	0	0	85	42	6	1	0	0	100	100	39	5	0	0
July 2037	79	26	0	0	0	0	83	38	5	1	0	0	100	100	30	3	0	0
July 2038	77	22	0	0	0	0	81	35	4	0	0	0	100	100	23	2	0	0
July 2039	74	18	0	0	0	0	78	32	3	0	0	0	100	100	17	1	0	0
July 2040	71	15	0	0	0	0	75	29	2	0	0	0	100	100	13	1	0	0
July 2041	67	11	0	0	0	0	72	26	2	0	0	0	100	100	10	0	0	0
July 2042	63	8	0	0	0	0	69	23	1	0	0	0	100	100	8	0	0	0
July 2043	59	5	0	0	0	0	66	20	1	0	0	0	100	100	6	0	0	0
July 2044	55	2	0	0	0	0	62	18	1	0	0	0	100	100	4	0	0	0
July 2045	50	0	0	0	0	0	58	16	0	0	0	0	100	95	3	0	0	0
July 2046	44	0	0	0	0	0	53	13	0	0	0	0	100	81	2	0	0	0
July 2047	38	0	0	0	0	0	49	11	0	0	0	0	100	69	2	0	0	0
July 2048	32	0	0	0	0	0	43	9	0	0	0	0	100	56	1	0	0	0
July 2049	25	0	0	0	0	0	37	7	0	0	0	0	100	45	1	0	0	0
July 2050	18	0	0	0	0	0	31	6	0	0	0	0	100	34	0	0	0	0
July 2051	10	0	0	0	0	0	24	4	0	0	0	0	100	24	0	0	0	0
July 2052	1	0	0	0	0	0	17	2	0	0	0	0	100	14	0	0	0	0
July 2053	0	0	0	0	0	0	9	1	0	0	0	0	54	5	0	0	0	0
July 2054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	19.1	9.0	3.7	2.5	1.9	1.6	20.8	11.5	5.1	3.4	2.4	1.9	29.1	24.7	12.1	7.6	4.8	3.6

PSA Prepayment Assumption Rates

Distribution Date	Class ES						Class IS					
	0%	100%	350%	580%	900%	1,200%	0%	100%	350%	580%	900%	1,200%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100
July 2025	99	98	94	90	85	81	99	98	94	90	85	81
July 2026	98	93	80	69	55	42	98	93	80	69	55	42
July 2027	98	86	63	45	26	12	98	86	63	45	26	12
July 2028	97	80	49	29	12	3	97	80	49	29	12	3
July 2029	95	74	38	19	5	1	95	74	38	19	5	1
July 2030	94	69	30	12	2	0	94	69	30	12	2	0
July 2031	93	64	23	8	1	0	93	64	23	8	1	0
July 2032	92	59	18	5	0	0	92	59	18	5	0	0
July 2033	90	54	14	3	0	0	90	54	14	3	0	0
July 2034	89	50	11	2	0	0	89	50	11	2	0	0
July 2035	87	46	8	1	0	0	87	46	8	1	0	0
July 2036	85	42	6	1	0	0	85	42	6	1	0	0
July 2037	83	38	5	1	0	0	83	38	5	1	0	0
July 2038	81	35	4	0	0	0	81	35	4	0	0	0
July 2039	78	32	3	0	0	0	78	32	3	0	0	0
July 2040	75	29	2	0	0	0	75	29	2	0	0	0
July 2041	72	26	2	0	0	0	72	26	2	0	0	0
July 2042	69	23	1	0	0	0	69	23	1	0	0	0
July 2043	66	20	1	0	0	0	66	20	1	0	0	0
July 2044	62	18	1	0	0	0	62	18	1	0	0	0
July 2045	58	16	0	0	0	0	58	16	0	0	0	0
July 2046	53	13	0	0	0	0	53	13	0	0	0	0
July 2047	49	11	0	0	0	0	49	11	0	0	0	0
July 2048	43	9	0	0	0	0	43	9	0	0	0	0
July 2049	37	7	0	0	0	0	37	7	0	0	0	0
July 2050	31	6	0	0	0	0	31	6	0	0	0	0
July 2051	24	4	0	0	0	0	24	4	0	0	0	0
July 2052	17	2	0	0	0	0	17	2	0	0	0	0
July 2053	9	1	0	0	0	0	9	1	0	0	0	0
July 2054	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	20.8	11.5	5.1	3.4	2.4	1.9	20.8	11.5	5.1	3.4	2.4	1.9

Security Group 13
PSA Prepayment Assumption Rates

Distribution Date	Classes GF and SJ						Class GS					
	0%	100%	400%	700%	1,050%	1,400%	0%	100%	400%	700%	1,050%	1,400%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100
July 2025	99	97	92	87	81	75	99	97	92	87	81	75
July 2026	99	93	76	61	45	31	99	93	76	61	45	31
July 2027	98	86	58	36	17	5	98	86	58	36	17	5
July 2028	97	80	43	20	6	1	97	80	43	20	6	1
July 2029	96	74	33	12	2	0	96	74	33	12	2	0
July 2030	95	69	24	7	1	0	95	69	24	7	1	0
July 2031	94	64	18	4	0	0	94	64	18	4	0	0
July 2032	92	59	14	2	0	0	92	59	14	2	0	0
July 2033	91	54	10	1	0	0	91	55	10	1	0	0
July 2034	89	50	8	1	0	0	89	50	8	1	0	0
July 2035	88	46	6	0	0	0	88	46	6	0	0	0
July 2036	86	42	4	0	0	0	86	42	4	0	0	0
July 2037	84	39	3	0	0	0	84	39	3	0	0	0
July 2038	82	35	2	0	0	0	82	35	2	0	0	0
July 2039	79	32	2	0	0	0	79	32	2	0	0	0
July 2040	77	29	1	0	0	0	77	29	1	0	0	0
July 2041	74	26	1	0	0	0	74	26	1	0	0	0
July 2042	71	23	1	0	0	0	71	23	1	0	0	0
July 2043	67	21	0	0	0	0	67	21	0	0	0	0
July 2044	64	18	0	0	0	0	64	18	0	0	0	0
July 2045	59	16	0	0	0	0	59	16	0	0	0	0
July 2046	55	14	0	0	0	0	55	14	0	0	0	0
July 2047	50	12	0	0	0	0	50	12	0	0	0	0
July 2048	45	10	0	0	0	0	45	10	0	0	0	0
July 2049	39	8	0	0	0	0	39	8	0	0	0	0
July 2050	32	6	0	0	0	0	32	6	0	0	0	0
July 2051	25	4	0	0	0	0	25	4	0	0	0	0
July 2052	18	3	0	0	0	0	18	3	0	0	0	0
July 2053	9	1	0	0	0	0	9	1	0	0	0	0
July 2054	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	21.0	11.6	4.5	2.8	2.0	1.6	21.0	11.7	4.5	2.8	2.0	1.6

Security Group 14
PSA Prepayment Assumption Rates

Distribution Date	Class FH						Class FJ						Class SH					
	0%	100%	400%	700%	1,050%	1,400%	0%	100%	400%	700%	1,050%	1,400%	0%	100%	400%	700%	1,050%	1,400%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2025	99	97	89	81	72	63	99	96	88	80	71	61	99	96	89	81	71	62
July 2026	99	91	70	52	34	18	99	91	70	51	32	16	99	91	70	52	33	17
July 2027	98	84	53	30	12	3	98	84	52	29	12	3	98	84	53	30	12	3
July 2028	97	78	40	17	5	0	97	78	39	17	4	0	97	78	40	17	4	0
July 2029	96	73	30	10	2	0	96	73	29	10	2	0	96	73	30	10	2	0
July 2030	95	67	22	6	1	0	95	67	22	5	1	0	95	67	22	6	1	0
July 2031	94	62	17	3	0	0	94	62	17	3	0	0	94	62	17	3	0	0
July 2032	92	58	12	2	0	0	92	58	12	2	0	0	92	58	12	2	0	0
July 2033	91	53	9	1	0	0	91	53	9	1	0	0	91	53	9	1	0	0
July 2034	89	49	7	1	0	0	89	49	7	1	0	0	89	49	7	1	0	0
July 2035	88	45	5	0	0	0	88	45	5	0	0	0	88	45	5	0	0	0
July 2036	86	41	4	0	0	0	86	41	4	0	0	0	86	41	4	0	0	0
July 2037	84	38	3	0	0	0	84	37	3	0	0	0	84	38	3	0	0	0
July 2038	82	34	2	0	0	0	82	34	2	0	0	0	82	34	2	0	0	0
July 2039	79	31	2	0	0	0	79	31	1	0	0	0	79	31	2	0	0	0
July 2040	77	28	1	0	0	0	77	28	1	0	0	0	77	28	1	0	0	0
July 2041	74	25	1	0	0	0	74	25	1	0	0	0	74	25	1	0	0	0
July 2042	71	22	1	0	0	0	71	22	1	0	0	0	71	22	1	0	0	0
July 2043	67	20	0	0	0	0	67	20	0	0	0	0	67	20	0	0	0	0
July 2044	64	17	0	0	0	0	64	17	0	0	0	0	64	17	0	0	0	0
July 2045	59	15	0	0	0	0	59	15	0	0	0	0	59	15	0	0	0	0
July 2046	55	13	0	0	0	0	55	13	0	0	0	0	55	13	0	0	0	0
July 2047	50	11	0	0	0	0	50	11	0	0	0	0	50	11	0	0	0	0
July 2048	45	9	0	0	0	0	45	9	0	0	0	0	45	9	0	0	0	0
July 2049	39	7	0	0	0	0	39	7	0	0	0	0	39	7	0	0	0	0
July 2050	32	5	0	0	0	0	32	5	0	0	0	0	32	5	0	0	0	0
July 2051	25	3	0	0	0	0	25	3	0	0	0	0	25	3	0	0	0	0
July 2052	18	2	0	0	0	0	18	2	0	0	0	0	18	2	0	0	0	0
July 2053	9	0	0	0	0	0	9	0	0	0	0	0	9	0	0	0	0	0
July 2054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	21.0	11.3	4.2	2.5	1.8	1.3	21.0	11.3	4.2	2.5	1.7	1.3	21.0	11.3	4.2	2.5	1.7	1.3

Security Group 15
PSA Prepayment Assumption Rates

	Classes H, HF, HG, HJ and IH						Class HA						Classes HC, HD, HE and HI					
Distribution Date	**0%**	**100%**	**300%**	**450%**	**700%**	**900%**	**0%**	**100%**	**300%**	**450%**	**700%**	**900%**	**0%**	**100%**	**300%**	**450%**	**700%**	**900%**
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2025	99	98	95	92	89	85	99	97	93	91	86	83	99	97	94	92	88	84
July 2026	98	93	83	75	64	55	98	91	79	70	56	46	98	92	81	73	61	51
July 2027	98	86	67	55	37	26	97	84	61	46	25	11	97	85	65	51	32	20
July 2028	97	80	55	40	21	12	96	76	46	28	6	0	96	79	51	35	15	4
July 2029	95	74	44	28	12	5	95	69	33	15	0	0	95	72	40	23	5	0
July 2030	94	69	36	20	7	2	93	63	23	5	0	0	94	66	30	14	0	0
July 2031	93	64	29	15	4	1	92	57	15	0	0	0	93	61	23	8	0	0
July 2032	92	59	23	11	2	0	90	51	8	0	0	0	91	55	17	3	0	0
July 2033	90	54	19	8	1	0	88	45	3	0	0	0	89	50	12	0	0	0
July 2034	89	50	15	5	1	0	86	40	0	0	0	0	88	46	8	0	0	0
July 2035	87	46	12	4	0	0	84	35	0	0	0	0	86	41	5	0	0	0
July 2036	85	42	10	3	0	0	82	31	0	0	0	0	84	37	2	0	0	0
July 2037	83	38	8	2	0	0	79	26	0	0	0	0	81	33	0	0	0	0
July 2038	81	35	6	1	0	0	77	22	0	0	0	0	79	29	0	0	0	0
July 2039	78	32	5	1	0	0	74	18	0	0	0	0	76	26	0	0	0	0
July 2040	75	28	4	1	0	0	71	15	0	0	0	0	73	23	0	0	0	0
July 2041	72	26	3	0	0	0	67	11	0	0	0	0	70	19	0	0	0	0
July 2042	69	23	2	0	0	0	63	8	0	0	0	0	67	17	0	0	0	0
July 2043	66	20	2	0	0	0	59	5	0	0	0	0	63	14	0	0	0	0
July 2044	62	18	1	0	0	0	55	2	0	0	0	0	59	11	0	0	0	0
July 2045	58	15	1	0	0	0	50	0	0	0	0	0	54	9	0	0	0	0
July 2046	53	13	1	0	0	0	44	0	0	0	0	0	50	6	0	0	0	0
July 2047	49	11	1	0	0	0	39	0	0	0	0	0	44	4	0	0	0	0
July 2048	43	9	0	0	0	0	32	0	0	0	0	0	39	2	0	0	0	0
July 2049	37	7	0	0	0	0	25	0	0	0	0	0	32	0	0	0	0	0
July 2050	31	6	0	0	0	0	18	0	0	0	0	0	26	0	0	0	0	0
July 2051	24	4	0	0	0	0	10	0	0	0	0	0	18	0	0	0	0	0
July 2052	17	2	0	0	0	0	1	0	0	0	0	0	10	0	0	0	0	0
July 2053	9	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
July 2054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	20.8	11.5	5.7	4.1	2.9	2.4	19.2	9.0	4.1	3.1	2.2	1.9	20.0	10.3	4.8	3.5	2.5	2.1

