

\$1,816,879,503
Government National Mortgage Association

GINNIE MAE[®]

**Guaranteed REMIC Pass-Through Securities
and MX Securities
Ginnie Mae REMIC Trust 2021-194**

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-14 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 November 30, 2021.

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

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

Class of REMIC Securities	Original Principal Balance(2)	Interest Rate	Principal Type(3)	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
Security Group 1						
FA	\$300,000,000	(5)	PT	FLT	38383DCN6	November 2051
SA	300,000,000	(5)	NTL(PT)	INV/IO	38383DCP1	November 2051
Security Group 2						
HP(1)	49,146,000	3.00%	PAC/AD	FIX	38383DCQ9	November 2051
HZ	8,797,628	3.00	SUP	FIX/Z	38383DCR7	November 2051
ZH	50,000	3.00	PAC/AD	FIX/Z	38383DCS5	November 2051
Security Group 3						
MB	2,443,143	2.00	SEQ	FIX	38383DCT3	November 2051
MD	60,275,000	1.75	SEQ	FIX	38383DCU0	March 2051
MI	7,534,375	2.00	NTL(SEQ)	FIX/IO	38383DCV8	March 2051
Security Group 4						
A	92,960,093	2.00	PT	FIX	38383DCW6	November 2051
F	67,960,093	(5)	PT	FLT	38383DCX4	November 2051
FD	50,000,000	(5)	PT	FLT	38383DCY2	November 2051
S	67,960,093	(5)	NTL(PT)	INV/IO	38383DCZ9	November 2051
SD	50,000,000	(5)	NTL(PT)	INV/IO	38383DDA3	November 2051
Security Group 5						
NA	25,000,000	2.25	PT	FIX	38383DDB1	November 2051
NI	2,500,000	2.50	NTL(PT)	FIX/IO	38383DDC9	November 2051
Security Group 6						
AE(1)	53,654,225	2.00	SEQ	FIX	38383DDD7	February 2049
EA	35,000,000	2.00	SEQ/AD	FIX	38383DDE5	May 2050
EB(1)	4,767,882	2.00	SEQ	FIX	38383DDF2	November 2051
EK(1)	4,786,478	2.00	SEQ	FIX	38383DDG0	July 2050
EZ	1,791,416	2.00	SEQ	FIX/Z	38383DDH8	November 2051
FE	50,000,000	(5)	PT	FLT	38383DDJ4	November 2051
SE	50,000,000	(5)	NTL(PT)	INV/IO	38383DDK1	November 2051
Security Group 7						
KA	500,000	1.75	PAC II	FIX	38383DDL9	November 2051
KB	3,420,000	1.75	PAC II	FIX	38383DDM7	November 2051
KM	1,498,290	1.75	SUP	FIX	38383DDN5	November 2051
KN	1,498,290	1.75	SUP	FIX	38383DDP0	November 2051
KQ	32,080,000	1.75	PAC I	FIX	38383DDQ8	November 2051
KR	68,196	1.75	PAC I	FIX	38383DDR6	November 2051
KT	19,532,388	5.50	PT	FIX	38383DDS4	November 2051
Security Group 8						
BP	6,003,000	3.00	PAC/AD	FIX	38383DDV7	November 2051
BZ	705,152	3.00	SUP	FIX/Z	38383DDW5	November 2051
Security Group 9						
P(1)	145,000,000	3.00	PAC/AD	FIX	38383DDX3	November 2051
PZ	32,161,432	3.00	SUP	FIX/Z	38383DDY1	November 2051
Security Group 10						
JA	25,000,000	2.15	PT	FIX	38383DDZ8	November 2051
JB	50,000,000	2.20	PT	FIX	38383DEA2	November 2051
JC	25,000,000	2.30	PT	FIX	38383DEB0	November 2051
JJ(1)	11,500,000	2.50	NTL(PT)	FIX/IO	38383DEC8	November 2051
Security Group 11						
QB	1,322,248	2.50	SEQ	FIX	38383DED6	November 2051
QD	70,000,000	2.00	SEQ	FIX	38383DEE4	August 2051
QI(1)	14,000,000	2.50	NTL(SEQ)	FIX/IO	38383DEF1	August 2051
Security Group 12						
TA	75,000,000	2.00	PT	FIX	38383DEG9	November 2051
TI	25,000,000	3.00	NTL(PT)	FIX/IO	38383DEH7	November 2051
Security Group 13						
LA	2,385,374	2.50	SEQ	FIX	38383DEJ3	May 2034
LB	14,000,000	2.50	SEQ	FIX	38383DEK0	November 2051
LH	1,250,000	2.50	SEQ	FIX	38383DEL8	May 2034
LK	1,750,000	2.50	SEQ	FIX	38383DEM6	May 2034
Security Group 14						
AP	4,710,000	2.50	PAC/AD	FIX	38383DIH2	November 2051
AZ	737,706	2.50	SUP	FIX/Z	38383DIJ8	November 2051
Security Group 15						
G(1)	138,020,000	3.00	PAC/AD	FIX	38383DIK5	March 2051
GZ	24,357,623	3.00	SUP	FIX/Z	38383DIL3	March 2051

(Cover continued on next page)

Class of REMIC Securities	Original Principal Balance(2)	Interest Rate	Principal Type(3)	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
Security Group 16						
IA	\$ 20,579,689	3.00%	NTL(SC/PT)	FIX/IO	38383DEN4	October 2051
Security Group 17						
IC	1,200,000	2.50	NTL(PT)	FIX/IO	38383DEP9	November 2051
PT	6,000,000	2.00	PT	FIX	38383DEQ7	November 2051
Security Group 18						
BI(1)	2,063,760	3.00	NTL(PT)	FIX/IO	38383DER5	November 2051
IB	10,437,629	2.50	NTL(PT)	FIX/IO	38383DES3	November 2051
ID	2,719,362	2.00	NTL(PT)	FIX/IO	38383DET1	November 2051
IG(1)	4,799,370	2.50	NTL(PT)	FIX/IO	38383DEU8	November 2051
IJ	3,922,715	2.00	NTL(PT)	FIX/IO	38383DEV6	November 2051
IK	46,053,310	3.00	NTL(PT)	FIX/IO	38383DEW4	November 2051
IL(1)	1,690,859	3.00	NTL(PT)	FIX/IO	38383DEX2	November 2051
IM(1)	9,170,770	3.00	NTL(PT)	FIX/IO	38383DEY0	November 2051
IN	34,529,573	3.00	NTL(PT)	FIX/IO	38383DEZ7	November 2051
IP	779,916	2.00	NTL(PT)	FIX/IO	38383DFA1	November 2051
IR(1)	2,122,427	2.50	NTL(PT)	FIX/IO	38383DFB9	November 2051
IT	3,234,585	2.50	NTL(PT)	FIX/IO	38383DFC7	November 2051
KD	250,000,000	1.75	SEQ	FIX	38383DFD5	May 2051
L	425,000	1.50	PAC I	FIX	38383DFE3	November 2051
LM	1,167,000	1.50	PAC I	FIX	38383DFFO	October 2051
LN	50,000,000	1.50	PAC I	FIX	38383DFG8	June 2051
LP	5,000,000	1.50	PAC I	FIX	38383DFH6	October 2051
LQ	8,173,000	1.50	PAC II/AD	FIX	38383DFJ2	November 2051
LU	5,327,326	1.50	SUP/AD	FIX	38383DFK9	November 2051
LZ	1,000	1.50	PAC II	FIX/Z	38383DFL7	November 2051
VA(1)	1,494,000	1.75	AD/SEQ	FIX	38383DFM5	June 2033
ZA(1)	6,659,520	1.75	SEQ	FIX/Z	38383DFN3	November 2051
ZL	1,000	1.50	SUP	FIX/Z	38383DFP8	November 2051
Residuals						
R1	0	0.00	NPR	NPR	38383DFQ6	November 2051
R2	0	0.00	NPR	NPR	38383DFR4	November 2051
RR3	0	0.00	NPR	NPR	38383DFS2	November 2051
R4	0	0.00	NPR	NPR	38383DFT0	November 2051
R5	0	0.00	NPR	NPR	38383DFU7	November 2051
R6	0	0.00	NPR	NPR	38383DFV5	November 2051
R7	0	0.00	NPR	NPR	38383DFW3	November 2051
R8	0	0.00	NPR	NPR	38383DFX1	November 2051
R9	0	0.00	NPR	NPR	38383DFY9	November 2051
R10	0	0.00	NPR	NPR	38383DFZ6	November 2051
RR11	0	0.00	NPR	NPR	38383DGA0	November 2051
R12	0	0.00	NPR	NPR	38383DGB8	November 2051
R13	0	0.00	NPR	NPR	38383DGC6	November 2051
R14	0	0.00	NPR	NPR	38383DGD4	November 2051
R15	0	0.00	NPR	NPR	38383DGE2	March 2051
R16	0	0.00	NPR	NPR	38383DFP9	October 2051
R17	0	0.00	NPR	NPR	38383DGG7	November 2051
R18	0	0.00	NPR	NPR	38383DGH5	November 2051

- (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 16 securities, the disclosure document relating to the Underlying Certificates (the “Underlying Certificate Disclosure Document”).

The Base Offering Circular and the Underlying Certificate Disclosure Document 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: Goldman Sachs & Co. LLC

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

Trustee: U.S. Bank National Association

Tax Administrator: The Trustee

Closing Date: November 30, 2021

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 December 2021.

Trust Assets:

<u>Trust Asset Group or Subgroup⁽²⁾</u>	<u>Trust Asset Type</u>	<u>Certificate Rate</u>	<u>Original Term To Maturity (in years)</u>
1	Ginnie Mae II	2.500%	30
2	Ginnie Mae II	3.000%	30
3	Ginnie Mae II	2.000%	30
4A	Ginnie Mae II	3.000%	30
4B	Ginnie Mae II	3.000%	30
5	Ginnie Mae II	2.500%	30
6A	Ginnie Mae II	2.500%	30
6B	Ginnie Mae II	2.500%	30
7	Ginnie Mae II	3.000%	30
8	Ginnie Mae II	3.000%	30
9	Ginnie Mae II	3.000%	30
10	Ginnie Mae II	2.500%	30
11	Ginnie Mae II	2.500%	30
12	Ginnie Mae II	3.000%	30
13	Ginnie Mae II	2.500%	30
14	Ginnie Mae II	2.500%	30
15	Ginnie Mae II	3.000%	30
16	Underlying Certificates	(1)	(1)
17	Ginnie Mae II	2.500%	30
18A	Ginnie Mae II	3.000%	30
18B	Ginnie Mae II	3.000%	30
18C	Ginnie Mae II	3.000%	30
18D	Ginnie Mae I	3.000%	30
18E	Ginnie Mae II	2.500%	30
18F	Ginnie Mae I	2.500%	30

<u>Trust Asset Group or Subgroup⁽²⁾</u>	<u>Trust Asset Type</u>	<u>Certificate Rate</u>	<u>Original Term To Maturity (in years)</u>
18G	Ginnie Mae II	2.500%	30
18H	Ginnie Mae II	2.000%	30
18I	Ginnie Mae II	2.000%	30
18J	Ginnie Mae II	3.000%	30
18K	Ginnie Mae II	2.500%	30
18L	Ginnie Mae II	2.000%	30

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

⁽²⁾ The Group 4, 6 and 18 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 a certain MX Class in Groups 10 and 11, payments on each Group will be based solely on payments on the Trust Asset Group with the same numerical designation.

Assumed Characteristics of the Mortgage Loans Underlying the Group 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 17 and 18 Trust Assets⁽¹⁾:

<u>Principal Balance</u>	<u>Weighted Average Remaining Term to Maturity (in months)</u>	<u>Weighted Average Loan Age (in months)</u>	<u>Weighted Average Mortgage Rate⁽²⁾</u>
Group 1 Trust Assets			
\$300,000,000 ⁽³⁾	358	1	2.900%
Group 2 Trust Assets			
\$57,993,628	359	1	3.440%
Group 3 Trust Assets			
\$62,718,143	356	1	2.400%
Subgroup 4A Trust Assets			
\$75,000,000	357	1	3.400%
Subgroup 4B Trust Assets			
\$135,920,186	357	1	3.400%
Group 5 Trust Assets			
\$25,000,000	358	1	2.926%
Subgroup 6A Trust Assets			
\$55,187,123	354	3	2.960%
Subgroup 6B Trust Assets			
\$94,812,878	354	3	2.960%
Group 7 Trust Assets			
\$58,597,164	358	2	3.417%
Group 8 Trust Assets			
\$6,708,152	356	1	3.423%
Group 9 Trust Assets			
\$177,161,432	348	6	3.370%

<u>Principal Balance</u>	<u>Weighted Average Remaining Term to Maturity (in months)</u>	<u>Weighted Average Loan Age (in months)</u>	<u>Weighted Average Mortgage Rate⁽²⁾</u>
Group 10 Trust Assets			
\$100,000,000	358	1	2.926%
Group 11 Trust Assets			
\$71,322,248	354	1	2.889%
Group 12 Trust Assets			
\$75,000,000	352	3	3.408%
Group 13 Trust Assets			
\$19,385,374 ⁽³⁾	357	2	2.899%
Group 14 Trust Assets			
\$5,447,706 ⁽³⁾	350	10	2.906%
Group 17 Trust Assets			
\$6,000,000	356	2	2.921%
Subgroup 18A Trust Assets			
\$79,476,041	355	2	3.410%
Subgroup 18B Trust Assets			
\$106,000,000	359	1	3.390%
Subgroup 18C Trust Assets			
\$21,108,183	355	2	3.336%
Subgroup 18D Trust Assets			
\$4,750,117	345	6	3.500%
Subgroup 18E Trust Assets			
\$14,934,643	351	2	2.780%
Subgroup 18F Trust Assets			
\$6,604,553	352	2	3.000%
Subgroup 18G Trust Assets			
\$32,479,734	359	1	2.920%
Subgroup 18H Trust Assets			
\$25,858,752	343	2	2.318%
Subgroup 18I Trust Assets			
\$17,937,401	357	2	2.535%
Subgroup 18J Trust Assets			
\$3,891,817	355	2	3.336%
Subgroup 18K Trust Assets			
\$10,065,357	351	2	2.780%
Subgroup 18L Trust Assets			
\$5,141,248	343	2	2.318%

⁽¹⁾ As of November 1, 2021.