PSA Prepayment Assumption Rates

	Class HL						Class HN						Class HS					
Distribution Date	**0%**	**100%**	**300%**	**450%**	**700%**	**900%**	**0%**	**100%**	**300%**	**450%**	**700%**	**900%**	**0%**	**100%**	**300%**	**450%**	**700%**	**900%**
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2025	100	100	100	100	100	100	100	100	100	100	100	100	99	98	95	92	89	85
July 2026	100	100	100	100	100	100	100	100	100	100	100	100	98	93	83	75	64	55
July 2027	100	100	100	100	100	100	100	100	100	100	100	100	98	86	67	55	37	26
July 2028	100	100	100	100	100	100	100	100	100	100	100	46	97	80	55	40	21	12
July 2029	100	100	100	100	100	70	100	100	100	100	52	0	95	74	44	28	12	5
July 2030	100	100	100	100	92	32	100	100	100	100	0	0	94	69	36	20	7	2
July 2031	100	100	100	100	52	14	100	100	100	81	0	0	93	64	29	15	4	1
July 2032	100	100	100	100	30	6	100	100	100	34	0	0	92	59	23	11	2	0
July 2033	100	100	100	99	17	3	100	100	100	0	0	0	90	54	19	8	1	0
July 2034	100	100	100	71	10	1	100	100	84	0	0	0	89	50	15	5	1	0
July 2035	100	100	100	51	5	1	100	100	50	0	0	0	87	46	12	4	0	0
July 2036	100	100	100	36	3	0	100	100	23	0	0	0	85	42	10	3	0	0
July 2037	100	100	100	26	2	0	100	100	0	0	0	0	83	38	8	2	0	0
July 2038	100	100	80	18	1	0	100	100	0	0	0	0	81	35	6	1	0	0
July 2039	100	100	63	13	1	0	100	100	0	0	0	0	78	32	5	1	0	0
July 2040	100	100	50	9	0	0	100	100	0	0	0	0	75	28	4	1	0	0
July 2041	100	100	39	6	0	0	100	100	0	0	0	0	72	26	3	0	0	0
July 2042	100	100	30	4	0	0	100	100	0	0	0	0	69	23	2	0	0	0
July 2043	100	100	23	3	0	0	100	100	0	0	0	0	66	20	2	0	0	0
July 2044	100	100	18	2	0	0	100	100	0	0	0	0	62	18	1	0	0	0
July 2045	100	100	14	1	0	0	100	90	0	0	0	0	58	15	1	0	0	0
July 2046	100	100	10	1	0	0	100	65	0	0	0	0	53	13	1	0	0	0
July 2047	100	100	7	1	0	0	100	41	0	0	0	0	49	11	1	0	0	0
July 2048	100	100	5	0	0	0	100	19	0	0	0	0	43	9	0	0	0	0
July 2049	100	97	4	0	0	0	100	0	0	0	0	0	37	7	0	0	0	0
July 2050	100	73	2	0	0	0	100	0	0	0	0	0	31	6	0	0	0	0
July 2051	100	51	1	0	0	0	100	0	0	0	0	0	24	4	0	0	0	0
July 2052	100	30	1	0	0	0	100	0	0	0	0	0	17	2	0	0	0	0
July 2053	100	10	0	0	0	0	14	0	0	0	0	0	9	1	0	0	0	0
July 2054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	29.6	27.1	17.0	11.9	7.6	5.8	28.6	22.7	11.1	7.7	5.1	4.0	20.8	11.5	5.7	4.1	2.9	2.4

Security Group 15
PSA Prepayment Assumption Rates

Distribution Date	Class HY 0%	100%	300%	450%	700%	900%	Class S 0%	100%	300%	450%	700%	900%	Class SI 0%	100%	300%	450%	700%	900%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2025	100	100	100	100	100	100	99	98	95	92	89	85	99	98	95	92	89	85
July 2026	100	100	100	100	100	100	98	93	83	75	64	55	98	93	83	75	64	55
July 2027	100	100	100	100	100	100	98	86	67	55	37	26	98	86	67	55	37	26
July 2028	100	100	100	100	100	71	97	80	55	40	21	12	97	80	55	40	21	12
July 2029	100	100	100	100	75	32	95	74	44	28	12	5	95	74	44	28	12	5
July 2030	100	100	100	100	43	15	94	69	36	20	7	2	94	69	36	20	7	2
July 2031	100	100	100	90	24	7	93	64	29	15	4	1	93	64	29	15	4	1
July 2032	100	100	100	65	14	3	92	59	23	11	2	0	92	59	23	11	2	0
July 2033	100	100	100	46	8	1	90	54	19	8	1	0	90	54	19	8	1	0
July 2034	100	100	92	33	4	1	89	50	15	5	1	0	89	50	15	5	1	0
July 2035	100	100	73	24	3	0	87	46	12	4	0	0	87	46	12	4	0	0
July 2036	100	100	59	17	1	0	85	42	10	3	0	0	85	42	10	3	0	0
July 2037	100	100	47	12	1	0	83	38	8	2	0	0	83	38	8	2	0	0
July 2038	100	100	37	8	0	0	81	35	6	1	0	0	81	35	6	1	0	0
July 2039	100	100	29	6	0	0	78	32	5	1	0	0	78	32	5	1	0	0
July 2040	100	100	23	4	0	0	75	28	4	1	0	0	75	28	4	1	0	0
July 2041	100	100	18	3	0	0	72	26	3	0	0	0	72	26	3	0	0	0
July 2042	100	100	14	2	0	0	69	23	2	0	0	0	69	23	2	0	0	0
July 2043	100	100	11	1	0	0	66	20	2	0	0	0	66	20	2	0	0	0
July 2044	100	100	8	1	0	0	62	18	1	0	0	0	62	18	1	0	0	0
July 2045	100	95	6	1	0	0	58	15	1	0	0	0	58	15	1	0	0	0
July 2046	100	81	5	0	0	0	53	13	1	0	0	0	53	13	1	0	0	0
July 2047	100	69	3	0	0	0	49	11	1	0	0	0	49	11	1	0	0	0
July 2048	100	56	3	0	0	0	43	9	0	0	0	0	43	9	0	0	0	0
July 2049	100	45	2	0	0	0	37	7	0	0	0	0	37	7	0	0	0	0
July 2050	100	34	1	0	0	0	31	6	0	0	0	0	31	6	0	0	0	0
July 2051	100	24	1	0	0	0	24	4	0	0	0	0	24	4	0	0	0	0
July 2052	100	14	0	0	0	0	17	2	0	0	0	0	17	2	0	0	0	0
July 2053	54	5	0	0	0	0	9	1	0	0	0	0	9	1	0	0	0	0
July 2054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	29.1	24.7	13.8	9.7	6.3	4.8	20.8	11.5	5.7	4.1	2.9	2.4	20.8	11.5	5.7	4.1	2.9	2.4

Security Group 16
PSA Prepayment Assumption Rates

Distribution Date	Classes FN, IN, N, NE, NG, NH and SN 0%	100%	300%	480%	750%	1,000%	Classes NA, NB, NC, ND and NI 0%	100%	300%	480%	750%	1,000%	Class NY 0%	100%	300%	480%	750%	1,000%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2025	99	97	94	92	88	84	99	97	93	89	84	78	100	100	100	100	100	100
July 2026	98	93	82	74	61	50	98	90	77	65	48	34	100	100	100	100	100	100
July 2027	97	86	67	52	34	21	96	82	56	36	12	0	100	100	100	100	100	82
July 2028	96	80	54	37	18	8	95	73	39	16	0	0	100	100	100	100	73	32
July 2029	95	74	44	26	10	3	93	65	25	1	0	0	100	100	100	100	40	13
July 2030	94	69	35	18	5	1	92	58	14	0	0	0	100	100	100	72	22	5
July 2031	92	63	29	13	3	0	90	51	5	0	0	0	100	100	100	50	12	2
July 2032	91	58	23	9	2	0	88	44	0	0	0	0	100	100	92	35	6	1
July 2033	89	54	19	6	1	0	86	38	0	0	0	0	100	100	74	25	3	0
July 2034	88	49	15	4	0	0	84	33	0	0	0	0	100	100	59	17	2	0
July 2035	86	45	12	3	0	0	81	27	0	0	0	0	100	100	47	12	1	0
July 2036	84	42	9	2	0	0	78	22	0	0	0	0	100	100	38	8	1	0
July 2037	82	38	8	1	0	0	76	17	0	0	0	0	100	100	30	6	0	0
July 2038	79	34	6	1	0	0	72	12	0	0	0	0	100	100	24	4	0	0
July 2039	77	31	5	1	0	0	69	8	0	0	0	0	100	100	19	3	0	0
July 2040	74	28	4	0	0	0	65	4	0	0	0	0	100	100	15	2	0	0
July 2041	71	25	3	0	0	0	61	0	0	0	0	0	100	100	12	1	0	0
July 2042	68	23	2	0	0	0	57	0	0	0	0	0	100	90	9	1	0	0
July 2043	64	20	2	0	0	0	52	0	0	0	0	0	100	80	7	1	0	0
July 2044	60	18	1	0	0	0	47	0	0	0	0	0	100	70	5	0	0	0
July 2045	56	15	1	0	0	0	42	0	0	0	0	0	100	61	4	0	0	0
July 2046	52	13	1	0	0	0	36	0	0	0	0	0	100	53	3	0	0	0
July 2047	47	11	1	0	0	0	29	0	0	0	0	0	100	45	2	0	0	0
July 2048	42	9	0	0	0	0	22	0	0	0	0	0	100	37	2	0	0	0
July 2049	36	7	0	0	0	0	15	0	0	0	0	0	100	30	1	0	0	0
July 2050	30	6	0	0	0	0	7	0	0	0	0	0	100	23	1	0	0	0
July 2051	23	4	0	0	0	0	0	0	0	0	0	0	93	16	0	0	0	0
July 2052	16	3	0	0	0	0	0	0	0	0	0	0	64	10	0	0	0	0
July 2053	8	1	0	0	0	0	0	0	0	0	0	0	34	5	0	0	0	0
July 2054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	20.5	11.5	5.7	3.9	2.7	2.2	17.8	7.7	3.6	2.6	1.9	1.6	28.5	22.7	12.0	7.9	5.1	3.9

Security Group 17
PSA Prepayment Assumption Rates

Distribution Date	Class BM					Classes FM, M, MF, MS, SM and TM					Class MA				
	0%	100%	286%	450%	600%	0%	100%	286%	450%	600%	0%	100%	286%	450%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2025	100	100	100	100	100	99	97	94	91	89	99	96	91	87	84
July 2026	100	100	100	100	100	98	92	82	73	66	97	89	74	62	51
July 2027	100	100	100	100	100	97	85	67	53	42	96	79	53	32	16
July 2028	100	100	100	100	86	96	79	55	38	27	94	70	35	11	0
July 2029	100	100	100	89	54	95	73	45	28	17	92	61	20	0	0
July 2030	100	100	100	64	34	93	68	36	20	11	90	53	8	0	0
July 2031	100	100	96	46	21	92	62	30	14	7	88	46	0	0	0
July 2032	100	100	78	33	13	90	58	24	10	4	86	39	0	0	0
July 2033	100	100	63	23	8	89	53	20	7	3	84	32	0	0	0
July 2034	100	100	51	17	5	87	49	16	5	2	81	26	0	0	0
July 2035	100	100	41	12	3	85	44	13	4	1	78	20	0	0	0
July 2036	100	100	33	8	2	83	41	10	3	1	75	14	0	0	0
July 2037	100	100	27	6	1	80	37	8	2	0	72	9	0	0	0
July 2038	100	100	21	4	1	78	34	7	1	0	68	4	0	0	0
July 2039	100	99	17	3	0	75	30	5	1	0	64	0	0	0	0
July 2040	100	89	14	2	0	73	27	4	1	0	60	0	0	0	0
July 2041	100	80	11	1	0	70	25	3	0	0	56	0	0	0	0
July 2042	100	71	8	1	0	66	22	3	0	0	51	0	0	0	0
July 2043	100	63	7	1	0	63	19	2	0	0	46	0	0	0	0
July 2044	100	55	5	0	0	59	17	2	0	0	41	0	0	0	0
July 2045	100	48	4	0	0	55	15	1	0	0	35	0	0	0	0
July 2046	100	41	3	0	0	50	13	1	0	0	28	0	0	0	0
July 2047	100	34	2	0	0	46	11	1	0	0	21	0	0	0	0
July 2048	100	28	2	0	0	40	9	0	0	0	14	0	0	0	0
July 2049	100	23	1	0	0	35	7	0	0	0	6	0	0	0	0
July 2050	94	17	1	0	0	29	5	0	0	0	0	0	0	0	0
July 2051	73	12	0	0	0	22	4	0	0	0	0	0	0	0	0
July 2052	50	7	0	0	0	16	2	0	0	0	0	0	0	0	0
July 2053	26	3	0	0	0	8	1	0	0	0	0	0	0	0	0
July 2054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	28.0	21.2	11.4	7.6	5.8	20.2	11.3	5.8	4.0	3.2	16.7	6.9	3.3	2.4	2.0

PSA Prepayment Assumption Rates

Distribution Date	Class MV					Class MZ				
	0%	100%	286%	450%	600%	0%	100%	286%	450%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100
July 2025	93	93	93	93	93	106	106	106	106	106
July 2026	86	86	86	86	86	112	112	112	112	112
July 2027	78	78	78	78	78	118	118	118	118	118
July 2028	70	70	70	70	39	125	125	125	125	125
July 2029	61	61	61	38	0	132	132	132	132	98
July 2030	52	52	52	0	0	139	139	139	116	62
July 2031	43	43	34	0	0	147	147	147	83	39
July 2032	32	32	0	0	0	155	155	142	60	24
July 2033	22	22	0	0	0	164	164	115	43	15
July 2034	10	10	0	0	0	173	173	93	30	10
July 2035	0	0	0	0	0	182	182	75	22	6
July 2036	0	0	0	0	0	182	182	60	15	4
July 2037	0	0	0	0	0	182	182	48	11	2
July 2038	0	0	0	0	0	182	182	39	8	1
July 2039	0	0	0	0	0	182	179	31	5	1
July 2040	0	0	0	0	0	182	161	25	4	1
July 2041	0	0	0	0	0	182	144	19	3	0
July 2042	0	0	0	0	0	182	129	15	2	0
July 2043	0	0	0	0	0	182	114	12	1	0
July 2044	0	0	0	0	0	182	100	9	1	0
July 2045	0	0	0	0	0	182	87	7	1	0
July 2046	0	0	0	0	0	182	74	5	0	0
July 2047	0	0	0	0	0	182	62	4	0	0
July 2048	0	0	0	0	0	182	51	3	0	0
July 2049	0	0	0	0	0	182	41	2	0	0
July 2050	0	0	0	0	0	171	31	1	0	0
July 2051	0	0	0	0	0	133	22	1	0	0
July 2052	0	0	0	0	0	92	13	0	0	0
July 2053	0	0	0	0	0	48	5	0	0	0
July 2054	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	6.0	6.0	5.2	4.1	3.5	28.0	21.2	12.2	8.5	6.6