⁽²⁾ The Mortgage Loans underlying the Group 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 and 17 and Subgroup 18A, 18B, 18C, 18E, 18G, 18H, 18I, 18J, 18K and 18L Trust Assets may bear interest at rates ranging from 0.25% to 1.50% per annum above the related Certificate Rate.

⁽³⁾ More than 10% of the Mortgage Loans underlying the Group 1, 13 and 14 Trust Assets may be higher balance Mortgage Loans. See "Risk Factors" in this Supplement.

The actual remaining terms to maturity, loan ages and, in the case of the Group 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 and 17 and Subgroup 18A, 18B, 18C, 18E, 18G, 18H, 18I, 18J, 18K and 18L Trust Assets, Mortgage Rates of many of the Mortgage Loans underlying the Group 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 17 and 18 Trust Assets will differ from the weighted averages shown above, perhaps significantly. See *“The Trust Assets — The Mortgage Loans”* in this Supplement.

Characteristics of the Mortgage Loans Underlying the Group 15 Trust Asset⁽¹⁾

<u>Pool Number</u>	<u>Principal Balance</u>	<u>Weighted Average Remaining Term to Maturity (in months)</u>	<u>Weighted Average Loan Age (in months)</u>	<u>Weighted Average Mortgage Rate⁽²⁾</u>
Group 15 Trust Asset				
MA7256	\$162,377,623.42	336	10	3.334%

⁽¹⁾ As of November 1, 2021.

⁽²⁾ The Mortgage Loans underlying the Group 15 Trust Asset may bear interest at rates ranging from 0.25% to 1.50% per annum above the related Certificate Rate.

The actual remaining terms to maturity, loan ages and Mortgage Rates of many of the Mortgage Loans underlying the Group 15 Trust Asset will differ from the weighted averages shown above, perhaps significantly. See *“The Trust Assets - The Mortgage Loans”* in this Supplement.

Characteristics of the Group 16 Trust Assets: See Exhibit A to this Supplement for certain information regarding the characteristics of the Underlying Certificates.

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

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

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

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

The Floating Rate and Inverse Floating Rate Classes will bear interest at per annum rates based on one-month LIBOR (hereinafter referred to as “LIBOR”) or a 30-day compounded average of the Secured Overnight Financing Rate (“SOFR”) (hereinafter referred to as “Compounded SOFR”) as follows:

<u>Class</u>	<u>Interest Rate Formula(1)</u>	<u>Initial Interest Rate(2)</u>	<u>Minimum Rate</u>	<u>Maximum Rate</u>	<u>Delay (in days)</u>	<u>LIBOR or Compounded SOFR for Minimum Interest Rate</u>
Security Group 1						
FA	Compounded SOFR + 0.75%	0.800%	0.75%	2.50%	0	0.00%
SA	1.75% – Compounded SOFR	1.700%	0.00%	1.75%	0	1.75%
Security Group 4						
F	Compounded SOFR + 0.30%	0.350%	0.30%	4.00%	0	0.00%
FD	LIBOR + 0.26%	0.349%	0.26%	3.50%	0	0.00%
S	3.70% – Compounded SOFR	3.650%	0.00%	3.70%	0	3.70%
SD	3.24% – LIBOR	3.151%	0.00%	3.24%	0	3.24%
Security Group 6						
FE	LIBOR + 0.28%	0.369%	0.28%	3.50%	0	0.00%
SE	3.22% – LIBOR	3.131%	0.00%	3.22%	0	3.22%

- (1) LIBOR and Compounded 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.

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

SECURITY GROUP 1

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

SECURITY GROUP 2

The Group 2 Principal Distribution Amount, the HZ Accrual Amount and the ZH Accrual Amount will be allocated as follows:

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

SECURITY GROUP 3

The Group 3 Principal Distribution Amount will be allocated, sequentially, to MD and MB, 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:

- 66.666666667% of the Subgroup 4A Principal Distribution Amount to FD, until retired
- 50% of the Subgroup 4B Principal Distribution Amount to F, until retired
- The remainder of the Subgroup 4A Principal Distribution Amount and the remainder of the Subgroup 4B Principal Distribution Amount to A, until retired

SECURITY GROUP 5

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

SECURITY GROUP 6

The Subgroup 6A Principal Distribution Amount, the Subgroup 6B Principal Distribution Amount and the EZ Accrual Amount will be allocated as follows:

- The EZ Accrual Amount and 66.6666678747% of the Subgroup 6A Principal Distribution Amount, sequentially, to EA and EZ, in that order, until retired
- 66.666663151% of the Subgroup 6B Principal Distribution Amount, sequentially, to AE, EK and EB, in that order, until retired
- The remainder of the Subgroup 6A Principal Distribution Amount and the remainder of the Subgroup 6B Principal Distribution Amount to FE, until retired

SECURITY GROUP 7

The Group 7 Principal Distribution Amount will be allocated, concurrently, as follows:

- 33.333333333% to KT, until retired
- 66.666666667% in the following order of priority:
 1. Sequentially, to KQ and KR, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
 2. Concurrently, to KA and KB, pro rata, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
 3. Concurrently, to KM and KN, pro rata, until retired
 4. Concurrently, to KA and KB, pro rata, without regard to their Aggregate Scheduled Principal Balance, until retired
 5. Sequentially, to KQ and KR, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired

SECURITY GROUP 8

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

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

SECURITY GROUP 9

The Group 9 Principal Distribution Amount and the PZ Accrual Amount will be allocated in the following order of priority:

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

SECURITY GROUP 10

The Group 10 Principal Distribution Amount will be allocated, concurrently, to JA, JB and JC, pro rata, until retired

SECURITY GROUP 11

The Group 11 Principal Distribution Amount will be allocated, sequentially, to QD and QB, in that order, until retired

SECURITY GROUP 12

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

SECURITY GROUP 13

The Group 13 Principal Distribution Amount will be allocated in the following order of priority:

1. Concurrently, to LA, LH and LK, pro rata, until retired
2. To LB, until retired

SECURITY GROUP 14

The Group 14 Principal Distribution Amount and the AZ Accrual Amount will be allocated in the following order of priority:

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

SECURITY GROUP 15

The Group 15 Principal Distribution Amount and the GZ Accrual Amount will be allocated in the following order of priority:

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

SECURITY GROUP 17

The Group 17 Principal Distribution Amount will be allocated to PT, until retired

SECURITY GROUP 18

The Subgroup 18A Principal Distribution Amount, the Subgroup 18B Principal Distribution Amount, the Subgroup 18C Principal Distribution Amount, the Subgroup 18D Principal Distribution Amount, the Subgroup 18E Principal Distribution Amount, the Subgroup 18F Principal Distribution Amount, the Subgroup 18G Principal Distribution Amount, the Subgroup 18H Principal Distribution Amount, the Subgroup 18I Principal Distribution Amount, the Subgroup 18J Principal Distribution Amount, the Subgroup 18K Principal Distribution Amount, the Subgroup 18L Principal Distribution Amount, the LZ Accrual Amount, the ZA Accrual Amount and the ZL Accrual Amount will be allocated as follows:

- The LZ Accrual Amount, sequentially, to LQ and LZ, in that order, until retired
- The ZA Accrual Amount, sequentially, to VA and ZA, in that order, until retired
- The ZL Accrual Amount, sequentially, to LU and ZL, in that order, until retired
- 78.6417670201% of the Subgroup 18A Principal Distribution Amount, 78.6417679245% of the Subgroup 18B Principal Distribution Amount, 78.6417665604% of the Subgroup 18C Principal Distribution Amount, 78.6417681922% of the Subgroup 18D Principal Distribution Amount, 78.6417659933% of the Subgroup 18E Principal Distribution Amount, 78.6417642496% of the Subgroup 18F Principal Distribution Amount, 78.6417678174% of the Subgroup 18G Principal Distribution Amount, 78.6417689454% of the Subgroup 18H Principal Distribution Amount, 78.7176525741% of the Subgroup 18I Principal Distribution Amount, 78.6417758081% of the Subgroup 18J Principal Distribution Amount, 78.6417709774% of the Subgroup 18K Principal Distribution Amount and 78.6417616890% of the Subgroup 18L Principal Distribution Amount, sequentially, to KD, VA and ZA, in that order, until retired
- The remainder of the Subgroup 18A Principal Distribution Amount, the remainder of the Subgroup 18B Principal Distribution Amount, the remainder of the Subgroup 18C Principal Distribution Amount, the remainder of the Subgroup 18D Principal Distribution Amount, the remainder of the Subgroup 18E Principal Distribution Amount, the remainder of the Subgroup 18F Principal Distribution Amount, the remainder of the Subgroup 18G Principal Distribution Amount, the remainder of the Subgroup 18H Principal Distribution Amount, the remainder of the Subgroup 18I Principal Distribution Amount, the remainder of the Subgroup 18J Principal Distribution Amount, the remainder of the Subgroup 18K Principal Distribution Amount and the remainder of the Subgroup 18L Principal Distribution Amount in the following order of priority:
 1. To L, LM, LN and LP, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date in the following order of priority:
 - a. To LM, LN and LP, concurrently, as follows:
 - i. 8.9020243203% to LP, while outstanding

- ii. 91.0979756797%, sequentially, to LN and LM, in that order, while outstanding
- b. To L, while outstanding
- 2. Sequentially, to LQ and LZ, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
- 3. Sequentially, to LU and ZL, in that order, until retired
- 4. Sequentially, to LQ and LZ, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired
- 5. To L, LM, LN and LP, in the same manner and order of priority as described in step 1. above, but without regard to their Aggregate Scheduled Principal Balance, until retired

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

<u>Security Group</u>	<u>Structuring Ranges</u>
PAC Classes	
2 HP and ZH (in the aggregate)	150% PSA through 270% PSA
8 BP	325% PSA through 450% PSA
9 P	340% PSA through 400% PSA
14 AP	300% PSA through 450% PSA
15 G	335% PSA through 415% PSA
PAC I Classes	
7 KQ and KR (in the aggregate)	175% PSA through 300% PSA
18 L, LM, LN and LP (in the aggregate)	165% PSA through 300% PSA
PAC II Classes	
7 KA and KB (in the aggregate)	240% PSA through 300% PSA
18 LQ and LZ (in the aggregate)	240% PSA through 300% 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, Subgroup or Subgroups indicated:

<u>Class</u>	<u>Original Class Notional Balance</u>	<u>Represents Approximately</u>
Security Group 1		
SA	\$300,000,000	100% of FA (PT Class)
Security Group 2		
HI	\$ 32,764,000	66.6666666667% of HP (PAC/AD Class)
Security Group 3		
MI	\$ 7,534,375	12.5% of MD (SEQ Class)
Security Group 4		
S	\$ 67,960,093	100% of F (PT Class)
SD	50,000,000	100% of FD (PT Class)
Security Group 5		
NI	\$ 2,500,000	10% of NA (PT Class)
Security Group 6		
CI	\$ 23,376,281	40% of AE and EK (in the aggregate) (SEQ Classes)
DI	25,283,434	26.6666665260% of the Subgroup 6B Trust Assets
EI	21,461,690	40% of AE (SEQ Class)
SE	50,000,000	100% of FE (PT Class)
Security Group 9		
PI	\$ 96,666,666	66.6666666667% of P (PAC/AD Class)
Security Group 10		
JJ	\$ 11,500,000	11.5% of the Group 10 Trust Assets
Security Group 11		
QI	\$ 14,000,000	20% of QD (SEQ Class)
Security Groups 10 and 11		
IQ	\$ 11,500,000	11.5% of the Group 10 Trust Assets
	<u>14,000,000</u>	20% of QD (SEQ Class)
	<u>\$ 25,500,000</u>	
Security Group 12		
TI	\$ 25,000,000	33.3333333333% of TA (PT Class)
Security Group 15		
GI	\$ 92,013,333	66.6666666667% of G (PAC/AD Class)
Security Group 16		
IA	\$ 20,579,689	100% of the Group 16 Trust Assets
Security Group 17		
IC	\$ 1,200,000	20% of PT (PT Class)
Security Group 18		
BI	\$ 2,063,760	43.4465193173% of the Subgroup 18D Trust Assets
IB	10,437,629	32.1358232183% of the Subgroup 18G Trust Assets
ID	2,719,362	15.1602934282% of the Subgroup 18I Trust Assets
IG	4,799,370	32.1358234007% of the Subgroup 18E Trust Assets
IH	\$ 9,170,770	43.4465194533% of the Subgroup 18C Trust Assets
	2,063,760	43.4465193173% of the Subgroup 18D Trust Assets
	1,690,859	43.4465186827% of the Subgroup 18J Trust Assets
	<u>\$ 12,925,389</u>	

<u>Class</u>	<u>Original Class Notional Balance</u>	<u>Represents Approximately</u>
IJ	\$ 3,922,715	15.1697788818% of the Subgroup 18H Trust Assets
IK	46,053,310	43.4465193396% of the Subgroup 18B Trust Assets
IL	1,690,859	43.4465186827% of the Subgroup 18J Trust Assets
IM	9,170,770	43.4465194533% of the Subgroup 18C Trust Assets
IN	34,529,573	43.4465194150% of the Subgroup 18A Trust Assets
IP	779,916	15.1697797889% of the Subgroup 18L Trust Assets
IR	2,122,427	32.1358235750% of the Subgroup 18F Trust Assets
IT	3,234,585	32.1358229023% of the Subgroup 18K Trust Assets
KI	\$ 9,170,770	43.4465194533% of the Subgroup 18C Trust Assets
	2,063,760	43.4465193173% of the Subgroup 18D Trust Assets
	<u>\$ 11,234,530</u>	
LI	\$ 4,799,370	32.1358234007% of the Subgroup 18E Trust Assets
	2,122,427	32.1358235750% of the Subgroup 18F Trust Assets
	<u>\$ 6,921,797</u>	

Tax Status: Single REMIC Series as to the Group 1 Trust Assets (the “Group 1 REMIC”), the Group 2 Trust Assets (the “Group 2 REMIC”), the Group 4 Trust Assets (the “Group 4 REMIC”), the Group 5 Trust Assets (the “Group 5 REMIC”), the Group 6 Trust Assets (the “Group 6 REMIC”), the Group 7 Trust Assets (the “Group 7 REMIC”), the Group 8 Trust Assets (the “Group 8 REMIC”), the Group 9 Trust Assets (the “Group 9 REMIC”), the Group 10 Trust Assets (the “Group 10 REMIC”), the Group 12 Trust Assets (the “Group 12 REMIC”), the Group 13 Trust Assets (the “Group 13 REMIC”), the Group 14 Trust Assets (the “Group 14 REMIC”), the Group 15 Trust Asset (the “Group 15 REMIC”), the Group 16 Trust Assets (the “Group 16 REMIC”), the Group 17 Trust Assets (the “Group 17 REMIC”) and the Group 18 Trust Assets (the “Group 18 REMIC”). Double REMIC Series as to the Group 3 Trust Assets and the Group 11 Trust Assets. Separate REMIC elections will be made as to the Group 1 REMIC, the Group 2 REMIC, the Issuing REMIC and the Pooling REMIC with respect to the Group 3 Trust Assets (the “Group 3 Issuing REMIC” and the “Group 3 Pooling REMIC,” respectively), the Group 4 REMIC, the Group 5 REMIC, the Group 6 REMIC, the Group 7 REMIC, the Group 8 REMIC, the Group 9 REMIC, the Group 10 REMIC, the Issuing REMIC and the Pooling REMIC with respect to the Group 11 Trust Assets (the “Group 11 Issuing REMIC” and the “Group 11 Pooling REMIC,” respectively), the Group 12 REMIC, the Group 13 REMIC, the Group 14 REMIC, the Group 15 REMIC, the Group 16 REMIC, the Group 17 REMIC and the Group 18 REMIC. See “*Certain United States Federal Income Tax Consequences*” in this Supplement and in the Base Offering Circular.

Regular and Residual Classes: Classes R1, R2, RR3, R4, R5, R6, R7, R8, R9, R10, RR11, R12, R13, R14, R15, R16, R17 and R18 are Residual Classes. Class R1 represents the Residual Interest of the Group 1 REMIC. Class R2 represents the Residual Interest of the Group 2 REMIC. Class RR3 represents the Residual Interest of the Group 3 Issuing and Pooling REMICs. Class R4 represents the Residual Interest of the Group 4 REMIC. Class R5 represents the Residual Interest of the Group 5 REMIC. Class R6 represents the Residual Interest of the Group 6 REMIC. Class R7 represents the Residual Interest of the Group 7 REMIC. Class R8 represents the Residual Interest of the Group 8 REMIC. Class R9 represents the Residual Interest of the Group 9 REMIC. Class R10 represents the Residual Interest of the Group 10 REMIC. Class RR11 represents the Residual Interest of the Group 11 Issuing and Pooling REMICs. Class R12 represents the Residual Interest of the Group 12 REMIC. Class R13 represents the Residual Interest of the Group 13 REMIC. Class R14 represents the Residual Interest of the Group 14 REMIC. Class R15 represents the Residual Interest of the Group 15 REMIC. Class R16 represents the Residual Interest of the Group 16 REMIC. Class R17 represents the Residual Interest of the Group 17 REMIC. Class R18 represents the Residual Interest of the Group 18 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 LIBOR and Compounded SOFR, as applicable, will affect the yields on the floating rate and inverse floating rate securities. If LIBOR or Compounded SOFR, as applicable, performs differently from what you expect, the yield on the floating rate and inverse floating rate securities may be lower than you expect. Lower levels of LIBOR or Compounded SOFR, as applicable, will generally reduce the yield on the floating rate securities; higher levels of LIBOR or Compounded SOFR, as applicable,

will generally reduce the yield on the inverse floating rate securities. You should bear in mind that the timing of changes in the level of LIBOR or Compounded SOFR, as applicable, may affect your yield: generally, the earlier a change, the greater the effect on your yield. It is doubtful that LIBOR or Compounded SOFR will remain constant.

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

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

The rate of payments on the underlying certificates will directly affect the rate of payments on the group 16 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 underlying certificate disclosure document, the reductions in notional balance of one of the underlying certificates on any payment date is calculated, directly or indirectly, on the basis of schedules; no assurance can be given that the underlying certificate will adhere to its schedules. Further, prepayments on the related mortgage loans may have occurred at rates faster or slower than those initially assumed.

This supplement contains no information as to whether the related class with which a notional underlying certificate reduces has adhered to any applicable principal balance schedules, whether any related supporting classes remain outstanding or whether the underlying certificates otherwise 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 underlying certificate disclosure document.

Up to 10% of the mortgage loans underlying the group 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 15, 17 and 18 trust assets and up to 100% of the mortgage loans underlying the group 1, 13, 14 and 16 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.

Changes to, the elimination of, and uncertainty with respect to, LIBOR could adversely affect your investment. As discussed under “Description of the Securities — Interest Rate Indices — Determination of LIBOR — ICE LIBOR” in the base offering circular, all LIBOR tenors relevant to the securities will cease to be published or will no longer be representative after June 30, 2023. Investors in financial instruments linked to LIBOR will likely experience disparate outcomes based on relevant contractual terms and related amendment provisions, market or product type, jurisdiction, and a host of other factors. There can be no assurance that legislative or regulatory actions will dictate what happens when LIBOR ceases to be available or is no longer representative or if such actions will provide a viable alternative or substitute rate for LIBOR. In addition, although the Alternative Reference Rates Committee (“ARRC”) was created to identify best practices for market participants regarding alternative interest rates, there can be no assurance that broadly accepted industry practices will develop either before or after LIBOR ceases to be available or is no longer representative. It is not possible to predict the impact that disparate outcomes, the availability or unavailability of LIBOR or alternative rates, divergent industry practices or any other reforms related to LIBOR that may be adopted in the U.S., U.K. or elsewhere will have on the performance, trading market or value of financial instruments, including securities with an interest rate based on LIBOR (“LIBOR classes”).

With respect to the LIBOR classes, on March 8, 2021 the ARRC confirmed that a “benchmark transition event” occurred on March 5, 2021, when the U.K. Financial Conduct Authority and ICE Benchmark Administration announced that the LIBOR tenors relevant to the LIBOR classes will cease to be published or will no longer be representative after June 30, 2023. Consequently, effective June 30, 2023 (the related “benchmark replacement date”), Ginnie Mae will select a replacement interest rate, including index, methodology, spread or other related adjustment, in accordance with the ARRC Endorsed Terms, as described under “Description of the Securities — Interest Rate Indices — Determination of LIBOR”

in the base offering circular. The ARRC Endorsed Terms, however, generally rely on actions to be taken by regulators or the ARRC, and there can be no assurance whether or when those actions will be taken. Further, there can be no assurance that those actions or related events will align with similar events in the market generally or in other parts of the financial markets, such as the derivatives market.

The ARRC Endorsed Terms provide for various alternative benchmarks based on availability: the first two alternatives involve SOFR, and the last two alternatives are not currently specified. SOFR is a secured, risk-free, overnight rate that is calculated based on different criteria than LIBOR, which is an unsecured rate reflecting counterparty risk. See *“Description of the Securities — Interest Rate Indices — Determination of SOFR — General”* in the base offering circular for more information about SOFR and the market for securities indexed to SOFR. Accordingly, SOFR and LIBOR may diverge, particularly in times of macroeconomic stress. The Federal Reserve Bank of New York began to publish SOFR in April 2018 and has published historical indicative SOFR and accompanying volumes from August 2014 to March 2018. The Federal Reserve Bank of New York also began to publish 30-, 90- and 180-day compounded averages of SOFR in March 2020. Investors should not rely on historical changes or trends in SOFR as indicative of future changes. Over the lives of LIBOR classes, SOFR may diverge from historical or indicative data.

Term SOFR, which is the first alternative benchmark specified in the ARRC Endorsed Terms, is a prospective term rate based on SOFR that is expected to be the CME Term SOFR Reference Rate published by the CME Group. CME Group’s term SOFR rate is a relatively new rate recommended by the ARRC on July 29, 2021. If CME Group’s term SOFR rate is available and recommended for the applicable tenor as of the benchmark replacement date and is operationally feasible, Ginnie Mae will select CME Group’s term SOFR rate as the benchmark replacement for LIBOR classes in accordance with the ARRC Endorsed Terms. If term SOFR is unavailable as

of the benchmark replacement date, the next alternative benchmark is compounded SOFR. As a benchmark replacement for LIBOR, compounded SOFR is a compounded average for which there are multiple methodologies that may also diverge from LIBOR. In addition, the methodology for calculating compounded SOFR as a LIBOR replacement may differ from the methodology for calculating Compounded SOFR for SOFR classes, as described under “Description of the Securities — Interest Distributions — Floating Rate and Inverse Floating Rate Classes” in this supplement. There can be no assurance that compounded SOFR as a LIBOR replacement will be the same as, or similar to, Compounded SOFR for SOFR classes.

If a benchmark replacement other than term SOFR is chosen because term SOFR is not available, term SOFR would become the benchmark replacement if it later becomes available, which could lead to further volatility in the interest rates on LIBOR classes. Moreover, a benchmark replacement adjustment will be applied to compensate for the foregoing effects of any benchmark replacement. However, no assurance can be provided that any benchmark replacement adjustment will be sufficient to produce the economic equivalent of the then-current benchmark, either at the benchmark replacement date or over the lives of LIBOR classes. Additionally, Ginnie Mae cannot anticipate how long it will take to develop the systems and processes necessary to adopt a specific benchmark replacement, which may delay and contribute to uncertainty and volatility surrounding any benchmark transition for LIBOR classes.

Ginnie Mae will have sole discretion with respect to certain elements of the benchmark replacement process, including determining which benchmark replacement is available, determining the earliest practicable index determination date for using the benchmark replacement, selecting a benchmark replacement in the event term SOFR or compounded SOFR is unavailable, determining benchmark replacement adjustments (if not otherwise determined by applicable governing bodies or authorities) and making benchmark replacement conforming changes (including

potential changes affecting the business day convention and index determination date). If Ginnie Mae, in its sole discretion, determines that an alternative rate is not administratively feasible, including as a result of technical, administrative or operational issues, then such alternative rate will be deemed not determinable as of such date. Ginnie Mae may determine an alternative not to be administratively feasible even if such alternative rate has been adopted by other market participants in similar products. Furthermore, if Ginnie Mae does not select an alternative rate on any date as a result of its determination that an alternative higher on the list of ARRC Endorsed Terms is not administratively feasible as of such date and such higher alternative subsequently becomes administratively feasible (as determined by Ginnie Mae in its sole discretion), then Ginnie Mae may elect to replace the previously selected alternative with such higher alternative. Any of the foregoing determinations will be at the sole discretion of Ginnie Mae and may adversely affect the return on LIBOR classes, the trading market for such classes and the value of such classes. None of the foregoing determinations, or the application thereof to payment calculations on LIBOR classes, will be subject to the approval of security holders.