Security Group 18
PSA Prepayment Assumption Rates

Distribution Date	Classes JF and JS					
	0%	100%	350%	580%	900%	1,200%
Initial Percent . . .	100	100	100	100	100	100
July 2025	99	96	88	80	69	59
July 2026	98	89	70	54	34	19
July 2027	98	83	54	35	16	5
July 2028	97	77	42	22	7	1
July 2029	95	71	33	14	3	0
July 2030	94	66	26	9	1	0
July 2031	93	61	20	6	1	0
July 2032	92	56	15	4	0	0
July 2033	90	52	12	2	0	0
July 2034	89	48	9	2	0	0
July 2035	87	44	7	1	0	0
July 2036	85	40	5	1	0	0
July 2037	83	36	4	0	0	0
July 2038	81	33	3	0	0	0
July 2039	78	30	2	0	0	0
July 2040	75	27	2	0	0	0
July 2041	72	24	1	0	0	0
July 2042	69	21	1	0	0	0
July 2043	66	19	1	0	0	0
July 2044	62	17	1	0	0	0
July 2045	58	14	0	0	0	0
July 2046	53	12	0	0	0	0
July 2047	49	10	0	0	0	0
July 2048	43	8	0	0	0	0
July 2049	37	6	0	0	0	0
July 2050	31	5	0	0	0	0
July 2051	24	3	0	0	0	0
July 2052	17	1	0	0	0	0
July 2053	9	0	0	0	0	0
July 2054	0	0	0	0	0	0
Weighted Average Life (years)	20.8	11.0	4.5	2.8	1.8	1.3

Security Group 19
PSA Prepayment Assumption Rates

Distribution Date	Classes KH and KI				
	0%	100%	225%	350%	500%
Initial Percent	100	100	100	100	100
July 2025	99	97	94	91	88
July 2026	98	91	83	76	67
July 2027	97	84	71	59	47
July 2028	95	78	61	46	32
July 2029	94	72	52	36	22
July 2030	93	67	44	28	15
July 2031	91	61	37	21	10
July 2032	89	57	31	17	7
July 2033	88	52	27	13	5
July 2034	86	48	22	10	3
July 2035	84	43	19	8	2
July 2036	82	40	16	6	2
July 2037	79	36	13	4	1
July 2038	77	33	11	3	1
July 2039	74	30	9	3	0
July 2040	71	27	8	2	0
July 2041	68	24	6	1	0
July 2042	65	21	5	1	0
July 2043	61	19	4	1	0
July 2044	57	16	3	1	0
July 2045	53	14	3	0	0
July 2046	49	12	2	0	0
July 2047	44	10	2	0	0
July 2048	39	8	1	0	0
July 2049	34	7	1	0	0
July 2050	28	5	1	0	0
July 2051	22	4	0	0	0
July 2052	15	2	0	0	0
July 2053	8	1	0	0	0
July 2054	0	0	0	0	0
Weighted Average Life (years)	19.9	11.1	6.8	4.8	3.6

Security Group 20
PSA Prepayment Assumption Rates

Distribution Date	Classes FL and SL					
	0%	100%	300%	480%	750%	1,000%
Initial Percent	100	100	100	100	100	100
July 2025	99	95	88	81	71	62
July 2026	98	89	72	58	40	26
July 2027	97	82	58	41	22	10
July 2028	96	76	47	29	12	4
July 2029	95	70	38	20	6	2
July 2030	94	65	31	14	3	1
July 2031	92	60	25	10	2	0
July 2032	91	55	20	7	1	0
July 2033	89	51	16	5	1	0
July 2034	88	47	13	3	0	0
July 2035	86	43	10	2	0	0
July 2036	84	39	8	2	0	0
July 2037	82	35	6	1	0	0
July 2038	79	32	5	1	0	0
July 2039	77	29	4	1	0	0
July 2040	74	26	3	0	0	0
July 2041	71	23	2	0	0	0
July 2042	68	21	2	0	0	0
July 2043	64	18	1	0	0	0
July 2044	60	16	1	0	0	0
July 2045	56	14	1	0	0	0
July 2046	52	11	1	0	0	0
July 2047	47	9	0	0	0	0
July 2048	42	8	0	0	0	0
July 2049	36	6	0	0	0	0
July 2050	30	4	0	0	0	0
July 2051	23	3	0	0	0	0
July 2052	16	1	0	0	0	0
July 2053	8	0	0	0	0	0
July 2054	0	0	0	0	0	0
Weighted Average Life (years)	20.5	10.8	5.0	3.3	2.1	1.5

Security Group 21
PSA Prepayment Assumption Rates

Distribution Date	Classes LF and LS					
	0%	100%	400%	700%	1,050%	1,400%
Initial Percent	100	100	100	100	100	100
July 2025	99	97	92	87	81	75
July 2026	99	93	76	61	45	31
July 2027	98	86	58	36	17	5
July 2028	97	80	43	20	6	1
July 2029	96	74	33	12	2	0
July 2030	95	69	24	7	1	0
July 2031	94	64	18	4	0	0
July 2032	92	59	14	2	0	0
July 2033	91	55	10	1	0	0
July 2034	89	50	8	1	0	0
July 2035	88	46	6	0	0	0
July 2036	86	43	4	0	0	0
July 2037	84	39	3	0	0	0
July 2038	82	36	2	0	0	0
July 2039	79	32	2	0	0	0
July 2040	77	29	1	0	0	0
July 2041	74	26	1	0	0	0
July 2042	71	24	1	0	0	0
July 2043	67	21	0	0	0	0
July 2044	64	19	0	0	0	0
July 2045	59	16	0	0	0	0
July 2046	55	14	0	0	0	0
July 2047	50	12	0	0	0	0
July 2048	45	10	0	0	0	0
July 2049	39	8	0	0	0	0
July 2050	32	6	0	0	0	0
July 2051	25	4	0	0	0	0
July 2052	18	3	0	0	0	0
July 2053	9	1	0	0	0	0
July 2054	0	0	0	0	0	0
Weighted Average Life (years)	21.0	11.7	4.5	2.8	2.0	1.6

Security Group 22
PSA Prepayment Assumption Rates

Distribution Date	Classes QF and QS					
	0%	100%	300%	480%	750%	1,000%
Initial Percent . . .	100	100	100	100	100	100
July 2025	99	96	89	83	74	66
July 2026	98	89	73	60	43	29
July 2027	97	83	59	42	23	11
July 2028	96	77	48	30	13	5
July 2029	95	71	39	21	7	2
July 2030	94	66	31	15	4	1
July 2031	92	61	25	10	2	0
July 2032	91	56	20	7	1	0
July 2033	89	51	16	5	1	0
July 2034	88	47	13	3	0	0
July 2035	86	43	10	2	0	0
July 2036	84	39	8	2	0	0
July 2037	82	36	7	1	0	0
July 2038	79	33	5	1	0	0
July 2039	77	29	4	1	0	0
July 2040	74	26	3	0	0	0
July 2041	71	24	3	0	0	0
July 2042	68	21	2	0	0	0
July 2043	64	19	1	0	0	0
July 2044	60	16	1	0	0	0
July 2045	56	14	1	0	0	0
July 2046	52	12	1	0	0	0
July 2047	47	10	0	0	0	0
July 2048	42	8	0	0	0	0
July 2049	36	6	0	0	0	0
July 2050	30	5	0	0	0	0
July 2051	23	3	0	0	0	0
July 2052	16	1	0	0	0	0
July 2053	8	0	0	0	0	0
July 2054	0	0	0	0	0	0
Weighted Average Life (years)	20.5	10.9	5.1	3.3	2.2	1.6

Security Group 23
PSA Prepayment Assumption Rates

Distribution Date	Class YS					
	0%	100%	300%	480%	750%	1,000%
Initial Percent . . .	100	100	100	100	100	100
July 2025	99	96	89	83	74	65
July 2026	98	89	73	60	43	29
July 2027	96	83	59	42	23	11
July 2028	95	77	48	30	13	4
July 2029	94	71	39	21	7	2
July 2030	92	66	31	15	4	1
July 2031	90	61	25	10	2	0
July 2032	89	56	20	7	1	0
July 2033	87	51	16	5	1	0
July 2034	85	47	13	3	0	0
July 2035	82	43	10	2	0	0
July 2036	80	39	8	2	0	0
July 2037	78	36	7	1	0	0
July 2038	75	32	5	1	0	0
July 2039	72	29	4	1	0	0
July 2040	69	26	3	0	0	0
July 2041	65	24	2	0	0	0
July 2042	62	21	2	0	0	0
July 2043	58	18	1	0	0	0
July 2044	54	16	1	0	0	0
July 2045	49	14	1	0	0	0
July 2046	44	12	1	0	0	0
July 2047	39	10	0	0	0	0
July 2048	34	8	0	0	0	0
July 2049	28	6	0	0	0	0
July 2050	22	4	0	0	0	0
July 2051	15	3	0	0	0	0
July 2052	8	1	0	0	0	0
July 2053	0	0	0	0	0	0
July 2054	0	0	0	0	0	0
Weighted Average Life (years)	19.1	10.9	5.1	3.3	2.2	1.6

Security Groups 22 and 23
PSA Prepayment Assumption Rates

	Class SK					
Distribution Date	**0%**	**100%**	**300%**	**480%**	**750%**	**1,000%**
Initial Percent	100	100	100	100	100	100
July 2025	99	96	89	83	74	66
July 2026	98	89	73	60	43	29
July 2027	97	83	59	42	23	11
July 2028	96	77	48	30	13	4
July 2029	94	71	39	21	7	2
July 2030	93	66	31	15	4	1
July 2031	91	61	25	10	2	0
July 2032	90	56	20	7	1	0
July 2033	88	51	16	5	1	0
July 2034	86	47	13	3	0	0
July 2035	84	43	10	2	0	0
July 2036	82	39	8	2	0	0
July 2037	80	36	7	1	0	0
July 2038	77	33	5	1	0	0
July 2039	74	29	4	1	0	0
July 2040	71	26	3	0	0	0
July 2041	68	24	3	0	0	0
July 2042	65	21	2	0	0	0
July 2043	61	18	1	0	0	0
July 2044	57	16	1	0	0	0
July 2045	53	14	1	0	0	0
July 2046	48	12	1	0	0	0
July 2047	43	10	0	0	0	0
July 2048	38	8	0	0	0	0
July 2049	32	6	0	0	0	0
July 2050	26	4	0	0	0	0
July 2051	19	3	0	0	0	0
July 2052	12	1	0	0	0	0
July 2053	4	0	0	0	0	0
July 2054	0	0	0	0	0	0
Weighted Average Life (years)	19.8	10.9	5.1	3.3	2.2	1.6

Security Group 24
PSA Prepayment Assumption Rates

	Class JA					Class JC					Class JD					Class JL				
Distribution Date	**0%**	**100%**	**120%**	**250%**	**400%**	**0%**	**100%**	**120%**	**250%**	**400%**	**0%**	**100%**	**120%**	**250%**	**400%**	**0%**	**100%**	**120%**	**250%**	**400%**
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2025	97	84	82	68	51	97	87	85	73	60	98	89	87	77	65	100	100	100	100	100
July 2026	94	70	66	41	15	95	75	71	51	29	96	78	75	57	39	100	100	100	100	100
July 2027	90	56	51	19	0	92	63	59	32	7	93	68	64	41	19	100	100	100	100	100
July 2028	87	43	37	0	0	89	53	47	17	0	91	59	54	28	5	100	100	100	100	38
July 2029	83	31	24	0	0	86	43	37	4	0	88	51	45	17	0	100	100	100	100	0
July 2030	80	20	12	0	0	83	34	27	0	0	85	43	37	7	0	100	100	100	55	0
July 2031	76	10	2	0	0	80	25	18	0	0	82	35	29	0	0	100	100	100	0	0
July 2032	72	1	0	0	0	76	17	10	0	0	79	28	22	0	0	100	100	100	0	0
July 2033	67	0	0	0	0	73	10	3	0	0	76	22	16	0	0	100	100	100	0	0
July 2034	63	0	0	0	0	69	3	0	0	0	73	16	10	0	0	100	100	74	0	0
July 2035	58	0	0	0	0	65	0	0	0	0	70	10	4	0	0	100	79	33	0	0
July 2036	53	0	0	0	0	61	0	0	0	0	66	5	0	0	0	100	40	0	0	0
July 2037	48	0	0	0	0	57	0	0	0	0	62	1	0	0	0	100	4	0	0	0
July 2038	42	0	0	0	0	52	0	0	0	0	58	0	0	0	0	100	0	0	0	0
July 2039	37	0	0	0	0	47	0	0	0	0	54	0	0	0	0	100	0	0	0	0
July 2040	31	0	0	0	0	42	0	0	0	0	50	0	0	0	0	100	0	0	0	0
July 2041	24	0	0	0	0	37	0	0	0	0	46	0	0	0	0	100	0	0	0	0
July 2042	18	0	0	0	0	32	0	0	0	0	41	0	0	0	0	100	0	0	0	0
July 2043	11	0	0	0	0	26	0	0	0	0	36	0	0	0	0	100	0	0	0	0
July 2044	4	0	0	0	0	20	0	0	0	0	31	0	0	0	0	100	0	0	0	0
July 2045	0	0	0	0	0	14	0	0	0	0	25	0	0	0	0	100	0	0	0	0
July 2046	0	0	0	0	0	8	0	0	0	0	20	0	0	0	0	100	0	0	0	0
July 2047	0	0	0	0	0	1	0	0	0	0	14	0	0	0	0	100	0	0	0	0
July 2048	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	59	0	0	0	0
July 2049	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	11	0	0	0	0
July 2050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
July 2051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
July 2052	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
July 2053	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
July 2054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	11.8	3.7	3.2	1.8	1.1	13.5	4.6	4.1	2.3	1.4	15.0	5.6	4.9	2.8	1.8	24.2	11.8	10.6	6.1	3.9