Notwithstanding the foregoing, Ginnie Mae will select only an alternative rate as to which it and the trustee will receive an opinion of counsel that the selection of such alternative rate will not cause any related Trust REMIC to lose its classification as a REMIC for United States federal income tax purposes.

An investment in the class F, FA, S and SA 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 class F, FA, S and SA securities may fluctuate more than debt securities linked to less volatile indices.

SOFR is a relatively new market index, and the class F, FA, S and SA 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. Investment in the class F, FA, S and SA securities carries additional pricing volatility, illiquidity and market risk, as discussed in more detail under “Description of the Securities — Interest Rate Indices — Determination of SOFR — General” in the base offering circular.

The interest rates of the class F, FA, S and SA securities will be based on Compounded SOFR. Ginnie Mae may, in its sole discretion and without the consent of security holders or any other party, convert the interest rates of the class F, FA, S and SA securities from Compounded SOFR to term SOFR. In connection with that conversion, Ginnie Mae may, in its sole discretion and without the consent of security holders or any other party, change the calculation methodology or spread, add or subtract a rate adjustment and make other conforming changes with respect to the class F, FA, S and SA securities, as described under “Description of the Securities — Interest Rate Indices — Replacement Rate Conforming Changes” in the base offering circular. There can be no assurance that the interest rates of the class F, FA, S and SA securities will ever be based on term SOFR or, if based on term SOFR in the future, that the resulting interest rates will yield the same or similar economic results over the lives of the affected securities relative to the results that would have occurred had the interest rates

remained based on Compounded SOFR or that the market value will not decrease due to the move from Compounded SOFR to term SOFR.

All aspects of the conversion will be at the sole discretion of Ginnie Mae, which could lead to volatility in the interests rates of or adversely affect the return on the class F, FA, S and SA securities, the trading market for such securities and the value of such securities.

You should consult your own financial and legal advisors about the risks associated with an investment in the class F, FA, S and SA securities and the suitability of investing in the class F, FA, S and SA securities in light of your particular circumstances.

Interest on the class F, FA, S and SA securities will be determined using a replacement rate if SOFR is no longer available, which could adversely affect the value of your investment in the class F, FA, S and SA securities. Because SOFR is published by the Federal Reserve Bank of New York based on data received from other sources, neither Ginnie Mae nor the trustee has any control over its determination, calculation or publication. 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 SOFR at any time without notice. There can be no assurance that SOFR will not be discontinued or fundamentally altered in a manner that is materially adverse to the interests of investors in the class F, FA, S and SA securities.

If SOFR is no longer published or cannot be used, the amount of interest payable on the class F, FA, S and SA securities will be determined using a replacement rate, as described under “Description of the Securities — Interest Rate Indices — Determination of SOFR” 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” in the base offering circular. This could reduce the amount of interest

payable on the class F, FA, S and SA securities, which could adversely affect the return on, value of, and market for, the class F, FA, S and SA securities. Furthermore, there can be no assurance that the characteristics of any replacement rate will be similar to SOFR or that any replacement rate will produce the economic equivalent of SOFR.

The securities may not be a suitable investment for you. The securities, especially the group 16 securities and, in particular, the support, interest only, accrual and residual classes, are not suitable investments for all investors.

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

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

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

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

You are encouraged to consult advisors regarding the financial, legal, tax and other aspects of an

investment in the securities. You should not purchase the securities of any class unless you understand and are able to bear the prepayment, yield, liquidity and market risks associated with that class.

The actual characteristics of the underlying mortgage loans will affect the weighted average lives and yields of your securities.

The yield and decrement tables in this supplement are based on assumed characteristics which

are likely to be different from the actual characteristics. As a result, the yields on your securities could be lower than you expected, even if the mortgage loans prepay at the constant prepayment rates set forth in the applicable table.

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

THE TRUST ASSETS

General

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

The Trust MBS (Groups 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 17 and 18)

The Subgroup 18D and 18F Trust Assets are either:

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

Each Mortgage Loan underlying a Ginnie Mae I MBS Certificate bears interest at a Mortgage Rate 0.50% per annum greater than the related Certificate Rate. The difference between the Mortgage Rate and the Certificate Rate is used to pay the related servicers of the Mortgage Loans a monthly servicing fee and Ginnie Mae a fee for its guaranty of the Ginnie Mae I MBS Certificate of 0.44% per annum and 0.06% per annum, respectively, of the outstanding principal balance of the Mortgage Loan.

The Group 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 and 17 and Subgroup 18A, 18B, 18C, 18E, 18G, 18H, 18I, 18J, 18K and 18L Trust Assets are either:

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

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

The Underlying Certificates (Group 16)

The Group 16 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 Series of certificates described in the Underlying Certificate Disclosure Document. The 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 the Underlying Certificate Disclosure Document, including changes in prepayment rates, prevailing interest rates and other economic factors, which may limit the usefulness of, and be directly contrary to the assumptions used in preparing the information included in, the offering document. See *“Underlying Certificates” in the Base Offering Circular*.

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

The Mortgage Loans

The Mortgage Loans underlying the Group 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 17 and 18 Trust Assets are expected to have, on a weighted average basis, the characteristics set forth in the Terms Sheet under “Assumed Characteristics of the Mortgage Loans Underlying the Group 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 17 and 18 Trust Assets” and the general characteristics described in the Base Offering Circular. The Mortgage Loans underlying the Group 15 Trust Asset are expected to have, on a weighted average basis, the characteristics set forth in the Terms Sheet under “Characteristics of the Mortgage Loans Underlying the Group 15 Trust Asset” 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, in the case of the Group 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 and 17 and Subgroup 18A, 18B, 18C, 18E, 18G, 18H, 18I, 18J, 18K and 18L Trust Assets, Mortgage Rates of the Mortgage Loans underlying the Trust MBS. However, the actual remaining terms to maturity, loan ages and, in the case of the Group 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 and 17 and Subgroup 18A, 18B, 18C, 18E, 18G, 18H, 18I, 18J, 18K and 18L Trust Assets, Mortgage Rates of many of the Mortgage Loans will differ from the characteristics assumed, perhaps significantly. This will be the case even if the weighted average characteristics of the Mortgage Loans are the same as the assumed characteristics. Small differences in the characteristics of the Mortgage Loans can have a significant effect on the Weighted Average Lives and yields of the Securities. See *“Risk Factors” and “Yield, Maturity and Prepayment Considerations” in this Supplement*.

The Trustee Fee

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

GINNIE MAE GUARANTY

The Government National Mortgage Association (“Ginnie Mae”), a wholly-owned corporate instrumentality of the United States of America within HUD, guarantees the timely payment of principal

and interest on the Securities. The General Counsel of HUD has provided an opinion to the effect that Ginnie Mae has the authority to guarantee multiclass securities and that Ginnie Mae guaranties will constitute general obligations of the United States, for which the full faith and credit of the United States is pledged. See *“Ginnie Mae Guaranty” in the Base Offering Circular*.

DESCRIPTION OF THE SECURITIES

General

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

Form of Securities

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

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

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

Distributions

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

Interest Distributions

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

- Interest will be calculated on the basis of a 360-day year consisting of twelve 30-day months.
- Interest distributable (or accrued in the case of an Accrual Class) on any Class for any Distribution Date will consist of 30 days’ interest on its Class Principal Balance (or Class Notional Balance) as of the related Record Date.

- Investors can calculate the amount of interest to be distributed (or accrued in the case of an Accrual Class) on each Class of Securities for any Distribution Date by using the Class Factors published in the preceding month. See “— Class Factors” below.

Categories of Classes

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

Accrual Periods

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

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

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 (other than Classes F, FA, S and SA, which will be based initially on Compounded SOFR as described below) will be based on LIBOR. The Trustee or its agent will determine LIBOR on the basis of the ICE LIBOR method, as described under “Description of the Securities — Interest Rate Indices — Determination of LIBOR” in the Base Offering Circular.

We can provide no assurance that LIBOR for a Distribution Date accurately represents the offered rate at which one-month U.S. dollar deposits are being quoted to prime banks in the London interbank market, nor that the procedures for calculating LIBOR on the basis of the ICE LIBOR method for one-month U.S. dollar deposits will not change. Any change in LIBOR values resulting from any change in reporting or in the determination of LIBOR may cause LIBOR to fluctuate disproportionately to changes in other market lending rates. When LIBOR ceases to be published or becomes no longer representative, a replacement rate will be selected, as described under “Description of the Securities — Interest Rate Indices — Determination of LIBOR” in the Base Offering Circular.

The Interest Rate for Classes F, FA, S and SA will be based initially on Compounded SOFR with a Corresponding Tenor of 30 days. The Trustee or its agent will determine Compounded SOFR as described under “Description of the Securities — Interest Rate Indices — Determination of SOFR” in the Base Offering Circular.

At any time, Ginnie Mae may, in its sole discretion and without the consent of security holders or any other party, designate Term SOFR and related positive or negative adjustments, spreads or methodology changes as a Replacement Rate for Classes F, FA, S and SA and instruct the Trustee in writing to

replace Compounded SOFR with such Replacement Rate for all purposes relating to such Classes in respect of such determination on such date and all determinations on subsequent dates. Ginnie Mae will not do so unless Ginnie Mae and the Trustee receive a Replacement Rate Tax Opinion. In connection with the implementation of Term SOFR as a Replacement Rate for SOFR Classes, Ginnie Mae will have the right to make other Conforming Changes from time to time without the consent of security holders or any other party, as described under “Description of the Securities — Interest Rate Indices” and “ — Interest Rate Indices — Determination of SOFR — Conversion of Simple SOFR and Compounded SOFR Classes to Term SOFR” in the Base Offering Circular.

If 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 — Determination of SOFR” in the Base Offering Circular.

The Trustee’s determination of LIBOR and Compounded SOFR and its calculation of the Interest Rates will be final except in the case of clear error. Investors can obtain LIBOR and Compounded 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 AZ, BZ, EZ, GZ, HZ, LZ, PZ, ZA, ZH and ZL 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 Class R1 Securities, Class R2 Securities, Class R4 Securities, Class R5 Securities, Class R6 Securities, Class R7 Securities, Class R8 Securities, Class R9 Securities, Class R10 Securities, Class R12 Securities, Class R13 Securities, Class R14 Securities, Class R15 Securities, Class R16 Securities, Class R17 Securities and Class R18 Securities will represent the beneficial ownership of the Residual Interest in the Group 1 REMIC, the Group 2 REMIC, the Group 4 REMIC, the Group 5 REMIC, the Group 6 REMIC, the

Group 7 REMIC, the Group 8 REMIC, the Group 9 REMIC, the Group 10 REMIC, the Group 12 REMIC, the Group 13 REMIC, the Group 14 REMIC, the Group 15 REMIC, the Group 16 REMIC, the Group 17 REMIC and the Group 18 REMIC, respectively, as described in “Certain United States Federal Income Tax Consequences” in the Base Offering Circular. The Class RR3 Securities will represent the beneficial ownership of the Residual Interest in the Group 3 Issuing REMIC and the beneficial ownership of the Residual Interest in the Group 3 Pooling REMIC and the Class RR11 Securities will represent the beneficial ownership of the Residual Interest in the Group 11 Issuing REMIC and the beneficial ownership of the Residual Interest in the Group 11 Pooling REMIC, as described in “Certain United States Federal Income Tax Consequences” in the Base Offering Circular. The Class R1, R2, RR3, R4, R5, R6, R7, R8, R9, R10, RR11, R12, R13, R14, R15, R16, R17 and R18 Securities have no Class Principal Balance and do not accrue interest. The Class R1, R2, RR3, R4, R5, R6, R7, R8, R9, R10, RR11, R12, R13, R14, R15, R16, R17 and R18 Securities will be entitled to receive the proceeds of the disposition of any assets remaining in the related Trust REMIC or Trust REMICs, as applicable, after the Class Principal Balance or Class Notional Balance of each Class of Regular Securities in the related Security Group 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. 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 such Trust REMIC and any related Trust REMIC and retire the related Securities. For these purposes, the Trust REMICs and the Securities with corresponding numerical designations are related as follows:

<u>Trust REMICs</u>	<u>Related Securities</u>
Group 1 REMIC	Group 1 Securities
Group 2 REMIC	Group 2 Securities
Group 3 Issuing and Pooling REMICs	Group 3 Securities
Group 4 REMIC	Group 4 Securities
Group 5 REMIC	Group 5 Securities
Group 6 REMIC	Group 6 Securities
Group 7 REMIC	Group 7 Securities
Group 8 REMIC	Group 8 Securities
Group 9 REMIC	Group 9 Securities
Group 10 REMIC	Group 10 Securities
Group 11 Issuing and Pooling REMICs	Group 11 Securities
Group 12 REMIC	Group 12 Securities
Group 13 REMIC	Group 13 Securities
Group 14 REMIC	Group 14 Securities
Group 15 REMIC	Group 15 Securities
Group 16 REMIC	Group 16 Securities
Group 17 REMIC	Group 17 Securities
Group 18 REMIC	Group 18 Securities

Upon any termination of the Trust (or one or more related Trust REMICs), the Holder of any related 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 related 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 related Trust REMIC or Trust REMICs, as applicable, after payment in full of the amounts described in the foregoing sentence. However, any remaining assets are not likely to be significant.

With respect to each of Security Groups 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17 and 18, a Holder of all of the outstanding Regular Securities of any such Security Group and the related Class of Residual Securities will have the right to purchase the related Trust Assets upon three Business Days' notice (the "Notice Period"). The purchase will be for cash in an amount equal to (A)(i) the aggregate remaining principal balance of the assets of such Security Group, but in no event less than the aggregate outstanding principal amount of the Securities of such Security Group, plus (ii) accrued interest on the Securities of such Security Group, less (B) amounts on deposit in the related Trust REMIC or Trust REMICs, as applicable, for distribution on the Securities of such Security Group, plus (C) a \$5,000 termination fee payable to the Trustee in connection with each Security Group to be terminated. After the Notice Period, and upon such purchase, the Trustee will terminate the related Trust REMIC or Trust REMICs, as applicable. Upon such termination, the Trustee will distribute the cash proceeds of the sale of the related Trust Assets to the Holder of the related Securities (which distribution may be offset against amounts due on the sale of such assets), will cancel the Securities of the related Security Group and cause the removal from the Book-Entry Depository Account of all Classes of the related Security Group, will cancel the related Class of Residual Securities, and will credit the remaining Trust Assets in the related Security Group to the account of the surrendering Holder. Notwithstanding anything to the contrary contained herein, no such termi-

nation will be allowed unless the Trustee and Ginnie Mae are provided, at no cost to either the Trustee or Ginnie Mae, an Opinion of Counsel, acceptable to the Trustee and Ginnie Mae, to the effect that such termination constitutes a “qualified liquidation” under the REMIC Provisions, including Section 860F(a)(4) of the Code, and such termination will not result in a disqualification of any Trust REMIC that is not terminated at such time or the imposition of any “prohibited transactions” or “contributions” tax under the REMIC Provisions on any Trust REMIC that is not terminated at such time.

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 1, 2, 3, 4, 6, 8, 9, 10 and 11, 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 1, 2, 3, 4, 6 and 8, the related REMIC Securities may be exchanged for proportionate interests in various subcombinations of MX Classes. Similarly, all or a portion of these MX Classes may be exchanged for proportionate interests in the related REMIC Securities or in other subcombinations of the related MX Classes. Each subcombination may be effected only in proportions that result in the principal and interest entitlements of the Securities received being equal to the entitlements of the Securities surrendered. *See the example under “Description of the Securities — Modification and Exchange” in the Base Offering Circular.*

A Beneficial Owner proposing to effect an exchange must notify the Trustee through the Beneficial Owner’s Book-Entry Depository participant. This notice must be received by the Trustee not later than two Business Days before the proposed exchange date. The exchange date can be any Business Day other than the last Business Day of the month. The notice must contain the outstanding principal and notional balances of the Securities to be included in the exchange and the proposed exchange date. The notice is required to be delivered to the Trustee by email to USBGNMATEam@USBank.com or in writing at its Corporate Trust Office at U.S. Bank National Association, One Federal Street, 3rd Floor, Boston, MA 02110, Attention: Ginnie Mae REMIC Program Agency Group 2021-194. The Trustee may be contacted by telephone at (617) 603-6451 and by fax at (617) 603-6644.

A fee will be payable to the Trustee in connection with each exchange equal to $\frac{1}{32}$ of 1% of the outstanding principal balance (or notional balance) of the Securities surrendered for exchange (but not less than \$2,000 or more than \$25,000); provided, however, that no fee will be payable in respect of an interest only security unless all securities involved in the exchange are interest only securities. 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 16 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 16 securities*” in this Supplement.

Accretion Directed Classes

Classes AP, BP, EA, G, HP, LQ, LU, P, VA and ZH 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 the Accretion Directed Classes (other than Class VA) has the AD designation in the suffix position, rather than the prefix position, in its class principal type because it does not have principal payment stability through the applicable pricing prepayment assumption. Class VA will have principal payment stability only through the prepayment rate shown in the table below. The remaining Accretion

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

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

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

Accretion Directed Class			
<u>Class</u>	<u>Maximum Weighted Average Life (in years)⁽¹⁾</u>	<u>Final Distribution Date</u>	<u>Prepayment Rate at or below</u>
VA	6.0	June 2033	433% PSA

⁽¹⁾ The maximum Weighted Average Life for Class VA 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. That Weighted Average Life could extend, perhaps significantly, under certain non-constant prepayment scenarios or if the actual Mortgage Loan characteristics differ from the Modeling Assumptions.

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

Securities that Receive Principal on the Basis of Schedules

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

Each PAC Class exhibits an Effective Range of constant prepayment rates at which such Class will receive Scheduled Payments. That range may differ from the Structuring Range used to create the

related principal balance schedule. Based on the Modeling Assumptions, the *initial* Effective Ranges for the PAC Classes are as follows:

<u>Security Group</u>	<u>Initial Effective Ranges</u>
PAC Classes	
2 HP and ZH (in the aggregate)	150% PSA through 270% PSA
8 BP	325% PSA through 450% PSA
9 P	340% PSA through 400% PSA
14 AP	300% PSA through 450% PSA
15 G	335% PSA through 415% PSA
PAC I Classes	
7 KQ and KR (in the aggregate)	175% PSA through 300% PSA
18 L, LM, LN and LP (in the aggregate)	165% PSA through 300% PSA
PAC II Classes	
7 KA and KB (in the aggregate)	240% PSA through 300% PSA
18 LQ and LZ (in the aggregate)	240% PSA through 300% PSA

- The principal payment stability of the PAC Classes will be supported by the related Support Class.
- The principal payment stability of the PAC I Classes will be supported by the related PAC II and Support Classes.
- The principal payment stability of the PAC II Classes will be supported by the related Support Classes.

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

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

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

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

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

Assumability

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

Final Distribution Date

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

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

Modeling Assumptions

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

1. The Mortgage Loans underlying the Group 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 17 and 18 Trust Assets have the assumed characteristics shown under “Assumed Characteristics of the Mortgage Loans Underlying the Group 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 17 and 18 Trust Assets” in the Terms Sheet and the Mortgage Loans underlying the Group 15 Trust Asset have the characteristics shown under “Characteristics of the Mortgage Loans Underlying the Group 15 Trust Asset” in the Terms Sheet except in the case of information set forth under the 0% PSA Prepayment Assumption Rate, for which each Mortgage Loan underlying a Group 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 17 or 18 Trust Asset is assumed to have an original and a remaining term to maturity of 360 months and each Mortgage Loan underlying a Group 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 or 17 or Subgroup 18A, 18B, 18C, 18E, 18G, 18H, 18I, 18J, 18K or 18L 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 December 2021.

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

5. The Closing Date for the Securities is November 30, 2021.

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 Underlying Certificate Disclosure Document.

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	Classes FA and SA				
	0%	100%	350%	550%	700%
Initial Percent	100	100	100	100	100
November 2022	98	96	93	90	87
November 2023	96	91	78	69	62
November 2024	94	83	61	46	36
November 2025	93	76	47	30	20
November 2026	90	70	36	19	11
November 2027	88	64	28	13	6
November 2028	86	58	21	8	4
November 2029	84	53	16	5	2
November 2030	81	48	12	3	1
November 2031	79	44	9	2	1
November 2032	76	39	7	1	0
November 2033	73	36	5	1	0
November 2034	71	32	4	1	0
November 2035	68	29	3	0	0
November 2036	65	26	2	0	0
November 2037	61	23	2	0	0
November 2038	58	20	1	0	0
November 2039	55	18	1	0	0
November 2040	51	15	1	0	0
November 2041	47	13	1	0	0
November 2042	43	11	0	0	0
November 2043	39	10	0	0	0
November 2044	35	8	0	0	0
November 2045	31	7	0	0	0
November 2046	26	5	0	0	0
November 2047	21	4	0	0	0
November 2048	16	3	0	0	0
November 2049	11	2	0	0	0
November 2050	6	1	0	0	0
November 2051	0	0	0	0	0
Weighted Average Life (years)	17.9	10.3	4.8	3.4	2.8

Security Group 2 PSA Prepayment Assumption Rates															
Distribution Date	Classes HC, HD, HE, HG, HI, HJ, HK, HL, HM and HP					Class HZ					Class ZH				
	0%	150%	240%	270%	500%	0%	150%	240%	270%	500%	0%	150%	240%	270%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2022	98	95	95	95	95	103	103	94	91	69	103	103	103	103	103
November 2023	95	85	85	85	84	106	106	77	67	0	106	106	106	106	106
November 2024	92	73	73	73	58	109	109	55	37	0	109	109	109	109	109
November 2025	90	62	62	62	40	113	113	39	17	0	113	113	113	113	113
November 2026	87	53	53	53	27	116	116	31	5	0	116	116	116	116	116
November 2027	84	44	44	44	18	120	120	27	0	0	120	120	120	120	120
November 2028	80	36	36	36	13	123	123	26	0	0	123	123	123	123	123
November 2029	77	29	29	29	8	127	122	25	0	0	127	127	127	127	127
November 2030	74	23	23	23	6	131	119	24	0	0	131	131	131	131	131
November 2031	70	19	19	19	4	135	114	22	0	0	135	135	135	135	135
November 2032	66	15	15	15	3	139	107	20	0	0	139	139	139	139	139
November 2033	63	12	12	12	2	143	100	18	0	0	143	143	143	143	143
November 2034	59	10	10	10	1	148	92	16	0	0	148	148	148	148	148
November 2035	54	8	8	8	1	152	84	14	0	0	152	152	152	152	152
November 2036	50	6	6	6	0	157	76	12	0	0	157	157	157	157	157
November 2037	45	5	5	5	0	162	68	10	0	0	162	162	162	162	162
November 2038	41	4	4	4	0	166	60	9	0	0	166	166	166	166	166
November 2039	36	3	3	3	0	171	53	8	0	0	171	171	171	171	152
November 2040	30	2	2	2	0	177	46	6	0	0	177	177	177	177	99
November 2041	25	2	2	2	0	182	39	5	0	0	182	182	182	182	64
November 2042	19	1	1	1	0	188	34	4	0	0	188	188	188	188	41
November 2043	13	1	1	1	0	193	28	3	0	0	193	193	193	193	26
November 2044	7	1	1	1	0	199	23	3	0	0	199	199	199	199	16
November 2045	1	0	0	0	0	205	19	2	0	0	205	205	205	205	10
November 2046	0	0	0	0	0	177	14	2	0	0	212	212	212	212	6
November 2047	0	0	0	0	0	145	11	1	0	0	218	218	218	218	3
November 2048	0	0	0	0	0	111	8	1	0	0	179	179	179	179	2
November 2049	0	0	0	0	0	76	5	0	0	0	100	100	100	100	1
November 2050	0	0	0	0	0	39	2	0	0	0	41	41	41	41	0
November 2051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	14.1	6.4	6.4	6.4	4.1	27.2	17.5	6.1	2.7	1.2	28.0	28.0	28.0	28.0	20.0

**Security Group 3
PSA Prepayment Assumption Rates**

Distribution Date	Class MB					Classes MD and MI				
	0%	100%	200%	300%	400%	0%	100%	200%	300%	400%
Initial Percent	100	100	100	100	100	100	100	100	100	100
November 2022	100	100	100	100	100	98	96	95	93	91
November 2023	100	100	100	100	100	96	90	85	79	75
November 2024	100	100	100	100	100	94	82	72	63	55
November 2025	100	100	100	100	100	92	75	61	50	39
November 2026	100	100	100	100	100	89	68	52	39	28
November 2027	100	100	100	100	100	87	61	44	30	20
November 2028	100	100	100	100	100	84	56	37	23	13
November 2029	100	100	100	100	100	82	50	30	17	9
November 2030	100	100	100	100	100	79	45	25	13	5
November 2031	100	100	100	100	100	77	40	21	9	3
November 2032	100	100	100	100	100	74	36	17	6	1
November 2033	100	100	100	100	90	71	32	14	4	0
November 2034	100	100	100	100	65	68	28	11	2	0
November 2035	100	100	100	100	47	65	25	8	1	0
November 2036	100	100	100	96	34	61	22	6	0	0
November 2037	100	100	100	74	24	58	19	5	0	0
November 2038	100	100	100	57	17	54	16	3	0	0
November 2039	100	100	100	44	12	51	14	2	0	0
November 2040	100	100	100	33	9	47	11	1	0	0
November 2041	100	100	94	25	6	43	9	0	0	0
November 2042	100	100	75	18	4	39	7	0	0	0
November 2043	100	100	59	14	3	35	5	0	0	0
November 2044	100	100	46	10	2	31	4	0	0	0
November 2045	100	100	35	7	1	26	2	0	0	0
November 2046	100	100	25	5	1	22	1	0	0	0
November 2047	100	91	18	3	0	17	0	0	0	0
November 2048	100	63	11	2	0	12	0	0	0	0
November 2049	100	37	6	1	0	7	0	0	0	0
November 2050	100	14	2	0	0	1	0	0	0	0
November 2051	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	29.6	27.6	23.2	18.4	14.7	17.1	9.4	6.4	4.8	3.9