Security Group 24
PSA Prepayment Assumption Rates

Distribution Date	Class JM 0%	Class JM 100%	Class JM 120%	Class JM 250%	Class JM 400%	Class JN 0%	Class JN 100%	Class JN 120%	Class JN 250%	Class JN 400%	Class JQ 0%	Class JQ 100%	Class JQ 120%	Class JQ 250%	Class JQ 400%	Class JT 0%	Class JT 100%	Class JT 120%	Class JT 250%	Class JT 400%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2025	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	98	92	90	83	74
July 2026	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	97	84	82	69	55
July 2027	100	100	100	100	42	100	100	100	100	70	100	100	100	100	100	95	77	74	57	40
July 2028	100	100	100	99	0	100	100	100	100	18	100	100	100	100	83	93	70	66	47	30
July 2029	100	100	100	23	0	100	100	100	59	0	100	100	100	100	61	91	63	60	38	22
July 2030	100	100	100	0	0	100	100	100	26	0	100	100	100	88	45	89	58	53	31	16
July 2031	100	100	100	0	0	100	100	100	0	0	100	100	100	72	33	87	52	48	26	12
July 2032	100	100	60	0	0	100	100	79	0	0	100	100	100	59	24	85	47	42	21	9
July 2033	100	59	16	0	0	100	79	56	0	0	100	100	100	48	17	83	42	38	17	6
July 2034	100	18	0	0	0	100	57	35	0	0	100	100	93	39	13	80	38	33	14	5
July 2035	100	0	0	0	0	100	37	16	0	0	100	94	82	31	9	78	34	29	11	3
July 2036	100	0	0	0	0	100	19	0	0	0	100	84	72	25	7	75	30	26	9	2
July 2037	100	0	0	0	0	100	2	0	0	0	100	74	63	20	5	72	27	22	7	2
July 2038	100	0	0	0	0	100	0	0	0	0	100	65	54	16	3	69	23	19	6	1
July 2039	100	0	0	0	0	100	0	0	0	0	100	56	47	12	2	66	20	17	4	1
July 2040	100	0	0	0	0	100	0	0	0	0	100	49	40	10	2	63	17	14	3	1
July 2041	100	0	0	0	0	100	0	0	0	0	100	41	33	7	1	60	15	12	3	0
July 2042	100	0	0	0	0	100	0	0	0	0	100	35	28	6	1	56	13	10	2	0
July 2043	100	0	0	0	0	100	0	0	0	0	100	29	22	4	1	53	10	8	2	0
July 2044	100	0	0	0	0	100	0	0	0	0	100	23	18	3	0	49	8	6	1	0
July 2045	83	0	0	0	0	91	0	0	0	0	100	18	14	2	0	45	6	5	1	0
July 2046	45	0	0	0	0	71	0	0	0	0	100	13	10	1	0	41	5	4	1	0
July 2047	5	0	0	0	0	50	0	0	0	0	100	9	6	1	0	36	3	2	0	0
July 2048	0	0	0	0	0	28	0	0	0	0	89	5	3	0	0	32	2	1	0	0
July 2049	0	0	0	0	0	5	0	0	0	0	76	1	1	0	0	27	0	0	0	0
July 2050	0	0	0	0	0	0	0	0	0	0	62	0	0	0	0	22	0	0	0	0
July 2051	0	0	0	0	0	0	0	0	0	0	47	0	0	0	0	17	0	0	0	0
July 2052	0	0	0	0	0	0	0	0	0	0	32	0	0	0	0	12	0	0	0	0
July 2053	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	6	0	0	0	0
July 2054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	21.9	9.3	8.3	4.6	3.0	23.0	10.4	9.4	5.3	3.4	26.8	16.5	15.4	10.0	6.6	18.3	8.9	8.1	5.0	3.3

PSA Prepayment Assumption Rates

Distribution Date	Class JU 0%	Class JU 100%	Class JU 120%	Class JU 250%	Class JU 400%	Class JV 0%	Class JV 100%	Class JV 120%	Class JV 250%	Class JV 400%	Class JY 0%	Class JY 100%	Class JY 120%	Class JY 250%	Class JY 400%	Class JZ 0%	Class JZ 100%	Class JZ 120%	Class JZ 250%	Class JZ 400%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2025	100	100	100	100	100	92	92	92	92	92	100	100	100	100	100	103	103	103	103	103
July 2026	100	100	100	100	100	85	85	85	85	85	100	100	100	100	100	106	106	106	106	106
July 2027	100	100	100	100	87	77	77	77	77	77	100	100	100	100	100	109	109	109	109	109
July 2028	100	100	100	100	64	68	68	68	68	68	100	100	100	100	100	113	113	113	113	113
July 2029	100	100	100	82	47	60	60	60	60	3	100	100	100	100	84	116	116	116	116	116
July 2030	100	100	100	67	34	51	51	51	51	0	100	100	100	100	62	120	120	120	120	86
July 2031	100	100	100	55	25	42	42	42	37	0	100	100	100	99	45	123	123	123	123	63
July 2032	100	100	91	45	18	32	32	32	0	0	100	100	100	80	33	127	127	127	113	46
July 2033	100	91	81	37	13	23	23	23	0	0	100	100	100	65	24	131	131	131	92	33
July 2034	100	81	71	30	10	13	13	13	0	0	100	100	100	53	17	135	135	135	74	24
July 2035	100	72	63	24	7	2	2	2	0	0	100	100	100	43	13	139	139	139	60	18
July 2036	100	64	55	19	5	0	0	0	0	0	100	100	99	34	9	140	140	138	48	13
July 2037	100	57	48	15	4	0	0	0	0	0	100	100	86	27	6	140	140	120	38	9
July 2038	100	50	42	12	3	0	0	0	0	0	100	89	74	22	5	140	125	104	31	6
July 2039	100	43	36	10	2	0	0	0	0	0	100	78	64	17	3	140	109	90	24	4
July 2040	100	37	30	7	1	0	0	0	0	0	100	67	54	13	2	140	94	76	19	3
July 2041	100	32	26	6	1	0	0	0	0	0	100	57	46	10	2	140	80	64	14	2
July 2042	100	27	21	4	1	0	0	0	0	0	100	48	38	8	1	140	67	53	11	1
July 2043	100	22	17	3	0	0	0	0	0	0	100	39	31	6	1	140	55	43	8	1
July 2044	100	18	14	2	0	0	0	0	0	0	100	32	25	4	0	140	44	34	6	1
July 2045	96	14	10	2	0	0	0	0	0	0	100	25	19	3	0	140	34	26	4	0
July 2046	87	10	8	1	0	0	0	0	0	0	100	18	14	2	0	140	25	19	3	0
July 2047	78	7	5	1	0	0	0	0	0	0	100	12	9	1	0	140	17	12	2	0
July 2048	68	4	3	0	0	0	0	0	0	0	100	6	5	1	0	140	9	6	1	0
July 2049	58	1	0	0	0	0	0	0	0	0	100	1	1	0	0	140	2	1	0	0
July 2050	48	0	0	0	0	0	0	0	0	0	85	0	0	0	0	119	0	0	0	0
July 2051	36	0	0	0	0	0	0	0	0	0	65	0	0	0	0	91	0	0	0	0
July 2052	25	0	0	0	0	0	0	0	0	0	44	0	0	0	0	62	0	0	0	0
July 2053	13	0	0	0	0	0	0	0	0	0	23	0	0	0	0	32	0	0	0	0
July 2054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	25.6	14.8	13.7	8.7	5.7	5.9	5.9	5.9	5.1	3.9	27.7	18.2	17.1	11.4	7.6	27.7	18.2	17.1	11.9	8.2

Security Group 25
PSA Prepayment Assumption Rates

Distribution Date	Class LA 0%	100%	115%	250%	400%	Class LC 0%	100%	115%	250%	400%	Class LM 0%	100%	115%	250%	400%	Class LT 0%	100%	115%	250%	400%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2025	97	85	83	68	52	98	87	86	74	60	100	100	100	100	100	99	92	91	83	74
July 2026	94	70	67	42	17	95	75	73	52	31	100	100	100	100	100	97	84	82	68	55
July 2027	91	57	53	20	0	93	64	60	33	8	100	100	100	100	51	95	76	74	57	40
July 2028	88	44	39	1	0	90	53	49	18	0	100	100	100	100	0	94	70	67	47	30
July 2029	85	32	27	0	0	87	44	39	5	0	100	100	100	31	0	92	63	60	38	22
July 2030	81	21	15	0	0	85	34	29	0	0	100	100	100	0	0	90	57	54	31	16
July 2031	78	11	5	0	0	81	26	21	0	0	100	100	100	0	0	88	52	48	26	12
July 2032	74	2	0	0	0	78	18	13	0	0	100	100	76	0	0	86	47	43	21	9
July 2033	70	0	0	0	0	75	11	5	0	0	100	63	32	0	0	84	42	38	17	6
July 2034	66	0	0	0	0	71	4	0	0	0	100	22	0	0	0	81	37	34	14	4
July 2035	61	0	0	0	0	68	0	0	0	0	100	0	0	0	0	79	33	30	11	3
July 2036	56	0	0	0	0	64	0	0	0	0	100	0	0	0	0	76	29	26	9	2
July 2037	51	0	0	0	0	60	0	0	0	0	100	0	0	0	0	74	26	23	7	2
July 2038	46	0	0	0	0	55	0	0	0	0	100	0	0	0	0	71	22	20	5	1
July 2039	41	0	0	0	0	51	0	0	0	0	100	0	0	0	0	68	19	17	4	1
July 2040	35	0	0	0	0	46	0	0	0	0	100	0	0	0	0	65	16	14	3	1
July 2041	29	0	0	0	0	41	0	0	0	0	100	0	0	0	0	61	14	12	2	0
July 2042	23	0	0	0	0	36	0	0	0	0	100	0	0	0	0	58	11	10	2	0
July 2043	16	0	0	0	0	30	0	0	0	0	100	0	0	0	0	54	9	8	1	0
July 2044	9	0	0	0	0	24	0	0	0	0	100	0	0	0	0	51	7	6	1	0
July 2045	1	0	0	0	0	18	0	0	0	0	100	0	0	0	0	47	5	4	1	0
July 2046	0	0	0	0	0	12	0	0	0	0	69	0	0	0	0	42	3	3	0	0
July 2047	0	0	0	0	0	5	0	0	0	0	28	0	0	0	0	38	2	1	0	0
July 2048	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33	0	0	0	0
July 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	0	0	0	0
July 2050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	0	0	0	0
July 2051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0
July 2052	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0
July 2053	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0
July 2054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	12.4	3.7	3.4	1.8	1.1	14.1	4.7	4.3	2.3	1.5	22.5	9.4	8.6	4.8	3.0	18.6	8.7	8.1	5.0	3.3

PSA Prepayment Assumption Rates

Distribution Date	Class LV 0%	100%	115%	250%	400%	Class LY 0%	100%	115%	250%	400%	Class LZ 0%	100%	115%	250%	400%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2025	93	93	93	93	93	100	100	100	100	100	104	104	104	104	104
July 2026	85	85	85	85	85	100	100	100	100	100	107	107	107	107	107
July 2027	77	77	77	77	77	100	100	100	100	100	111	111	111	111	111
July 2028	69	69	69	69	23	100	100	100	100	85	115	115	115	115	115
July 2029	60	60	60	60	0	100	100	100	100	63	119	119	119	119	93
July 2030	51	51	51	20	0	100	100	100	90	46	123	123	123	123	68
July 2031	42	42	42	0	0	100	100	100	73	34	128	128	128	109	50
July 2032	33	33	33	0	0	100	100	100	60	24	132	132	132	88	36
July 2033	23	23	23	0	0	100	100	100	48	18	137	137	137	72	26
July 2034	13	13	4	0	0	100	100	97	39	13	142	142	142	58	19
July 2035	2	0	0	0	0	100	95	86	31	9	147	141	127	47	14
July 2036	0	0	0	0	0	100	84	75	25	7	148	124	111	37	10
July 2037	0	0	0	0	0	100	74	65	20	5	148	109	96	30	7
July 2038	0	0	0	0	0	100	64	56	16	3	148	95	83	23	5
July 2039	0	0	0	0	0	100	55	48	12	2	148	82	71	18	3
July 2040	0	0	0	0	0	100	47	40	9	2	148	70	60	14	2
July 2041	0	0	0	0	0	100	39	34	7	1	148	58	50	11	2
July 2042	0	0	0	0	0	100	32	27	5	1	148	48	40	8	1
July 2043	0	0	0	0	0	100	26	22	4	0	148	38	32	6	1
July 2044	0	0	0	0	0	100	20	16	3	0	148	29	24	4	0
July 2045	0	0	0	0	0	100	14	12	2	0	148	21	17	3	0
July 2046	0	0	0	0	0	100	9	7	1	0	148	13	11	1	0
July 2047	0	0	0	0	0	100	4	3	0	0	148	6	5	1	0
July 2048	0	0	0	0	0	96	0	0	0	0	141	0	0	0	0
July 2049	0	0	0	0	0	82	0	0	0	0	121	0	0	0	0
July 2050	0	0	0	0	0	67	0	0	0	0	99	0	0	0	0
July 2051	0	0	0	0	0	51	0	0	0	0	76	0	0	0	0
July 2052	0	0	0	0	0	35	0	0	0	0	52	0	0	0	0
July 2053	0	0	0	0	0	18	0	0	0	0	27	0	0	0	0
July 2054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	6.0	6.0	5.9	4.6	3.3	27.0	16.2	15.4	10.0	6.7	27.0	16.3	15.6	10.8	7.4