**Security Group 4
PSA Prepayment Assumption Rates**

Distribution Date	Class A					Classes F and S					Classes FD and SD				
	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
November 2022	98	97	94	91	89	98	97	94	91	89	98	97	94	91	89
November 2023	97	91	81	74	67	97	91	81	74	67	97	91	81	74	67
November 2024	95	84	65	53	42	95	84	65	53	42	95	84	65	53	42
November 2025	93	77	52	38	27	93	77	52	38	27	93	77	52	38	27
November 2026	91	70	42	27	17	91	70	42	27	17	91	70	42	27	17
November 2027	89	64	33	19	10	89	64	33	19	10	89	64	33	19	10
November 2028	87	59	27	14	6	87	59	27	14	6	87	59	27	14	6
November 2029	85	54	21	10	4	85	54	21	10	4	85	54	21	10	4
November 2030	83	49	17	7	2	83	49	17	7	2	83	49	17	7	2
November 2031	80	44	13	5	2	80	44	13	5	2	80	44	13	5	2
November 2032	78	40	11	3	1	78	40	11	3	1	78	40	11	3	1
November 2033	75	36	8	2	1	75	36	8	2	1	75	36	8	2	1
November 2034	72	33	7	2	0	72	33	7	2	0	72	33	7	2	0
November 2035	69	29	5	1	0	69	29	5	1	0	69	29	5	1	0
November 2036	66	26	4	1	0	66	26	4	1	0	66	26	4	1	0
November 2037	63	23	3	1	0	63	23	3	1	0	63	23	3	1	0
November 2038	60	21	2	0	0	60	21	2	0	0	60	21	2	0	0
November 2039	56	18	2	0	0	56	18	2	0	0	56	18	2	0	0
November 2040	53	16	1	0	0	53	16	1	0	0	53	16	1	0	0
November 2041	49	14	1	0	0	49	14	1	0	0	49	14	1	0	0
November 2042	45	12	1	0	0	45	12	1	0	0	45	12	1	0	0
November 2043	41	10	1	0	0	41	10	1	0	0	41	10	1	0	0
November 2044	36	8	0	0	0	36	8	0	0	0	36	8	0	0	0
November 2045	32	7	0	0	0	32	7	0	0	0	32	7	0	0	0
November 2046	27	5	0	0	0	27	5	0	0	0	27	5	0	0	0
November 2047	22	4	0	0	0	22	4	0	0	0	22	4	0	0	0
November 2048	17	3	0	0	0	17	3	0	0	0	17	3	0	0	0
November 2049	12	2	0	0	0	12	2	0	0	0	12	2	0	0	0
November 2050	6	1	0	0	0	6	1	0	0	0	6	1	0	0	0
November 2051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	18.3	10.5	5.4	4.0	3.2	18.3	10.5	5.4	4.0	3.2	18.3	10.5	5.4	4.0	3.2

**Security Group 5
PSA Prepayment Assumption Rates**

Distribution Date	Classes NA and NI				
	0%	100%	250%	400%	500%
Initial Percent	100	100	100	100	100
November 2022	98	96	94	92	90
November 2023	96	91	83	76	71
November 2024	94	83	69	57	49
November 2025	93	76	57	42	34
November 2026	90	70	48	31	23
November 2027	88	64	39	23	16
November 2028	86	58	32	17	11
November 2029	84	53	27	12	7
November 2030	81	48	22	9	5
November 2031	79	44	18	7	3
November 2032	76	40	15	5	2
November 2033	73	36	12	4	1
November 2034	71	32	10	3	1
November 2035	68	29	8	2	1
November 2036	65	26	6	1	0
November 2037	61	23	5	1	0
November 2038	58	20	4	1	0
November 2039	55	18	3	0	0
November 2040	51	15	3	0	0
November 2041	47	13	2	0	0
November 2042	43	11	2	0	0
November 2043	39	10	1	0	0
November 2044	35	8	1	0	0
November 2045	31	7	1	0	0
November 2046	26	5	0	0	0
November 2047	21	4	0	0	0
November 2048	16	3	0	0	0
November 2049	11	2	0	0	0
November 2050	6	1	0	0	0
November 2051	0	0	0	0	0
Weighted Average Life (years)	17.9	10.4	6.1	4.3	3.7

**Security Group 6
PSA Prepayment Assumption Rates**

Distribution Date	Classes AE, EC, ED, EG, EH and EI					Class B					Classes C, CA, CB, CD, CE and CI				
	0%	100%	250%	400%	500%	0%	100%	250%	400%	500%	0%	100%	250%	400%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2022	98	95	92	89	86	100	100	100	100	100	98	96	93	90	88
November 2023	96	88	78	68	62	100	100	100	100	100	96	89	80	71	65
November 2024	94	79	62	46	37	100	100	100	100	100	94	81	65	51	42
November 2025	91	71	48	30	20	100	100	100	100	100	92	74	52	35	26
November 2026	89	64	37	17	8	100	100	100	100	100	90	67	42	24	15
November 2027	86	57	27	8	0	100	100	100	100	97	87	60	33	16	8
November 2028	84	50	19	1	0	100	100	100	100	66	85	54	26	9	3
November 2029	81	44	13	0	0	100	100	100	79	45	82	48	20	5	0
November 2030	78	38	7	0	0	100	100	100	58	30	80	43	15	1	0
November 2031	75	33	3	0	0	100	100	100	42	20	77	38	11	0	0
November 2032	72	28	0	0	0	100	100	94	31	14	74	34	7	0	0
November 2033	69	24	0	0	0	100	100	77	23	9	71	30	4	0	0
November 2034	65	19	0	0	0	100	100	62	16	6	68	26	2	0	0
November 2035	62	15	0	0	0	100	100	51	12	4	65	22	0	0	0
November 2036	58	12	0	0	0	100	100	41	9	3	62	19	0	0	0
November 2037	54	9	0	0	0	100	100	33	6	2	58	16	0	0	0
November 2038	51	5	0	0	0	100	100	26	4	1	55	13	0	0	0
November 2039	46	3	0	0	0	100	100	21	3	1	51	11	0	0	0
November 2040	42	0	0	0	0	100	100	16	2	1	47	8	0	0	0
November 2041	38	0	0	0	0	100	86	13	2	0	43	6	0	0	0
November 2042	33	0	0	0	0	100	73	10	1	0	39	4	0	0	0
November 2043	28	0	0	0	0	100	62	7	1	0	34	2	0	0	0
November 2044	23	0	0	0	0	100	51	6	0	0	30	0	0	0	0
November 2045	18	0	0	0	0	100	41	4	0	0	25	0	0	0	0
November 2046	13	0	0	0	0	100	32	3	0	0	20	0	0	0	0
November 2047	7	0	0	0	0	100	24	2	0	0	15	0	0	0	0
November 2048	1	0	0	0	0	100	16	1	0	0	9	0	0	0	0
November 2049	0	0	0	0	0	73	9	1	0	0	4	0	0	0	0
November 2050	0	0	0	0	0	37	3	0	0	0	0	0	0	0	0
November 2051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	16.0	7.8	4.4	3.1	2.6	28.6	23.5	15.2	10.4	8.5	17.0	8.9	5.0	3.5	3.0

**Security Group 6
PSA Prepayment Assumption Rates**

Distribution Date	Classes D, DB, DC, DE, DI and E					Class EA				
	0%	100%	250%	400%	500%	0%	100%	250%	400%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100
November 2022	98	96	93	90	88	98	96	93	90	88
November 2023	96	90	81	73	68	96	89	80	71	66
November 2024	94	82	68	54	47	94	81	66	52	43
November 2025	93	76	56	40	32	92	74	53	37	28
November 2026	90	69	46	30	22	89	67	43	26	17
November 2027	88	63	38	22	15	87	61	34	17	10
November 2028	86	58	32	16	10	85	55	27	11	5
November 2029	84	52	26	12	7	82	49	21	7	1
November 2030	81	48	21	9	5	79	44	16	3	0
November 2031	79	43	17	6	3	77	39	12	0	0
November 2032	76	39	14	5	2	74	35	9	0	0
November 2033	73	35	12	3	1	71	30	6	0	0
November 2034	71	32	9	2	1	68	27	3	0	0
November 2035	68	28	8	2	1	64	23	1	0	0
November 2036	65	25	6	1	0	61	20	0	0	0
November 2037	61	22	5	1	0	57	16	0	0	0
November 2038	58	20	4	1	0	54	14	0	0	0
November 2039	55	17	3	0	0	50	11	0	0	0
November 2040	51	15	2	0	0	46	8	0	0	0
November 2041	47	13	2	0	0	42	6	0	0	0
November 2042	43	11	1	0	0	38	4	0	0	0
November 2043	39	9	1	0	0	33	2	0	0	0
November 2044	35	8	1	0	0	29	0	0	0	0
November 2045	31	6	1	0	0	24	0	0	0	0
November 2046	26	5	0	0	0	19	0	0	0	0
November 2047	21	4	0	0	0	14	0	0	0	0
November 2048	16	2	0	0	0	8	0	0	0	0
November 2049	11	1	0	0	0	3	0	0	0	0
November 2050	6	0	0	0	0	0	0	0	0	0
November 2051	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	17.9	10.2	6.0	4.2	3.5	16.8	9.0	5.2	3.6	3.1

PSA Prepayment Assumption Rates

Distribution Date	Class EB					Class EK					Class EZ					Classes FE and SE					
	0%	100%	250%	400%	500%	0%	100%	250%	400%	500%	0%	100%	250%	400%	500%	0%	100%	250%	400%	500%	
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2022	100	100	100	100	100	100	100	100	100	100	102	102	102	102	102	98	96	93	90	88	
November 2023	100	100	100	100	100	100	100	100	100	100	104	104	104	104	104	96	90	81	73	68	
November 2024	100	100	100	100	100	100	100	100	100	100	106	106	106	106	106	94	82	68	54	47	
November 2025	100	100	100	100	100	100	100	100	100	100	108	108	108	108	108	93	76	56	40	32	
November 2026	100	100	100	100	100	100	100	100	100	100	111	111	111	111	111	90	69	46	30	22	
November 2027	100	100	100	100	100	100	100	100	95	113	113	113	113	113	88	63	38	22	15		
November 2028	100	100	100	100	100	100	100	100	32	115	115	115	115	115	86	58	32	16	10		
November 2029	100	100	100	90	100	100	100	58	0	117	117	117	117	117	84	52	26	12	7		
November 2030	100	100	100	61	100	100	100	16	0	120	120	120	120	94	81	48	21	9	5		
November 2031	100	100	100	85	41	100	100	0	0	122	122	122	122	63	79	43	17	6	3		
November 2032	100	100	100	62	28	100	100	89	0	0	125	125	125	96	43	76	39	14	5	2	
November 2033	100	100	100	45	18	100	100	54	0	0	127	127	127	70	29	73	35	12	3	1	
November 2034	100	100	100	33	12	100	100	25	0	0	130	130	130	51	19	71	32	9	2	1	
November 2035	100	100	100	24	8	100	100	1	0	0	132	132	132	37	13	68	28	8	2	1	
November 2036	100	100	82	17	5	100	100	0	0	0	135	135	127	27	8	65	25	6	1	0	
November 2037	100	100	66	12	4	100	100	0	0	0	138	138	102	19	6	61	22	5	1	0	
November 2038	100	100	52	9	2	100	100	0	0	0	140	140	81	14	4	58	20	4	1	0	
November 2039	100	100	41	6	2	100	100	0	0	0	143	143	64	10	2	55	17	3	0	0	
November 2040	100	100	33	4	1	100	99	0	0	0	146	146	51	7	2	51	15	2	0	0	
November 2041	100	100	25	3	1	100	72	0	0	0	149	149	39	5	1	47	13	2	0	0	
November 2042	100	100	20	2	0	100	47	0	0	0	152	152	30	3	1	43	11	1	0	0	
November 2043	100	100	15	1	0	100	23	0	0	0	155	155	23	2	0	39	9	1	0	0	
November 2044	100	100	11	1	0	100	2	0	0	0	158	158	17	1	0	35	8	1	0	0	
November 2045	100	82	8	1	0	100	0	0	0	0	162	128	13	1	0	31	6	1	0	0	
November 2046	100	64	6	0	0	100	0	0	0	0	165	99	9	1	0	26	5	0	0	0	
November 2047	100	48	4	0	0	100	0	0	0	0	168	74	6	0	0	21	4	0	0	0	
November 2048	100	32	2	0	0	100	0	0	0	0	172	50	4	0	0	16	2	0	0	0	
November 2049	100	19	1	0	0	46	0	0	0	0	175	29	2	0	0	11	1	0	0	0	
November 2050	74	6	0	0	0	0	0	0	0	0	115	9	1	0	0	6	0	0	0	0	
November 2051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Weighted Average Life (years)	29.3	26.0	18.2	12.6	10.3	27.9	20.9	12.2	8.2	6.7	29.2	26.0	18.8	13.3	10.9	17.9	10.2	6.0	4.2	3.5	