Security Group 26
PSA Prepayment Assumption Rates

	Class L					Classes LB, LE, LG, LH, LI, LK, LN and LP					Class LD					Class LJ				
Distribution Date	**0%**	**100%**	**135%**	**250%**	**400%**	**0%**	**100%**	**135%**	**250%**	**400%**	**0%**	**100%**	**135%**	**250%**	**400%**	**0%**	**100%**	**135%**	**250%**	**400%**
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2025	99	92	90	83	74	98	90	87	78	67	98	88	85	75	63	100	100	100	100	100
July 2026	97	84	80	69	55	97	80	75	60	43	96	77	72	55	35	100	100	100	100	100
July 2027	96	77	72	57	41	95	71	64	45	25	94	66	59	37	14	100	100	100	100	100
July 2028	95	70	64	47	30	93	62	55	33	11	92	57	48	23	0	100	100	100	100	90
July 2029	93	64	57	39	22	91	54	46	22	1	90	47	38	11	0	100	100	100	100	11
July 2030	91	58	50	32	16	89	47	37	14	0	88	39	28	1	0	100	100	100	100	0
July 2031	90	52	45	26	12	87	40	30	6	0	85	31	20	0	0	100	100	100	49	0
July 2032	88	47	39	21	9	85	33	23	0	0	82	23	12	0	0	100	100	100	2	0
July 2033	86	42	34	17	6	82	27	17	0	0	79	16	5	0	0	100	100	100	0	0
July 2034	84	38	30	14	5	79	21	12	0	0	76	10	0	0	0	100	100	91	0	0
July 2035	81	34	26	11	3	77	16	7	0	0	73	4	0	0	0	100	100	52	0	0
July 2036	79	30	23	9	2	74	11	2	0	0	70	0	0	0	0	100	86	16	0	0
July 2037	77	26	19	7	2	70	6	0	0	0	66	0	0	0	0	100	49	0	0	0
July 2038	74	22	16	5	1	67	2	0	0	0	62	0	0	0	0	100	15	0	0	0
July 2039	71	19	14	4	1	63	0	0	0	0	58	0	0	0	0	100	0	0	0	0
July 2040	68	16	11	3	1	60	0	0	0	0	54	0	0	0	0	100	0	0	0	0
July 2041	65	13	9	2	0	56	0	0	0	0	49	0	0	0	0	100	0	0	0	0
July 2042	61	11	7	2	0	51	0	0	0	0	44	0	0	0	0	100	0	0	0	0
July 2043	58	8	5	1	0	47	0	0	0	0	39	0	0	0	0	100	0	0	0	0
July 2044	54	6	4	1	0	42	0	0	0	0	33	0	0	0	0	100	0	0	0	0
July 2045	50	4	3	0	0	37	0	0	0	0	27	0	0	0	0	100	0	0	0	0
July 2046	46	2	1	0	0	31	0	0	0	0	21	0	0	0	0	100	0	0	0	0
July 2047	41	0	0	0	0	25	0	0	0	0	15	0	0	0	0	100	0	0	0	0
July 2048	36	0	0	0	0	19	0	0	0	0	8	0	0	0	0	100	0	0	0	0
July 2049	31	0	0	0	0	13	0	0	0	0	0	0	0	0	0	100	0	0	0	0
July 2050	26	0	0	0	0	6	0	0	0	0	0	0	0	0	0	46	0	0	0	0
July 2051	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
July 2052	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
July 2053	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
July 2054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	19.3	8.7	7.5	5.0	3.3	16.9	6.1	5.0	3.1	2.0	15.5	5.1	4.2	2.5	1.6	25.9	13.0	11.1	7.0	4.5

PSA Prepayment Assumption Rates

	Class VL					Class YL					Class ZL				
Distribution Date	**0%**	**100%**	**135%**	**250%**	**400%**	**0%**	**100%**	**135%**	**250%**	**400%**	**0%**	**100%**	**135%**	**250%**	**400%**
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2025	93	93	93	93	93	100	100	100	100	100	105	105	105	105	105
July 2026	85	85	85	85	85	100	100	100	100	100	109	109	109	109	109
July 2027	78	78	78	78	78	100	100	100	100	100	114	114	114	114	114
July 2028	69	69	69	69	69	100	100	100	100	100	120	120	120	120	120
July 2029	61	61	61	61	61	100	100	100	100	100	125	125	125	125	125
July 2030	52	52	52	52	0	100	100	100	100	77	131	131	131	131	127
July 2031	43	43	43	43	0	100	100	100	100	56	137	137	137	137	93
July 2032	33	33	33	33	0	100	100	100	100	41	143	143	143	143	68
July 2033	22	22	22	0	0	100	100	100	82	30	150	150	150	134	49
July 2034	12	12	12	0	0	100	100	100	66	22	157	157	157	108	35
July 2035	1	1	1	0	0	100	100	100	53	15	164	164	164	87	25
July 2036	0	0	0	0	0	100	100	100	42	11	164	164	164	69	18
July 2037	0	0	0	0	0	100	100	92	33	8	164	164	152	55	13
July 2038	0	0	0	0	0	100	100	78	26	5	164	164	128	43	9
July 2039	0	0	0	0	0	100	92	65	20	4	164	151	108	33	6
July 2040	0	0	0	0	0	100	78	54	16	3	164	127	89	25	4
July 2041	0	0	0	0	0	100	64	44	12	2	164	106	72	19	3
July 2042	0	0	0	0	0	100	52	34	8	1	164	85	57	14	2
July 2043	0	0	0	0	0	100	40	26	6	1	164	66	43	10	1
July 2044	0	0	0	0	0	100	29	19	4	0	164	48	31	6	1
July 2045	0	0	0	0	0	100	19	12	2	0	164	32	20	4	0
July 2046	0	0	0	0	0	100	10	6	1	0	164	17	10	2	0
July 2047	0	0	0	0	0	100	1	1	0	0	164	2	1	0	0
July 2048	0	0	0	0	0	100	0	0	0	0	164	0	0	0	0
July 2049	0	0	0	0	0	100	0	0	0	0	164	0	0	0	0
July 2050	0	0	0	0	0	100	0	0	0	0	164	0	0	0	0
July 2051	0	0	0	0	0	94	0	0	0	0	155	0	0	0	0
July 2052	0	0	0	0	0	65	0	0	0	0	106	0	0	0	0
July 2053	0	0	0	0	0	33	0	0	0	0	55	0	0	0	0
July 2054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	6.0	6.0	6.0	5.6	4.4	28.5	18.4	16.8	12.2	8.3	28.5	18.4	16.8	12.7	9.0

Security Group 27
PSA Prepayment Assumption Rates

Distribution Date	Classes FW, KF, KS, SW, TE, TH, WF and WS					
	0%	100%	300%	480%	750%	1,000%
Initial Percent . . .	100	100	100	100	100	100
July 2025	99	98	95	92	88	84
July 2026	98	93	83	74	61	50
July 2027	97	86	67	52	34	21
July 2028	96	80	54	37	18	8
July 2029	95	74	44	26	10	3
July 2030	94	69	36	18	5	1
July 2031	92	63	29	13	3	0
July 2032	91	59	23	9	2	0
July 2033	89	54	19	6	1	0
July 2034	88	50	15	4	0	0
July 2035	86	46	12	3	0	0
July 2036	84	42	10	2	0	0
July 2037	82	38	8	1	0	0
July 2038	79	35	6	1	0	0
July 2039	77	31	5	1	0	0
July 2040	74	28	4	0	0	0
July 2041	71	25	3	0	0	0
July 2042	68	23	2	0	0	0
July 2043	64	20	2	0	0	0
July 2044	60	18	1	0	0	0
July 2045	56	15	1	0	0	0
July 2046	52	13	1	0	0	0
July 2047	47	11	1	0	0	0
July 2048	42	9	0	0	0	0
July 2049	36	8	0	0	0	0
July 2050	30	6	0	0	0	0
July 2051	23	4	0	0	0	0
July 2052	16	3	0	0	0	0
July 2053	8	1	0	0	0	0
July 2054	0	0	0	0	0	0
Weighted Average Life (years)	20.5	11.5	5.7	3.9	2.7	2.2

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 1, 6 and 23 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 or the Class F Securities, the investor's own projection of levels of 30-day Average SOFR under a variety of scenarios.

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

Prepayments: Effect on Yields

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

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

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

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

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

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

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

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

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

30-day Average SOFR: Effect on Yields of the Floating Rate and Inverse Floating Rate Classes and the Class F Securities

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

Payment Delay: Effect on Yields of the Fixed Rate Classes

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

Yield Tables

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

The Mortgage Loans will not prepay at any constant rate until maturity, and it is unlikely that 30-day Average SOFR will remain constant. Moreover, it is likely that the Mortgage Loans will 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, and
2. converting the monthly rates to corporate bond equivalent rates.

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

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

SECURITY GROUP 2

Sensitivity of Class SC to Prepayments
Assumed Price 7.0%*

	PSA Prepayment Assumption Rates			
30-day Average SOFR	100%	300%	450%	600%
4.33501%	17.7%	6.9%	(1.5)%	(10.1)%
5.33501%	0.9%	(10.6)%	(19.7)%	(29.2)%
5.66751%	(6.2)%	(17.8)%	(27.0)%	(36.7)%
6.00000% and above	**	**	**	**

SECURITY GROUP 3

Sensitivity of Class IQ to Prepayments
Assumed Price 22.0%*

PSA Prepayment Assumption Rates				
100%	300%	315%	450%	600%
19.1%	1.5%	0.1%	(12.5)%	(25.7)%

Sensitivity of Class QI to Prepayments
Assumed Price 20.0%*

PSA Prepayment Assumption Rates				
100%	296%	300%	450%	600%
20.6%	0.0%	(0.4)%	(16.1)%	(30.1)%

Sensitivity of Class SQ to Prepayments
Assumed Price 11.75%*

	PSA Prepayment Assumption Rates			
30-day Average SOFR	100%	300%	450%	600%
4.34106%	13.2%	2.3%	(6.1)%	(14.8)%
5.34106%	3.1%	(8.2)%	(17.1)%	(26.3)%
5.99553%	(4.7)%	(16.2)%	(25.2)%	(34.8)%
6.65000% and above	**	**	**	**

SECURITY GROUP 4

Sensitivity of Class AI to Prepayments
Assumed Price 16.4%*

PSA Prepayment Assumption Rates				
100%	386%	482%	600%	800%
33.1%	8.5%	0.0%	(9.8)%	(24.9)%

* 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 AS to Prepayments
Assumed Price 8.5%*

30-day Average SOFR	PSA Prepayment Assumption Rates			
	100%	386%	600%	800%
4.33535%	22.0%	7.0%	(4.7)%	(15.9)%
5.33535%	8.5%	(7.5)%	(20.2)%	(32.7)%
5.99268%	(1.3)%	(17.8)%	(31.2)%	(44.7)%
6.65000% and above	**	**	**	**

Sensitivity of Class CS to Prepayments
Assumed Price 6.0%*

30-day Average SOFR	PSA Prepayment Assumption Rates			
	100%	386%	600%	800%
4.33475%	22.5%	7.6%	(4.1)%	(15.3)%
5.33475%	3.1%	(13.2)%	(26.3)%	(39.4)%
5.66738%	(4.7)%	(21.3)%	(34.8)%	(48.6)%
6.00000% and above	**	**	**	**

Sensitivity of Class I to Prepayments
Assumed Price 21.4%*

PSA Prepayment Assumption Rates				
100%	386%	583%	600%	800%
25.3%	10.6%	0.0%	(0.9)%	(11.9)%

Sensitivity of Class IA to Prepayments
Assumed Price 18.1%*

PSA Prepayment Assumption Rates				
100%	386%	501%	600%	800%
30.0%	9.0%	0.0%	(7.6)%	(22.0)%

Sensitivity of Class SU to Prepayments
Assumed Price 5.2%*

30-day Average SOFR	PSA Prepayment Assumption Rates			
	100%	386%	600%	800%
4.33671%	19.6%	4.4%	(7.4)%	(18.9)%
5.33671%	(3.9)%	(20.5)%	(34.0)%	(47.9)%
5.49336%	(9.5)%	(26.2)%	(39.9)%	(54.5)%
5.65000% 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 TB to Prepayments
Assumed Price 1.0%*

30-day Average SOFR	PSA Prepayment Assumption Rates			
	100%	386%	600%	800%
6.00% and below	13.8%	(1.8)%	(14.1)%	(26.0)%
6.10%	1.8%	(14.6)%	(27.8)%	(41.0)%
6.20% and above	**	**	**	**

Sensitivity of Class TC to Prepayments
Assumed Price 72.6%*

30-day Average SOFR	PSA Prepayment Assumption Rates			
	100%	386%	600%	800%
6.000% and below	11.8%	16.5%	19.7%	22.4%
6.325%	7.4%	12.1%	15.3%	18.0%
6.650% and above	3.1%	7.8%	11.0%	13.8%

Sensitivity of Class TD to Prepayments
Assumed Price 72.5%*

30-day Average SOFR	PSA Prepayment Assumption Rates			
	100%	386%	600%	800%
6.000% and below	11.8%	16.6%	19.7%	22.4%
6.225%	7.4%	12.2%	15.4%	18.1%
6.450% and above	3.1%	7.9%	11.1%	13.8%

SECURITY GROUP 6

Sensitivity of Class TA to Prepayments
Assumed Price 1.0%*

30-day Average SOFR	PSA Prepayment Assumption Rates				
	100%	300%	480%	750%	1,000%
6.500% and below	7.1%	(5.3)%	(17.3)%	(36.9)%	(57.5)%
6.575%	(2.3)%	(14.6)%	(26.4)%	(46.1)%	(67.5)%
6.650% and above	**	**	**	**	**

SECURITY GROUP 7

Sensitivity of Class GI to Prepayments
Assumed Price 18.0%*

PSA Prepayment Assumption Rates				
100%	300%	343%	450%	600%
24.6%	4.5%	0.1%	(10.6)%	(24.4)%

* 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 IG to Prepayments
Assumed Price 19.4%*

PSA Prepayment Assumption Rates				
100%	300%	374%	450%	600%
23.5%	6.7%	0.0%	(6.7)%	(19.5)%

Sensitivity of Class SG to Prepayments
Assumed Price 7.0%*

	PSA Prepayment Assumption Rates			
30-day Average SOFR	100%	300%	450%	600%
4.33501%	17.0%	6.4%	(1.8)%	(10.3)%
5.33501%	0.0%	(11.3)%	(20.3)%	(29.7)%
5.64251%	(6.7)%	(18.2)%	(27.3)%	(37.0)%
5.95000% and above	**	**	**	**

Sensitivity of Class TG to Prepayments
Assumed Price 1.0%*

	PSA Prepayment Assumption Rates			
30-day Average SOFR	100%	300%	450%	600%
5.950% and below	7.8%	(3.3)%	(11.9)%	(20.9)%
6.025%	(1.7)%	(13.1)%	(22.2)%	(31.7)%
6.100% and above	**	**	**	**

SECURITY GROUP 8

Sensitivity of Class EI to Prepayments
Assumed Price 19.8%*

PSA Prepayment Assumption Rates					
100%	300%	368%	480%	750%	1,000%
25.0%	6.6%	0.1%	(10.5)%	(32.9)%	(49.9)%

Sensitivity of Class IE to Prepayments
Assumed Price 23.8%*

PSA Prepayment Assumption Rates					
100%	300%	480%	512%	750%	1,000%
21.8%	11.4%	1.8%	0.0%	(13.2)%	(27.7)%

* 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 SE to Prepayments
Assumed Price 9.6%*

30-day Average SOFR	PSA Prepayment Assumption Rates				
	100%	300%	480%	750%	1,000%
4.33535%	18.4%	7.8%	(2.0)%	(17.4)%	(32.2)%
5.33535%	6.4%	(4.8)%	(15.3)%	(32.1)%	(48.7)%
5.99268%	(2.6)%	(14.0)%	(24.9)%	(42.7)%	(61.1)%
6.65000% and above	**	**	**	**	**

SECURITY GROUP 9

Sensitivity of Class DI to Prepayments
Assumed Price 20.5%*

PSA Prepayment Assumption Rates				
100%	351%	385%	600%	800%
23.7%	0.1%	(3.2)%	(22.8)%	(38.5)%

Sensitivity of Class ID to Prepayments
Assumed Price 27.5%*

PSA Prepayment Assumption Rates				
100%	385%	429%	600%	800%
17.6%	2.4%	0.0%	(9.6)%	(21.2)%

Sensitivity of Class SD to Prepayments
Assumed Price 10.9%*

30-day Average SOFR	PSA Prepayment Assumption Rates			
	100%	385%	600%	800%
4.33535%	15.1%	(0.3)%	(12.6)%	(24.4)%
5.33535%	4.3%	(11.8)%	(24.9)%	(37.8)%
5.99268%	(3.8)%	(20.4)%	(34.0)%	(47.7)%
6.65000% and above	**	**	**	**

SECURITY GROUP 10

Sensitivity of Class IT to Prepayments
Assumed Price 1.0%*

30-day Average SOFR	PSA Prepayment Assumption Rates				
	100%	350%	600%	900%	1,200%
5.95% and below	(8.5)%	(40.3)%	(42.5)%	(45.5)%	(67.6)%
6.00%	(19.6)%	(55.8)%	(57.4)%	(55.7)%	(80.4)%
6.05% 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 ST to Prepayments
Assumed Price 3.5%*

30-day Average SOFR	PSA Prepayment Assumption Rates				
	100%	350%	600%	900%	1,200%
4.33808%	43.5%	24.5%	21.5%	14.3%	(0.1)%
5.33808%	7.6%	(18.6)%	(21.3)%	(28.0)%	(46.8)%
5.69404%	(8.1)%	(39.7)%	(41.9)%	(45.0)%	(67.1)%
6.05000% and above	**	**	**	**	**

Sensitivity of Class SX to Prepayments
Assumed Price 3.3%*

30-day Average SOFR	PSA Prepayment Assumption Rates				
	100%	350%	600%	900%	1,200%
4.33808%	43.3%	24.4%	21.4%	14.1%	(0.2)%
5.33808%	5.1%	(21.9)%	(24.6)%	(30.9)%	(50.2)%
5.64404%	(9.8)%	(42.0)%	(44.2)%	(46.7)%	(69.1)%
5.95000% and above	**	**	**	**	**

Sensitivity of Class TI to Prepayments
Assumed Price 1.0%*

30-day Average SOFR	PSA Prepayment Assumption Rates				
	100%	350%	600%	900%	1,200%
5.900% and below	(0.2)%	(28.9)%	(31.4)%	(36.7)%	(57.1)%
5.975%	(13.5)%	(47.1)%	(49.1)%	(50.2)%	(73.5)%
6.050% and above	**	**	**	**	**

Sensitivity of Class TS to Prepayments
Assumed Price 1.7%*

30-day Average SOFR	PSA Prepayment Assumption Rates				
	100%	350%	600%	900%	1,200%
4.33808%	111.1%	96.7%	93.9%	89.2%	78.9%
5.33808%	35.5%	15.4%	12.4%	5.0%	(10.1)%
5.69404%	8.8%	(17.1)%	(19.8)%	(26.6)%	(45.2)%
6.05000% and above	**	**	**	**	**

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* 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 3.2%*

30-day Average SOFR	PSA Prepayment Assumption Rates 100%	350%	600%	900%	1,200%
4.33808%	43.2%	24.3%	21.3%	14.0%	(0.3)%
5.33808%	3.7%	(23.8)%	(26.4)%	(32.5)%	(52.0)%
5.61904%	(10.8)%	(43.4)%	(45.5)%	(47.6)%	(70.3)%
5.90000% and above	**	**	**	**	**

SECURITY GROUP 11

Sensitivity of Class DS to Prepayments
Assumed Price 3.1%*

30-day Average SOFR	PSA Prepayment Assumption Rates 100%	350%	600%	900%	1,200%
4.33601%	49.6%	37.5%	24.9%	9.3%	(6.9)%
5.33601%	12.7%	(1.4)%	(16.4)%	(35.5)%	(56.0)%
5.61801%	2.2%	(12.5)%	(28.5)%	(49.6)%	(72.9)%
5.90000% and above	**	**	**	**	**

Sensitivity of Class TV to Prepayments
Assumed Price 1.0%*

30-day Average SOFR	PSA Prepayment Assumption Rates 100%	350%	600%	900%	1,200%
5.90% and below . . .	3.3%	(11.4)%	(27.3)%	(48.2)%	(71.2)%
5.95%	(3.2)%	(18.2)%	(34.7)%	(57.2)%	(82.5)%
6.00% and above . . .	**	**	**	**	**

SECURITY GROUPS 10 and 11

Sensitivity of Class SY to Prepayments
Assumed Price 5.7%*

30-day Average SOFR	PSA Prepayment Assumption Rates 100%	350%	600%	900%	1,200%
4.33621%	22.4%	8.5%	(5.0)%	(21.9)%	(40.5)%
5.33621%	2.6%	(12.3)%	(28.0)%	(48.1)%	(71.0)%
5.61811%	(3.8)%	(18.9)%	(35.2)%	(56.8)%	(82.1)%
5.90000% 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 12

Sensitivity of Class BI to Prepayments
Assumed Price 15.5%*

PSA Prepayment Assumption Rates					
100%	350%	580%	687%	900%	1,200%
40.9%	24.2%	7.6%	0.0%	(14.0)%	(31.5)%

Sensitivity of Class ES to Prepayments
Assumed Price 5.6%*

	PSA Prepayment Assumption Rates				
30-day Average SOFR	100%	350%	580%	900%	1,200%
4.33501%	38.5%	26.4%	14.9%	(1.6)%	(17.4)%
5.33501%	17.9%	4.6%	(8.2)%	(26.9)%	(45.2)%
5.99251%	4.1%	(10.0)%	(23.9)%	(44.9)%	(66.3)%
6.65000% and above	**	**	**	**	**

Sensitivity of Class IB to Prepayments
Assumed Price 18.9%*

PSA Prepayment Assumption Rates					
100%	350%	580%	747%	900%	1,200%
32.9%	20.5%	8.8%	0.0%	(8.2)%	(24.6)%

Sensitivity of Class IS to Prepayments
Assumed Price 8.9%*

	PSA Prepayment Assumption Rates				
30-day Average SOFR	100%	350%	580%	900%	1,200%
4.33501%	20.6%	7.5%	(5.1)%	(23.4)%	(41.3)%
5.33501%	7.7%	(6.2)%	(19.9)%	(40.2)%	(60.6)%
5.99251%	(1.7)%	(16.1)%	(30.4)%	(52.5)%	(75.7)%
6.65000% and above	**	**	**	**	**

SECURITY GROUP 13

Sensitivity of Class GS to Prepayments
Assumed Price 8.5%*

	PSA Prepayment Assumption Rates				
30-day Average SOFR	100%	400%	700%	1,050%	1,400%
4.33370%	22.1%	6.0%	(11.1)%	(32.2)%	(54.5)%
5.33370%	8.6%	(8.4)%	(26.9)%	(50.4)%	(75.8)%
5.99185%	(1.1)%	(18.7)%	(38.1)%	(64.0)%	(93.2)%
6.65000% and above	**	**	**	**	**

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* 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 SJ to Prepayments
Assumed Price 10.5%*

	PSA Prepayment Assumption Rates				
30-day Average SOFR	**100%**	**400%**	**700%**	**1,050%**	**1,400%**
4.33370%	16.1%	(0.4)%	(18.1)%	(40.1)%	(63.6)%
5.33370%	5.0%	(12.3)%	(31.1)%	(55.4)%	(82.0)%
5.99185%	(3.4)%	(21.0)%	(40.6)%	(67.1)%	(97.3)%
6.65000% and above	**	**	**	**	**

SECURITY GROUP 14

Sensitivity of Class SH to Prepayments
Assumed Price 2.6%*

	PSA Prepayment Assumption Rates				
30-day Average SOFR	**100%**	**400%**	**700%**	**1,050%**	**1,400%**
4.33501%	97.9%	81.1%	63.3%	41.1%	16.6%
5.33501%	49.4%	32.3%	13.9%	(9.3)%	(35.1)%
5.99251%	19.9%	2.1%	(17.4)%	(42.5)%	(71.2)%
6.65000% and above	**	**	**	**	**

SECURITY GROUP 15

Sensitivity of Class HI to Prepayments
Assumed Price 17.3%*

PSA Prepayment Assumption Rates					
100%	**300%**	**450%**	**694%**	**700%**	**900%**
36.2%	24.9%	15.6%	0.0%	(0.4)%	(12.8)%

Sensitivity of Class HS to Prepayments
Assumed Price 7.6%*

	PSA Prepayment Assumption Rates				
30-day Average SOFR	**100%**	**300%**	**450%**	**700%**	**900%**
4.33370%	25.8%	15.6%	7.7%	(5.8)%	(16.9)%
5.33370%	10.7%	(0.2)%	(8.8)%	(23.7)%	(36.2)%
5.99185%	0.0%	(11.3)%	(20.3)%	(36.3)%	(50.2)%
6.65000% and above	**	**	**	**	**

Sensitivity of Class IH to Prepayments
Assumed Price 19.1%*

PSA Prepayment Assumption Rates					
100%	**300%**	**450%**	**700%**	**737%**	**900%**
32.5%	22.6%	15.0%	2.0%	0.0%	(8.7)%

* 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 S to Prepayments
Assumed Price 6.8%*

30-day Average SOFR	PSA Prepayment Assumption Rates 100%	300%	450%	700%	900%
4.33370%	29.9%	19.9%	12.2%	(1.0)%	(11.8)%
5.33370%	13.1%	2.3%	(6.2)%	(20.8)%	(33.1)%
5.99185%	1.4%	(9.9)%	(18.8)%	(34.7)%	(48.4)%
6.65000% and above	**	**	**	**	**

Sensitivity of Class SI to Prepayments
Assumed Price 6.4%*

30-day Average SOFR	PSA Prepayment Assumption Rates 100%	300%	450%	700%	900%
4.33370%	32.4%	22.5%	14.9%	1.9%	(8.8)%
5.33370%	14.5%	3.7%	(4.6)%	(19.1)%	(31.3)%
5.99185%	2.2%	(9.1)%	(18.0)%	(33.8)%	(47.4)%
6.65000% and above	**	**	**	**	**

SECURITY GROUP 16

Sensitivity of Class IN to Prepayments
Assumed Price 22.2%*

PSA Prepayment Assumption Rates 100%	300%	480%	557%	750%	1,000%
24.0%	13.8%	4.2%	0.1%	(10.6)%	(24.8)%

Sensitivity of Class NI to Prepayments
Assumed Price 17.6%*

PSA Prepayment Assumption Rates 100%	300%	435%	480%	750%	1,000%
29.9%	12.5%	0.1%	(3.9)%	(25.8)%	(42.7)%

Sensitivity of Class SN to Prepayments
Assumed Price 6.4%*

30-day Average SOFR	PSA Prepayment Assumption Rates 100%	300%	480%	750%	1,000%
4.33535%	20.1%	9.7%	(0.1)%	(15.3)%	(29.9)%
5.33535%	1.8%	(9.5)%	(20.3)%	(37.6)%	(55.0)%
5.65768%	(5.5)%	(17.0)%	(28.0)%	(46.0)%	(65.0)%
5.98000% 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 17

Sensitivity of Class MS to Prepayments
Assumed Price 1.5%

30-day Average SOFR	PSA Prepayment Assumption Rates			
	100%	286%	450%	600%
3.85506%	105.1%	97.1%	89.9%	83.3%
4.33671%	64.5%	55.9%	48.2%	41.0%
4.81836%	26.9%	17.3%	8.5%	0.2%
5.30000% and above	**	**	**	**

Sensitivity of Class SM to Prepayments
Assumed Price 2.9%

30-day Average SOFR	PSA Prepayment Assumption Rates			
	100%	286%	450%	600%
3.88006%	44.3%	35.2%	27.0%	19.4%
4.33671%	26.2%	16.6%	7.8%	(0.5)%
4.79336%	8.4%	(2.0)%	(11.6)%	(20.7)%
5.25000% and above	**	**	**	**

Sensitivity of Class TM to Prepayments
Assumed Price 1.0%

30-day Average SOFR	PSA Prepayment Assumption Rates			
	100%	286%	450%	600%
5.250% and below	(5.8)%	(16.5)%	(26.5)%	(36.3)%
5.275%	(11.0)%	(21.7)%	(31.7)%	(41.7)%
5.300% and above	**	**	**	**

SECURITY GROUP 18

Sensitivity of Class JS to Prepayments
Assumed Price 3.2%*

30-day Average SOFR	PSA Prepayment Assumption Rates				
	100%	350%	580%	900%	1,200%
4.3364%	49.4%	33.8%	18.4%	(4.9)%	(29.4)%
5.3364%	13.9%	(1.7)%	(17.2)%	(41.2)%	(67.4)%
5.6682%	1.8%	(13.7)%	(29.3)%	(53.8)%	(81.3)%
6.0000% 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 19

Sensitivity of Class KI to Prepayments
Assumed Price 22.3%*

PSA Prepayment Assumption Rates				
100%	225%	350%	421%	500%
18.2%	11.3%	4.2%	0.0%	(4.7)%

SECURITY GROUP 20

Sensitivity of Class SL to Prepayments
Assumed Price 2.5%

	PSA Prepayment Assumption Rates				
30-day Average SOFR	100%	300%	480%	750%	1,000%
3.70%	57.7%	44.6%	32.1%	11.9%	(8.6)%
4.20%	34.7%	21.8%	9.5%	(10.4)%	(30.9)%
4.70%	12.5%	(0.1)%	(12.2)%	(32.0)%	(52.8)%
5.20% and above	**	**	**	**	**

SECURITY GROUP 21

Sensitivity of Class LS to Prepayments
Assumed Price 5.3%*

	PSA Prepayment Assumption Rates				
30-day Average SOFR	100%	400%	700%	1,050%	1,400%
4.33576%	42.4%	27.5%	11.9%	(7.0)%	(26.8)%
5.33576%	20.6%	4.3%	(12.9)%	(34.2)%	(56.8)%
6.01788%	5.6%	(11.6)%	(30.4)%	(54.6)%	(81.0)%
6.70000% and above	**	**	**	**	**