**Security Group 7
PSA Prepayment Assumption Rates**

Distribution Date	Classes KA and KB					Classes KM and KN					Class KQ				
	0%	175%	270%	300%	600%	0%	175%	270%	300%	600%	0%	175%	270%	300%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2022	100	100	89	89	89	100	100	93	87	21	98	94	94	94	94
November 2023	100	100	66	66	0	100	100	79	59	0	96	84	84	84	79
November 2024	100	100	39	39	0	100	100	64	30	0	94	71	71	71	50
November 2025	100	100	20	20	0	100	100	55	12	0	92	59	59	59	31
November 2026	100	100	8	8	0	100	100	50	3	0	89	49	49	49	19
November 2027	100	100	1	1	0	100	100	48	0	0	87	40	40	40	12
November 2028	100	100	0	0	0	100	100	47	0	0	84	32	32	32	7
November 2029	100	96	0	0	0	100	100	44	0	0	82	25	25	25	4
November 2030	100	88	0	0	0	100	100	40	0	0	79	20	20	20	3
November 2031	100	78	0	0	0	100	100	36	0	0	76	16	16	16	2
November 2032	100	66	0	0	0	100	100	32	0	0	73	12	12	12	1
November 2033	100	54	0	0	0	100	100	28	0	0	69	10	10	10	0
November 2034	100	41	0	0	0	100	100	25	0	0	66	8	8	8	0
November 2035	100	29	0	0	0	100	100	21	0	0	63	6	6	6	0
November 2036	100	17	0	0	0	100	100	18	0	0	59	5	5	5	0
November 2037	100	5	0	0	0	100	100	15	0	0	55	4	4	4	0
November 2038	100	0	0	0	0	100	93	13	0	0	51	3	3	3	0
November 2039	100	0	0	0	0	100	80	10	0	0	47	2	2	2	0
November 2040	100	0	0	0	0	100	68	9	0	0	42	1	1	1	0
November 2041	100	0	0	0	0	100	58	7	0	0	38	1	1	1	0
November 2042	100	0	0	0	0	100	48	6	0	0	33	1	1	1	0
November 2043	100	0	0	0	0	100	39	4	0	0	28	0	0	0	0
November 2044	100	0	0	0	0	100	32	3	0	0	23	0	0	0	0
November 2045	100	0	0	0	0	100	25	3	0	0	17	0	0	0	0
November 2046	100	0	0	0	0	100	19	2	0	0	11	0	0	0	0
November 2047	100	0	0	0	0	100	14	1	0	0	5	0	0	0	0
November 2048	92	0	0	0	0	100	9	1	0	0	0	0	0	0	0
November 2049	39	0	0	0	0	100	6	0	0	0	0	0	0	0	0
November 2050	0	0	0	0	0	77	2	0	0	0	0	0	0	0	0
November 2051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	27.8	12.2	2.7	2.7	1.4	29.4	21.5	8.1	2.4	0.7	16.1	5.9	5.9	5.9	3.5

PSA Prepayment Assumption Rates

Distribution Date	Class KR					Class KT				
	0%	175%	270%	300%	600%	0%	175%	270%	300%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100
November 2022	100	100	100	100	100	98	95	94	93	88
November 2023	100	100	100	100	100	97	86	81	80	65
November 2024	100	100	100	100	100	95	76	67	64	41
November 2025	100	100	100	100	100	93	66	55	51	26
November 2026	100	100	100	100	100	91	58	45	41	16
November 2027	100	100	100	100	100	89	50	37	33	10
November 2028	100	100	100	100	100	87	44	30	26	6
November 2029	100	100	100	100	100	85	38	24	21	4
November 2030	100	100	100	100	100	83	33	20	17	2
November 2031	100	100	100	100	100	80	29	16	13	1
November 2032	100	100	100	100	100	78	25	13	10	1
November 2033	100	100	100	100	100	75	21	10	8	1
November 2034	100	100	100	100	100	72	18	8	6	0
November 2035	100	100	100	100	100	69	16	7	5	0
November 2036	100	100	100	100	73	66	13	5	4	0
November 2037	100	100	100	100	44	63	11	4	3	0
November 2038	100	100	100	100	27	60	9	3	2	0
November 2039	100	100	100	100	16	56	8	3	2	0
November 2040	100	100	100	100	10	53	7	2	1	0
November 2041	100	100	100	100	6	49	5	2	1	0
November 2042	100	100	100	100	3	45	4	1	1	0
November 2043	100	100	100	100	2	41	4	1	1	0
November 2044	100	100	100	100	1	36	3	1	0	0
November 2045	100	100	100	100	1	32	2	0	0	0
November 2046	100	100	100	100	0	27	2	0	0	0
November 2047	100	78	78	78	0	22	1	0	0	0
November 2048	48	48	48	48	0	17	1	0	0	0
November 2049	26	26	26	26	0	12	0	0	0	0
November 2050	10	10	10	10	0	6	0	0	0	0
November 2051	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	27.5	27.2	27.2	27.2	16.4	18.3	7.8	5.8	5.4	3.1

**Security Group 8
PSA Prepayment Assumption Rates**

Distribution Date	Class BP						Class BZ					
	0%	100%	325%	400%	450%	800%	0%	100%	325%	400%	450%	800%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100
November 2022	98	96	92	92	92	92	103	103	103	92	85	35
November 2023	96	89	77	77	77	65	106	106	106	72	49	0
November 2024	93	81	58	58	58	34	109	109	109	51	14	0
November 2025	91	73	42	42	42	17	113	113	113	43	1	0
November 2026	88	65	30	30	30	9	116	116	114	42	0	0
November 2027	86	58	21	21	21	4	120	120	108	38	0	0
November 2028	83	51	15	15	15	2	123	123	98	34	0	0
November 2029	80	45	11	11	11	1	127	127	86	29	0	0
November 2030	77	39	8	8	8	1	131	131	74	24	0	0
November 2031	74	34	5	5	5	0	135	135	62	19	0	0
November 2032	70	29	4	4	4	0	139	139	51	16	0	0
November 2033	67	24	3	3	3	0	143	143	42	12	0	0
November 2034	63	19	2	2	2	0	148	148	34	10	0	0
November 2035	60	15	1	1	1	0	152	152	27	7	0	0
November 2036	56	11	1	1	1	0	157	157	22	6	0	0
November 2037	52	7	1	1	1	0	162	162	17	4	0	0
November 2038	47	4	0	0	0	0	166	166	13	3	0	0
November 2039	43	0	0	0	0	0	171	171	10	2	0	0
November 2040	38	0	0	0	0	0	177	149	8	2	0	0
November 2041	33	0	0	0	0	0	182	130	6	1	0	0
November 2042	28	0	0	0	0	0	188	111	4	1	0	0
November 2043	23	0	0	0	0	0	193	94	3	1	0	0
November 2044	17	0	0	0	0	0	199	78	2	0	0	0
November 2045	12	0	0	0	0	0	205	64	2	0	0	0
November 2046	6	0	0	0	0	0	212	50	1	0	0	0
November 2047	0	0	0	0	0	0	211	38	1	0	0	0
November 2048	0	0	0	0	0	0	162	26	0	0	0	0
November 2049	0	0	0	0	0	0	110	16	0	0	0	0
November 2050	0	0	0	0	0	0	56	6	0	0	0	0
November 2051	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	15.3	7.9	4.2	4.2	4.2	2.8	28.0	23.0	11.4	5.6	2.0	0.8

**Security Group 9
PSA Prepayment Assumption Rates**

Distribution Date	Classes P, PA, PB, PC, PD, PE and PI						Class PZ					
	0%	100%	340%	370%	400%	800%	0%	100%	340%	370%	400%	800%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100
November 2022	97	94	87	87	87	87	103	103	103	99	95	40
November 2023	95	85	66	66	66	57	106	106	106	96	86	0
November 2024	92	75	45	45	45	29	109	109	109	94	80	0
November 2025	89	66	29	29	29	15	113	113	113	96	80	0
November 2026	86	58	16	16	16	7	116	116	115	98	82	0
November 2027	82	50	7	7	7	4	120	120	116	99	85	0
November 2028	79	42	0	0	0	2	123	123	113	98	85	0
November 2029	75	35	0	0	0	1	127	127	87	74	62	0
November 2030	72	29	0	0	0	0	131	131	67	55	46	0
November 2031	68	22	0	0	0	0	135	135	51	42	34	0
November 2032	64	16	0	0	0	0	139	139	39	31	25	0
November 2033	60	11	0	0	0	0	143	143	30	23	18	0
November 2034	55	6	0	0	0	0	148	148	23	17	13	0
November 2035	51	1	0	0	0	0	152	152	17	13	9	0
November 2036	46	0	0	0	0	0	157	138	13	9	7	0
November 2037	41	0	0	0	0	0	162	122	10	7	5	0
November 2038	36	0	0	0	0	0	166	108	7	5	3	0
November 2039	31	0	0	0	0	0	171	94	5	4	2	0
November 2040	25	0	0	0	0	0	177	82	4	3	2	0
November 2041	19	0	0	0	0	0	182	70	3	2	1	0
November 2042	13	0	0	0	0	0	188	60	2	1	1	0
November 2043	7	0	0	0	0	0	193	50	1	1	1	0
November 2044	0	0	0	0	0	0	199	41	1	1	0	0
November 2045	0	0	0	0	0	0	176	33	1	0	0	0
November 2046	0	0	0	0	0	0	150	25	0	0	0	0
November 2047	0	0	0	0	0	0	122	18	0	0	0	0
November 2048	0	0	0	0	0	0	94	11	0	0	0	0
November 2049	0	0	0	0	0	0	64	5	0	0	0	0
November 2050	0	0	0	0	0	0	33	0	0	0	0	0
November 2051	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	13.4	6.4	3.0	3.0	3.0	2.5	26.7	20.1	10.6	9.9	8.5	0.9

**Security Group 10
PSA Prepayment Assumption Rates**

Distribution Date	Classes JA, JB, JC and JI				
	0%	100%	250%	400%	500%
Initial Percent	100	100	100	100	100
November 2022	98	96	94	92	90
November 2023	96	91	83	76	71
November 2024	94	83	69	57	49
November 2025	93	76	57	42	34
November 2026	90	70	48	31	23
November 2027	88	64	39	23	16
November 2028	86	58	32	17	11
November 2029	84	53	27	12	7
November 2030	81	48	22	9	5
November 2031	79	44	18	7	3
November 2032	76	40	15	5	2
November 2033	73	36	12	4	1
November 2034	71	32	10	3	1
November 2035	68	29	8	2	1
November 2036	65	26	6	1	0
November 2037	61	23	5	1	0
November 2038	58	20	4	1	0
November 2039	55	18	3	0	0
November 2040	51	15	3	0	0
November 2041	47	13	2	0	0
November 2042	43	11	2	0	0
November 2043	39	10	1	0	0
November 2044	35	8	1	0	0
November 2045	31	7	1	0	0
November 2046	26	5	0	0	0
November 2047	21	4	0	0	0
November 2048	16	3	0	0	0
November 2049	11	2	0	0	0
November 2050	6	1	0	0	0
November 2051	0	0	0	0	0
Weighted Average Life (years)	17.9	10.4	6.1	4.3	3.7

**Security Group 11
PSA Prepayment Assumption Rates**

Distribution Date	Class QB					Classes QD and QI				
	0%	100%	250%	400%	500%	0%	100%	250%	400%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100
November 2022	100	100	100	100	100	98	96	94	92	90
November 2023	100	100	100	100	100	96	90	83	75	71
November 2024	100	100	100	100	100	94	83	69	56	48
November 2025	100	100	100	100	100	92	76	56	41	32
November 2026	100	100	100	100	100	90	69	46	30	21
November 2027	100	100	100	100	100	88	63	38	21	14
November 2028	100	100	100	100	100	86	57	31	15	9
November 2029	100	100	100	100	100	83	52	25	11	5
November 2030	100	100	100	100	100	81	47	20	7	3
November 2031	100	100	100	100	100	78	42	16	5	1
November 2032	100	100	100	100	100	76	38	13	3	0
November 2033	100	100	100	100	79	73	34	10	2	0
November 2034	100	100	100	100	53	70	30	8	1	0
November 2035	100	100	100	100	35	67	27	6	0	0
November 2036	100	100	100	73	23	64	24	5	0	0
November 2037	100	100	100	52	15	61	21	3	0	0
November 2038	100	100	100	37	10	57	18	2	0	0
November 2039	100	100	100	26	7	54	16	1	0	0
November 2040	100	100	100	19	4	50	14	1	0	0
November 2041	100	100	100	13	3	46	11	0	0	0
November 2042	100	100	81	9	2	42	9	0	0	0
November 2043	100	100	62	6	1	38	8	0	0	0
November 2044	100	100	46	4	1	34	6	0	0	0
November 2045	100	100	34	3	0	29	4	0	0	0
November 2046	100	100	24	2	0	25	3	0	0	0
November 2047	100	100	16	1	0	20	2	0	0	0
November 2048	100	100	10	1	0	15	1	0	0	0
November 2049	100	76	5	0	0	9	0	0	0	0
November 2050	100	24	1	0	0	4	0	0	0	0
November 2051	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	29.9	28.5	23.3	16.9	13.9	17.7	9.9	5.8	4.1	3.5