SECURITY GROUP 22

Sensitivity of Class QS to Prepayments
Assumed Price 2.2%

	PSA Prepayment Assumption Rates				
30-day Average SOFR	100%	300%	480%	750%	1,000%
3.92%	53.2%	40.8%	29.0%	10.2%	(8.9)%
4.33%	31.9%	19.5%	7.7%	(11.2)%	(30.6)%
4.74%	11.2%	(1.2)%	(13.0)%	(32.3)%	(52.4)%
5.15% and above	**	**	**	**	**

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* 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 23

Sensitivity of Class YS to Prepayments
Assumed Price 2.3%

	PSA Prepayment Assumption Rates				
30-day Average SOFR	100%	300%	480%	750%	1,000%
3.94115%	49.3%	36.8%	25.0%	6.0%	(13.3)%
4.34410%	29.3%	16.9%	5.1%	(14.0)%	(33.5)%
4.74705%	9.9%	(2.5)%	(14.3)%	(33.7)%	(53.9)%
5.15000% and above	**	**	**	**	**

SECURITY GROUPS 22 and 23

Sensitivity of Class SK to Prepayments
Assumed Price 2.7%

	PSA Prepayment Assumption Rates				
30-day Average SOFR	100%	300%	480%	750%	1,000%
3.93038%	40.8%	28.4%	16.6%	(2.4)%	(21.6)%
4.33692%	23.9%	11.5%	(0.3)%	(19.4)%	(39.1)%
4.74346%	7.1%	(5.3)%	(17.1)%	(36.5)%	(56.8)%
5.15000% and above	**	**	**	**	**

SECURITY GROUP 26

Sensitivity of Class LI to Prepayments
Assumed Price 16.0%*

PSA Prepayment Assumption Rates				
100%	135%	209%	250%	400%
14.3%	10.1%	0.0%	(6.1)%	(31.4)%

SECURITY GROUP 27

Sensitivity of Class KS to Prepayments
Assumed Price 4.4%*

	PSA Prepayment Assumption Rates				
30-day Average SOFR	100%	300%	480%	750%	1,000%
4.34106%	20.8%	10.3%	0.6%	(14.5)%	(29.1)%
5.34106%	(8.2)%	(19.7)%	(30.7)%	(48.9)%	(68.4)%
5.42053%	(12.8)%	(24.2)%	(35.2)%	(53.8)%	(74.3)%
5.50000% 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 SW to Prepayments
Assumed Price 4.1%*

30-day Average SOFR	PSA Prepayment Assumption Rates 100%	300%	480%	750%	1,000%
4.34106%	20.2%	9.7%	(0.1)%	(15.3)%	(29.9)%
5.34106%	(14.2)%	(25.5)%	(36.5)%	(55.2)%	(76.1)%
5.37053%	(17.8)%	(29.1)%	(39.9)%	(59.1)%	(80.8)%
5.40000% and above . . .	**	**	**	**	**

Sensitivity of Class TE to Prepayments
Assumed Price 1.0%*

30-day Average SOFR	PSA Prepayment Assumption Rates 100%	300%	480%	750%	1,000%
5.30% and below . . .	1.7%	(9.6)%	(20.4)%	(37.7)%	(55.2)%
5.35%	(5.6)%	(17.0)%	(28.0)%	(46.2)%	(65.3)%
5.40% and above . . .	**	**	**	**	**

Sensitivity of Class TH to Prepayments
Assumed Price 1.0%*

30-day Average SOFR	PSA Prepayment Assumption Rates 100%	300%	480%	750%	1,000%
5.40% and below . . .	1.8%	(9.6)%	(20.3)%	(37.7)%	(55.2)%
5.45%	(5.5)%	(17.0)%	(28.0)%	(46.2)%	(65.2)%
5.50% and above . . .	**	**	**	**	**

Sensitivity of Class WS to Prepayments
Assumed Price 3.8%

30-day Average SOFR	PSA Prepayment Assumption Rates 100%	300%	480%	750%	1,000%
3.86159%	33.8%	23.9%	14.9%	0.8%	(12.5)%
4.34106%	19.5%	9.0%	(0.8)%	(16.1)%	(30.8)%
4.82053%	4.9%	(6.3)%	(16.9)%	(33.8)%	(50.7)%
5.30000% 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 Notional and Accrual Classes of Regular Securities will be issued with original issue discount ("OID"), and certain other Classes of Regular Securities may be issued with OID. *See "Certain United States Federal Income Tax Consequences — Tax Treatment of Regular Securities — Original Issue Discount," "— Variable Rate Securities" and "— Interest Weighted Securities and Non-VRDI Securities" in the Base Offering Circular.*

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

Group(s)	PSA
1 and 24	120%
2, 3, 5 and 7	300%
4	386%
6, 8, 16, 20, 22, 23 and 27	480%
9	385%
10 and 11	600%
12 and 18	580%
13, 14 and 21	700%
15	450%
17	286%
19	225%
25	115%
26	135%

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

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

Residual Securities

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

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

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

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

MX Securities

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

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

ERISA MATTERS

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

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

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

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

See "ERISA Considerations" in the Base Offering Circular.

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

LEGAL INVESTMENT CONSIDERATIONS

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

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

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

PLAN OF DISTRIBUTION

Subject to the terms and conditions of the Sponsor Agreement, the Sponsor has agreed to purchase all of the Securities if any are sold and purchased. The Sponsor proposes to offer the Regular and MX Classes to the public from time to time for sale in negotiated transactions at varying prices to be determined at the time of sale, plus accrued interest from (1) July 1, 2024 on the Fixed Rate Classes and (2) July 20, 2024 on the Floating Rate and Inverse Floating Rate Classes. The Sponsor may effect these transactions by sales to or through certain securities dealers. These dealers may receive compensation in the form of discounts, concessions or commissions from the Sponsor and/or commissions from any purchasers for which they act as agents. Some of the Securities may be sold through dealers in relatively small sales. In the usual case, the commission charged on a relatively small sale of securities will be a higher percentage of the sales price than that charged on a large sale of securities.

INCREASE IN SIZE

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

LEGAL MATTERS

Certain legal matters will be passed upon for Ginnie Mae by Hunton Andrews Kurth LLP, for the Trust by Cleary Gottlieb Steen & Hamilton LLP and Marcell Solomon & Associates, P.C., and for the Trustee by Faegre Drinker Biddle & Reath LLP.

Schedule I

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								
NF	$ 12,144,746	F	$ 74,311,926	SC/PT	(5)	FLT/WAC	38384QYA0	June 2051
PF	12,581,809							
UF	23,358,078							
VF	26,227,293							
Security Group 2								
Combination 2								
CL	$ 3,082,000	YC	$ 9,515,334	SEQ	4.50%	FIX	38384QYB8	July 2054
CV	2,517,000							
CZ	3,916,334							
Combination 3								
CV	$ 2,517,000	CY	$ 6,433,334	SEQ	4.50%	FIX	38384QYC6	July 2054
CZ	3,916,334							
Combination 4								
CA	$ 23,818,000	CB	$ 26,900,000	SEQ	4.50%	FIX	38384QYD4	January 2052
CL	3,082,000							
Combination 5								
CA	$ 23,818,000	CT	$ 33,333,334	PT	4.50%	FIX	38384QYE2	July 2054
CL	3,082,000							
CV	2,517,000							
CZ	3,916,334							
Security Group 3								
Combination 6(6)								
QA	$ 52,998,000	QB	$ 52,998,000	SEQ	3.00%	FIX	38384QYF9	July 2050
		QC	52,998,000	SEQ	3.50	FIX	38384QYG7	July 2050
		QD	52,998,000	SEQ	4.00	FIX	38384QYH5	July 2050
		QE	39,748,500	SEQ	5.00	FIX	38384QYJ1	July 2050
		QI	13,249,500	NTL(SEQ)	6.00	FIX/IO	38384QYK8	July 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 7								
QL	$ 6,989,000	YQ	$ 22,002,000	SEQ	4.50%	FIX	38384QYL6	July 2054
QV	5,873,000							
QZ	9,140,000							
Combination 8								
QV	$ 5,873,000	QY	$ 15,013,000	SEQ	4.50%	FIX	38384QYM4	July 2054
QZ	9,140,000							
Combination 9(6)								
QA	$ 52,998,000	IQ	$ 14,996,750	NTL(SEQ)	6.00%	FIX/IO	38384QYN2	December 2051
QL	6,989,000	QG	59,987,000	SEQ	3.00	FIX	38384QYP7	December 2051
		QH	59,987,000	SEQ	3.50	FIX	38384QYQ5	December 2051
		QJ	59,987,000	SEQ	4.00	FIX	38384QYR3	December 2051
		QK	59,987,000	SEQ	4.50	FIX	38384QYS1	December 2051
		QM	44,990,250	SEQ	5.00	FIX	38384QYT9	December 2051
Combination 10								
QA	$ 52,998,000	Q	$ 75,000,000	PT	4.50%	FIX	38384QYU6	July 2054
QL	6,989,000							
QV	5,873,000							
QZ	9,140,000							
Security Group 4								
Combination 11(6)								
AB	$ 43,579,000	AG	$ 48,986,000	SEQ	4.00%	FIX	38384QYV4	August 2052
AM	5,407,000	AH	48,986,000	SEQ	4.25	FIX	38384QYW2	August 2052
		AJ	48,986,000	SEQ	4.50	FIX	38384QYX0	August 2052
		AK	24,493,000	SEQ	5.00	FIX	38384QYY8	August 2052
		IA	3,768,153	NTL(SEQ)	6.50	FIX/IO	38384QYZ5	August 2052
Combination 12								
FY	$ 77,000,000	BF	$ 77,000,000	PT	(5)	FLT	38384QZA9	July 2054
TB	77,000,000							

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 13(6)								
AB	$ 43,579,000	AC	$ 43,579,000	SEQ	4.00%	FIX	38384QZB7	April 2051
		AD	43,579,000	SEQ	4.25	FIX	38384QZC5	April 2051
		AE	21,789,500	SEQ	5.00	FIX	38384QZD3	April 2051
		AI	3,352,230	NTL(SEQ)	6.50	FIX/IO	38384QZE1	April 2051
Combination 14(6)								
AB	$ 43,579,000	A	$ 58,229,169	PT	4.50%	FIX	38384QZF8	July 2054
AL	9,243,169	AN	58,229,169	PT	4.00	FIX	38384QZG6	July 2054
AM	5,407,000	AP	58,229,169	PT	4.25	FIX	38384QZH4	July 2054
		AQ	29,114,584	PT	5.00	FIX	38384QZJ0	July 2054
		I	4,479,166	NTL(PT)	6.50	FIX/IO	38384QZK7	July 2054
Combination 15								
AL	$ 9,243,169	AY	$ 14,650,169	SEQ	4.50%	FIX	38384QZL5	July 2054
AM	5,407,000							
Security Group 7								
Combination 16								
GV	$ 3,149,000	GY	$ 8,048,000	SEQ	4.50%	FIX	38384QZM3	July 2054
GZ	4,899,000							
Combination 17(6)								
GA	$ 28,225,000	GB	$ 28,225,000	SEQ	3.00%	FIX	38384QZN1	June 2050
		GC	28,225,000	SEQ	3.50	FIX	38384QZP6	June 2050
		GD	28,225,000	SEQ	4.00	FIX	38384QZQ4	June 2050
		GE	21,168,750	SEQ	5.00	FIX	38384QZR2	June 2050
		GI	7,056,250	NTL(SEQ)	6.00	FIX/IO	38384QZS0	June 2050
Combination 18								
GA	$ 28,225,000	G	$ 40,000,000	PT	4.50%	FIX	38384QZT8	July 2054
GM	3,727,000							
GV	3,149,000							
GZ	4,899,000							
Combination 19								
CF	$ 60,000,000	FG	$ 60,000,000	PT	(5)	FLT	38384QZU5	July 2054
TG	60,000,000							

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 20								
GM	$ 3,727,000	YG	$ 11,775,000	SEQ	4.50%	FIX	38384QZV3	July 2054
GV	3,149,000							
GZ	4,899,000							
Combination 21(6)								
GA	$ 28,225,000	GH	$ 31,952,000	SEQ	3.00%	FIX	38384QZW1	December 2051
GM	3,727,000	GJ	31,952,000	SEQ	3.50	FIX	38384QZX9	December 2051
		GK	31,952,000	SEQ	4.00	FIX	38384QZY7	December 2051
		GN	31,952,000	SEQ	4.50	FIX	38384QZZ4	December 2051
		GP	23,964,000	SEQ	5.00	FIX	38384QA24	December 2051
		IG	7,988,000	NTL(SEQ)	6.00	FIX/IO	38384QA32	December 2051
Security Group 8								
Combination 22(6)								
EA	$ 28,033,000	EB	$ 28,033,000	SEQ	4.00%	FIX	38384QA40	April 2051
		EC	28,033,000	SEQ	4.25	FIX	38384QA57	April 2051
		ED	14,016,500	SEQ	5.00	FIX	38384QA65	April 2051
		EI	2,156,384	NTL(SEQ)	6.50	FIX/IO	38384QA73	April 2051
Combination 23(6)								
EA	$ 28,033,000	E	$ 37,500,000	PT	4.50%	FIX	38384QA81	July 2054
EY	9,467,000	EG	37,500,000	PT	4.00	FIX	38384QA99	July 2054
		EH	37,500,000	PT	4.25	FIX	38384QB23	July 2054
		EJ	18,750,000	PT	5.00	FIX	38384QB31	July 2054
		IE	2,884,615	NTL(PT)	6.50	FIX/IO	38384QB49	July 2054
Security Group 9								
Combination 24(6)								
DA	$ 31,820,000	D	$ 42,500,000	PT	4.50%	FIX	38384QB56	July 2054
DY	10,680,000	DH	42,500,000	PT	4.00	FIX	38384QB64	July 2054
		DJ	42,500,000	PT	4.25	FIX	38384QB72	July 2054
		DK	21,250,000	PT	5.00	FIX	38384QB80	July 2054
		ID	3,269,230	NTL(pt)	6.50	FIX/IO	38384QB98	July 2054

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 25(6)								
DA	$ 31,820,000	DB	$ 31,820,000	SEQ	4.00%	FIX	38384QC22	April 2051
		DC	31,820,000	SEQ	4.25	FIX	38384QC30	April 2051
		DE	31,820,000	SEQ	4.50	FIX	38384QC48	April 2051
		DG	15,910,000	SEQ	5.00	FIX	38384QC55	April 2051
		DI	2,447,692	NTL(SEQ)	6.50	FIX/IO	38384QC63	April 2051
Security Group 10								
Combination 26								
IT	$ 25,000,000	TS	$ 50,000,000	NTL(TAC/AD)	(5)	INV/IO	38384QC71	July 2064
SX	25,000,000							
TI	25,000,000							
XS	25,000,000							
Combination 27								
IT	$ 25,000,000	ST	$ 25,000,000	NTL(TAC/AD)	(5)	INV/IO	38384QC89	July 2064
SX	25,000,000							
Combination 28								
FT	$ 25,000,000	FX	$ 25,000,000	TAC/AD	(5)	FLT	38384QC97	July 2064
IT	25,000,000							
Security Group 11								
Combination 29								
FV	$230,000,000	DF	$230,000,000	PT	(5)	FLT	38384QD21	July 2064
TV	230,000,000							
Security Groups 10 and 11								
Combination 30(7)								
DS	$230,000,000	SY	$255,000,000	NTL(PT/TAC/AD)	(5)	INV/IO	38384QD39	July 2064
XS	25,000,000							

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 12								
Combination 31(6)								
B	$ 29,271,000	BC	$ 29,271,000	SEQ	4.00%	FIX	38384QD47	August 2052
		BD	29,271,000	SEQ	4.50	FIX	38384QD54	August 2052
		BE	29,271,000	SEQ	4.75	FIX	38384QD62	August 2052
		BG	19,514,000	SEQ	5.50	FIX	38384QD70	August 2052
		BI	4,181,571	NTL(SEQ)	7.00	FIX/IO	38384QD88	August 2052
Combination 32(6)								
B	$ 29,271,000	BH	$ 35,000,000	PT	4.00%	FIX	38384QD96	July 2054
BY	5,729,000	BJ	35,000,000	PT	4.50	FIX	38384QE20	July 2054
		BK	35,000,000	PT	4.75	FIX	38384QE38	July 2054
		BL	35,000,000	PT	5.00	FIX	38384QE46	July 2054
		BN	23,333,333	PT	5.50	FIX	38384QE53	July 2054
		IB	5,000,000	NTL(PT)	7.00	FIX/IO	38384QE61	July 2054
Security Group 15								
Combination 33								
HS	$ 75,000,000	S	$225,000,000	NTL(PT)	(5)	INV/IO	38384QE79	July 2054
SI	150,000,000							
Combination 34(6)								
HA	$ 47,063,000	HC	$ 51,980,000	SEQ	4.50%	FIX	38384QE87	September 2053
HN	4,917,000	HD	51,980,000	SEQ	5.00	FIX	38384QE95	September 2053
		HE	25,990,000	SEQ	5.50	FIX	38384QF29	September 2053
		HI	3,712,857	NTL(SEQ)	7.00	FIX/IO	38384QF37	September 2053
Combination 35								
HL	$ 4,270,000	HY	$ 9,187,000	SEQ	5.00%	FIX	38384QF45	July 2054
HN	4,917,000							
Combination 36(6)								
HA	$ 47,063,000	H	$ 56,250,000	PT	5.00%	FIX	38384QF52	July 2054
HL	4,270,000	HG	56,250,000	PT	4.50	FIX	38384QF60	July 2054
HN	4,917,000	HJ	28,125,000	PT	5.50	FIX	38384QF78	July 2054
		IH	4,017,857	NTL(PT)	7.00	FIX/IO	38384QF86	July 2054

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 16								
Combination 37(6)								
NA	$ 18,710,000	NB	$ 18,710,000	SEQ	4.00%	FIX	38384QF94	April 2051
		NC	18,710,000	SEQ	4.25	FIX	38384QG28	April 2051
		ND	9,355,000	SEQ	5.00	FIX	38384QG36	April 2051
		NI	1,439,230	NTL(SEQ)	6.50	FIX/IO	38384QG44	April 2051
Combination 38(6)								
NA	$ 18,710,000	IN	$ 1,923,076	NTL(PT)	6.50%	FIX/IO	38384QG51	July 2054
NY	6,290,000	N	25,000,000	PT	4.50	FIX	38384QG69	July 2054
		NE	25,000,000	PT	4.00	FIX	38384QG77	July 2054
		NG	25,000,000	PT	4.25	FIX	38384QG85	July 2054
		NH	12,500,000	PT	5.00	FIX	38384QG93	July 2054
Security Group 17								
Combination 39								
SM	$ 50,000,000	MS	$ 50,000,000	NTL(PT)	(5)	INV/IO	38384QH27	July 2054
TM	50,000,000							
Combination 40								
MF	$ 50,000,000	FM	$ 50,000,000	PT	(5)	FLT	38384QH35	July 2054
TM	50,000,000							
Combination 41								
MF	$ 50,000,000	M	$ 50,000,000	PT	6.50%	FIX	38384QH43	July 2054
SM	50,000,000							
TM	50,000,000							
Combination 42								
MV	$ 6,922,914	BM	$ 15,403,000	SEQ	5.50%	FIX	38384QH50	July 2054
MZ	8,480,086							
Security Groups 22 and 23								
Combination 43(7)								
QS	$ 50,000,000	SK	$ 98,196,134	NTL(PT)	(5)	INV/IO	38384QH68	July 2054
YS	48,196,134							

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 24								
Combination 44								
JA	$110,764,000	JC	$133,229,000	SEQ	3.00%	FIX	38384QH76	September 2047
JM	22,465,000							
Combination 45								
JL	$ 20,375,000	JQ	$ 74,685,916	SEQ	3.00%	FIX	38384QH84	July 2054
JV	15,525,000							
JZ	38,785,916							
Combination 46								
JL	$ 20,375,000	JU	$ 97,150,916	SEQ	3.00%	FIX	38384QH92	July 2054
JM	22,465,000							
JV	15,525,000							
JZ	38,785,916							
Combination 47								
JA	$110,764,000	JD	$153,604,000	SEQ	3.00%	FIX	38384QJ25	October 2049
JL	20,375,000							
JM	22,465,000							
Combination 48								
JV	$ 15,525,000	JY	$ 54,310,916	SEQ	3.00%	FIX	38384QJ33	July 2054
JZ	38,785,916							
Combination 49								
JA	$110,764,000	JT	$207,914,916	PT	3.00%	FIX	38384QJ41	July 2054
JL	20,375,000							
JM	22,465,000							
JV	15,525,000							
JZ	38,785,916							
Combination 50								
JL	$ 20,375,000	JN	$ 42,840,000	SEQ	3.00%	FIX	38384QJ58	October 2049
JM	22,465,000							

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 25								
Combination 51								
LA	$ 45,430,000	LT	$ 83,816,192	PT	3.50%	FIX	38384QJ66	July 2054
LM	9,144,000							
LV	9,491,000							
LZ	19,751,192							
Combination 52								
LV	$ 9,491,000	LY	$ 29,242,192	SEQ	3.50%	FIX	38384QJ74	July 2054
LZ	19,751,192							
Combination 53								
LA	$ 45,430,000	LC	$ 54,574,000	SEQ	3.50%	FIX	38384QJ82	April 2048
LM	9,144,000							
Security Group 26								
Combination 54(6)								
LD	$ 97,004,000	LB	$111,180,000	SEQ	3.00%	FIX	38384QJ90	May 2051
LJ	14,176,000	LE	111,180,000	SEQ	3.50	FIX	38384QK23	May 2051
		LG	111,180,000	SEQ	4.00	FIX	38384QK31	May 2051
		LH	111,180,000	SEQ	4.25	FIX	38384QK49	May 2051
		LI	37,060,000	NTL(SEQ)	4.50	FIX/IO	38384QK56	May 2051
		LK	111,180,000	SEQ	4.50	FIX	38384QK64	May 2051
		LN	95,297,142	SEQ	4.75	FIX	38384QK72	May 2051
		LP	83,385,000	SEQ	5.00	FIX	38384QK80	May 2051
Combination 55								
VL	$ 11,498,000	YL	$ 29,390,726	SEQ	4.50%	FIX	38384QK98	July 2054
ZL	17,892,726							
Combination 56								
LD	$ 97,004,000	L	$140,570,726	PT	4.50%	FIX	38384QL22	July 2054
LJ	14,176,000							
VL	11,498,000							
ZL	17,892,726							

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 27								
Combination 57								
KF	$200,000,000	FW	$200,000,000	PT	(5)	FLT	38384QL30	July 2054
TH	200,000,000							
Combination 58								
TE	$200,000,000	KS	$200,000,000	NTL(PT)	(5)	INV/IO	38384QL48	July 2054
TH	200,000,000							
WS	200,000,000							
Combination 59								
TE	$200,000,000	SW	$200,000,000	NTL(PT)	(5)	INV/IO	38384QL55	July 2054
WS	200,000,000							
Combination 60								
KF	$200,000,000	WF	$200,000,000	PT	(5)	FLT	38384QL63	July 2054
TE	200,000,000							
TH	200,000,000							

(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 6, 9, 11, 13, 14, 17, 21, 22, 23, 24, 25, 31, 32, 34, 36, 37, 38 and 54, various subcombinations are permitted. *See "Description of the Securities — Modification and Exchange" in the Base Offering Circular for a discussion of subcombinations.*

(7) Derived from REMIC Classes relating to separate Groups.

Schedule II

SCHEDULED PRINCIPAL BALANCES

Distribution Date	Classes FT and TF (in the aggregate)
Initial Balance	$50,000,000.00
August 2024	49,793,365.42
September 2024	49,545,128.91
October 2024	49,255,325.54
November 2024	48,924,073.62
December 2024	48,551,575.46
January 2025	48,138,117.75
February 2025	47,684,071.82
March 2025	47,189,893.49
April 2025	46,656,122.72
May 2025	46,083,382.90
June 2025	45,472,379.91
July 2025	44,823,900.86
August 2025	44,138,812.55
September 2025	43,418,059.60
October 2025	42,662,662.36
November 2025	41,873,714.47
December 2025	41,052,380.19
January 2026	40,199,891.45
February 2026	39,317,544.60
March 2026	38,406,697.00
April 2026	37,468,763.25
May 2026	36,505,211.30
June 2026	35,517,558.30
July 2026	34,507,366.22
August 2026	33,476,237.40
September 2026	32,425,809.79
October 2026	31,357,752.18
November 2026	30,273,759.23
December 2026	29,212,490.31
January 2027	28,173,414.54
February 2027	27,156,013.07
March 2027	26,159,778.74
April 2027	25,184,215.93
May 2027	24,228,840.18
June 2027	23,293,178.01
July 2027	22,376,766.66
August 2027	21,479,153.79
September 2027	20,599,897.34
October 2027	19,738,565.21
November 2027	18,894,735.07
December 2027	18,067,994.14
January 2028	17,257,938.97
February 2028	16,464,175.20
March 2028	15,686,317.39

Distribution Date	Classes FT and TF (in the aggregate)
April 2028	$14,923,988.82
May 2028	14,176,821.26
June 2028	13,444,454.77
July 2028	12,726,537.56
August 2028	12,022,725.77
September 2028	11,332,683.29
October 2028	10,656,081.59
November 2028	9,992,599.55
December 2028	9,341,923.27
January 2029	8,703,745.95
February 2029	8,077,767.67
March 2029	7,463,695.30
April 2029	6,861,242.26
May 2029	6,270,128.46
June 2029	5,690,080.10
July 2029	5,120,829.53
August 2029	4,562,115.12
September 2029	4,013,681.11
October 2029	3,475,277.51
November 2029	2,946,659.91
December 2029	2,427,589.43
January 2030	1,917,832.50
February 2030	1,417,160.83
March 2030	925,351.23
April 2030	442,185.50
May 2030 and thereafter	0.00

Exhibit A

Underlying Certificates

Trust Asset Group or Subgroup	Issuer	Series	Class	Issue Date	CUSIP Number	Interest Rate	Interest Type(1)	Final Distribution Date	Principal Type(1)	Original Principal or Notional Balance of Class	Underlying Certificate Factor(2)	Principal or Notional Balance in Trust	Percentage of Class in Trust	Ginnie Mae I or II
1A	Ginnie Mae	2024-065	FA(3)	April 30, 2024	38384NKP9	(4)	FLT	June 2051	SC/PT	$26,962,927	0.97271685	$26,227,293.42	100.0000000000%	II
1B	Ginnie Mae	2024-065	FB(5)	April 30, 2024	38384NKT1	(4)	FLT	April 2051	SC/SEQ/AD	23,993,616	0.97351224	23,358,078.86	100.0000000000	II
1C	Ginnie Mae	2024-065	FD(6)	April 30, 2024	38384NKR5	(4)	FLT	September 2050	SC/PT	12,935,418	0.97266358	12,581,809.98	100.0000000000	II
1D	Ginnie Mae	2024-065	FE(7)	April 30, 2024	38384NKW4	(4)	FLT	April 2051	SC/PT	12,475,179	0.97351278	12,144,746.19	100.0000000000	II
6	Ginnie Mae	2023-123	FG(8)	August 30, 2023	38384CSK6	(4)	FLT	August 2053	PT	100,000,000	0.84905919	84,905,919.00	100.0000000000	II
23	Ginnie Mae	2024-097	LS	June 28, 2024	38384PSV3	(4)	INV/IO	June 2054	NTL(PT)	50,000,000	0.96392268	48,196,134.00	100.0000000000	II

(1) As defined under “Class Types” in Appendix I to the Base Offering Circular.

(2) Underlying Certificate Factors are as of July 2024.

(3) Class FA is backed by previously issued Ginnie Mae MX certificates as outlined below:
- MX Class GI from 2021-096

(4) The Interest Rate will be calculated as described under “Terms Sheet — Interest Rates” in the related Underlying Certificate Disclosure Document.

(5) Class FB is backed by previously issued Ginnie Mae REMIC and MX certificates as outlined below:
- REMIC Class IM from 2021-064
- MX Class MI from 2021-064

(6) Class FD is backed by previously issued Ginnie Mae MX certificates as outlined below:
- MX Class IA from 2021-093

(7) Class FE is backed by previously issued Ginnie Mae MX certificates as outlined below:
- MX Class IM from 2021-059

(8) MX Class.

$3,700,738,541

Government National Mortgage Association

GINNIE MAE®

Guaranteed REMIC
Pass-Through Securities
and MX Securities
Ginnie Mae REMIC Trust 2024-110

OFFERING CIRCULAR SUPPLEMENT
July 24, 2024

Ramirez & Co., Inc.