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

<u>Distribution Date</u>	<u>Class IQ</u>				
	<u>0%</u>	<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>
Initial Percent	100	100	100	100	100
November 2022	98	96	94	92	90
November 2023	96	90	83	76	71
November 2024	94	83	69	56	49
November 2025	92	76	57	41	33
November 2026	90	69	47	30	22
November 2027	88	63	39	22	15
November 2028	86	58	32	16	10
November 2029	84	52	26	12	6
November 2030	81	47	21	8	4
November 2031	79	43	17	6	2
November 2032	76	39	14	4	1
November 2033	73	35	11	3	1
November 2034	70	31	9	2	0
November 2035	67	28	7	1	0
November 2036	64	25	5	1	0
November 2037	61	22	4	0	0
November 2038	58	19	3	0	0
November 2039	54	17	2	0	0
November 2040	50	14	2	0	0
November 2041	47	12	1	0	0
November 2042	43	10	1	0	0
November 2043	39	9	1	0	0
November 2044	34	7	0	0	0
November 2045	30	5	0	0	0
November 2046	25	4	0	0	0
November 2047	20	3	0	0	0
November 2048	15	2	0	0	0
November 2049	10	1	0	0	0
November 2050	5	0	0	0	0
November 2051	0	0	0	0	0
Weighted Average Life (years)	17.8	10.1	6.0	4.2	3.6

**Security Group 12
PSA Prepayment Assumption Rates**

<u>Distribution Date</u>	<u>Classes TA and TI</u>				
	<u>0%</u>	<u>100%</u>	<u>350%</u>	<u>550%</u>	<u>700%</u>
Initial Percent	100	100	100	100	100
November 2022	98	96	91	88	85
November 2023	97	90	76	65	58
November 2024	95	83	59	43	33
November 2025	93	76	45	28	19
November 2026	91	70	35	18	11
November 2027	89	64	27	12	6
November 2028	87	58	21	8	3
November 2029	85	53	16	5	2
November 2030	83	48	12	3	1
November 2031	80	44	9	2	1
November 2032	78	40	7	1	0
November 2033	75	36	5	1	0
November 2034	72	32	4	1	0
November 2035	69	29	3	0	0
November 2036	66	26	2	0	0
November 2037	63	23	2	0	0
November 2038	60	20	1	0	0
November 2039	56	18	1	0	0
November 2040	53	15	1	0	0
November 2041	49	13	0	0	0
November 2042	45	11	0	0	0
November 2043	41	10	0	0	0
November 2044	36	8	0	0	0
November 2045	32	6	0	0	0
November 2046	27	5	0	0	0
November 2047	22	4	0	0	0
November 2048	17	2	0	0	0
November 2049	12	1	0	0	0
November 2050	6	0	0	0	0
November 2051	0	0	0	0	0
Weighted Average Life (years)	18.3	10.3	4.7	3.3	2.7

**Security Group 13
PSA Prepayment Assumption Rates**

Distribution Date	Classes LA, LH and LK					Class LB				
	0%	100%	350%	550%	700%	0%	100%	350%	550%	700%
Initial Percent	100	100	100	100	100	100	100	100	100	100
November 2022	94	86	71	59	50	100	100	100	100	100
November 2023	87	65	17	0	0	100	100	100	93	83
November 2024	80	38	0	0	0	100	100	83	61	47
November 2025	73	13	0	0	0	100	100	64	40	27
November 2026	66	0	0	0	0	100	96	49	26	15
November 2027	58	0	0	0	0	100	88	38	17	9
November 2028	50	0	0	0	0	100	80	29	11	5
November 2029	41	0	0	0	0	100	73	22	7	3
November 2030	33	0	0	0	0	100	66	17	5	2
November 2031	24	0	0	0	0	100	60	13	3	1
November 2032	14	0	0	0	0	100	54	10	2	0
November 2033	4	0	0	0	0	100	49	7	1	0
November 2034	0	0	0	0	0	98	44	6	1	0
November 2035	0	0	0	0	0	94	39	4	1	0
November 2036	0	0	0	0	0	89	35	3	0	0
November 2037	0	0	0	0	0	85	31	2	0	0
November 2038	0	0	0	0	0	80	28	2	0	0
November 2039	0	0	0	0	0	76	24	1	0	0
November 2040	0	0	0	0	0	71	21	1	0	0
November 2041	0	0	0	0	0	65	18	1	0	0
November 2042	0	0	0	0	0	60	16	0	0	0
November 2043	0	0	0	0	0	54	13	0	0	0
November 2044	0	0	0	0	0	48	11	0	0	0
November 2045	0	0	0	0	0	42	9	0	0	0
November 2046	0	0	0	0	0	36	7	0	0	0
November 2047	0	0	0	0	0	29	5	0	0	0
November 2048	0	0	0	0	0	22	4	0	0	0
November 2049	0	0	0	0	0	15	2	0	0	0
November 2050	0	0	0	0	0	8	1	0	0	0
November 2051	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	6.7	2.5	1.4	1.1	1.0	22.2	13.3	6.0	4.2	3.4

**Security Group 14
PSA Prepayment Assumption Rates**

Distribution Date	Class AP						Class AZ					
	0%	100%	300%	350%	450%	700%	0%	100%	300%	350%	450%	700%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100
November 2022	98	93	86	86	86	86	103	103	103	91	67	6
November 2023	95	84	67	67	67	52	105	105	105	78	26	0
November 2024	92	76	49	49	49	29	108	108	108	71	5	0
November 2025	90	67	36	36	36	17	111	111	110	70	0	0
November 2026	87	60	25	25	25	9	113	113	108	67	0	0
November 2027	84	53	18	18	18	5	116	116	100	61	0	0
November 2028	81	46	13	13	13	3	119	119	90	53	0	0
November 2029	78	39	9	9	9	2	122	122	78	46	0	0
November 2030	74	34	6	6	6	1	125	125	67	38	0	0
November 2031	71	28	4	4	4	1	128	128	56	31	0	0
November 2032	67	23	3	3	3	0	132	132	47	25	0	0
November 2033	64	18	2	2	2	0	135	135	39	20	0	0
November 2034	60	13	2	2	2	0	138	138	31	16	0	0
November 2035	56	9	1	1	1	0	142	142	25	13	0	0
November 2036	52	5	1	1	1	0	145	145	20	10	0	0
November 2037	48	1	0	0	0	0	149	149	16	8	0	0
November 2038	43	0	0	0	0	0	153	137	13	6	0	0
November 2039	39	0	0	0	0	0	157	120	10	4	0	0
November 2040	34	0	0	0	0	0	161	105	8	3	0	0
November 2041	29	0	0	0	0	0	165	90	6	3	0	0
November 2042	24	0	0	0	0	0	169	77	4	2	0	0
November 2043	18	0	0	0	0	0	173	64	3	1	0	0
November 2044	13	0	0	0	0	0	178	53	2	1	0	0
November 2045	7	0	0	0	0	0	182	42	2	1	0	0
November 2046	1	0	0	0	0	0	187	32	1	0	0	0
November 2047	0	0	0	0	0	0	156	23	1	0	0	0
November 2048	0	0	0	0	0	0	119	15	0	0	0	0
November 2049	0	0	0	0	0	0	81	8	0	0	0	0
November 2050	0	0	0	0	0	0	41	1	0	0	0	0
November 2051	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	14.5	7.0	3.7	3.7	3.7	2.5	27.7	21.6	11.1	7.7	1.5	0.6

**Security Group 15
PSA Prepayment Assumption Rates**

Distribution Date	Classes G, GA, GB, GC, GD, GE, GI, GJ, GK and GL						Class GZ					
	0%	100%	335%	380%	415%	800%	0%	100%	335%	380%	415%	800%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100
November 2022	97	93	84	84	84	84	103	103	103	93	86	2
November 2023	94	84	63	63	63	46	106	106	106	85	68	0
November 2024	90	75	44	44	44	23	109	109	109	81	60	0
November 2025	87	66	29	29	29	12	113	113	113	82	60	0
November 2026	83	58	18	18	18	6	116	116	113	83	61	0
November 2027	80	51	10	10	10	3	120	120	111	83	63	0
November 2028	76	44	4	4	4	2	123	123	108	82	65	0
November 2029	72	37	0	0	0	1	127	127	101	78	64	0
November 2030	68	31	0	0	0	0	131	131	78	58	46	0
November 2031	64	25	0	0	0	0	135	135	60	43	33	0
November 2032	59	19	0	0	0	0	139	139	46	32	24	0
November 2033	55	14	0	0	0	0	143	143	35	24	17	0
November 2034	50	9	0	0	0	0	148	148	27	17	12	0
November 2035	45	5	0	0	0	0	152	152	20	13	9	0
November 2036	41	0	0	0	0	0	157	157	15	9	6	0
November 2037	35	0	0	0	0	0	162	139	11	7	4	0
November 2038	30	0	0	0	0	0	166	122	8	5	3	0
November 2039	25	0	0	0	0	0	171	106	6	3	2	0
November 2040	19	0	0	0	0	0	177	91	5	2	1	0
November 2041	13	0	0	0	0	0	182	77	3	2	1	0
November 2042	7	0	0	0	0	0	188	64	2	1	1	0
November 2043	1	0	0	0	0	0	193	53	2	1	0	0
November 2044	0	0	0	0	0	0	169	42	1	1	0	0
November 2045	0	0	0	0	0	0	137	32	1	0	0	0
November 2046	0	0	0	0	0	0	105	23	0	0	0	0
November 2047	0	0	0	0	0	0	71	15	0	0	0	0
November 2048	0	0	0	0	0	0	36	7	0	0	0	0
November 2049	0	0	0	0	0	0	0	0	0	0	0	0
November 2050	0	0	0	0	0	0	0	0	0	0	0	0
November 2051	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	12.4	6.6	3.0	3.0	3.0	2.3	25.2	20.4	11.1	9.3	7.3	0.6

**Security Group 16
PSA Prepayment Assumption Rates**

Distribution Date	Class IA				
	0%	100%	350%	550%	700%
Initial Percent	100	100	100	100	100
November 2022	98	96	93	91	90
November 2023	96	90	81	74	68
November 2024	93	82	65	50	39
November 2025	91	75	51	32	22
November 2026	88	68	39	21	12
November 2027	86	61	30	13	7
November 2028	83	55	23	9	3
November 2029	80	49	18	5	2
November 2030	78	44	13	3	1
November 2031	75	39	10	2	0
November 2032	72	34	7	1	0
November 2033	68	30	6	1	0
November 2034	65	26	4	0	0
November 2035	62	22	3	0	0
November 2036	58	19	2	0	0
November 2037	55	16	1	0	0
November 2038	51	14	1	0	0
November 2039	47	12	1	0	0
November 2040	43	11	0	0	0
November 2041	39	9	0	0	0
November 2042	34	8	0	0	0
November 2043	30	7	0	0	0
November 2044	25	6	0	0	0
November 2045	20	4	0	0	0
November 2046	15	4	0	0	0
November 2047	12	3	0	0	0
November 2048	9	2	0	0	0
November 2049	6	1	0	0	0
November 2050	2	0	0	0	0
November 2051	0	0	0	0	0
Weighted Average Life (years)	16.3	9.4	5.0	3.6	3.0

**Security Group 17
PSA Prepayment Assumption Rates**

Distribution Date	Classes IC and PT				
	0%	100%	250%	400%	500%
Initial Percent	100	100	100	100	100
November 2022	98	96	94	91	89
November 2023	96	90	82	74	69
November 2024	94	83	68	56	48
November 2025	93	76	57	41	33
November 2026	90	69	47	30	22
November 2027	88	63	39	22	15
November 2028	86	58	32	17	10
November 2029	84	53	26	12	7
November 2030	81	48	22	9	5
November 2031	79	43	18	7	3
November 2032	76	39	14	5	2
November 2033	73	35	12	3	1
November 2034	71	32	10	3	1
November 2035	68	28	8	2	1
November 2036	65	25	6	1	0
November 2037	61	23	5	1	0
November 2038	58	20	4	1	0
November 2039	55	17	3	0	0
November 2040	51	15	3	0	0
November 2041	47	13	2	0	0
November 2042	43	11	2	0	0
November 2043	39	9	1	0	0
November 2044	35	8	1	0	0
November 2045	31	6	1	0	0
November 2046	26	5	0	0	0
November 2047	21	4	0	0	0
November 2048	16	3	0	0	0
November 2049	11	2	0	0	0
November 2050	6	1	0	0	0
November 2051	0	0	0	0	0
Weighted Average Life (years)	17.9	10.3	6.1	4.3	3.6

**Security Group 18
PSA Prepayment Assumption Rates**

Distribution Date	Class BI					Class BL					Class IB					Class ID				
	0%	165%	270%	300%	600%	0%	165%	270%	300%	600%	0%	165%	270%	300%	600%	0%	165%	270%	300%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2022	98	94	91	91	83	100	100	100	100	100	98	95	94	93	89	98	95	93	93	88
November 2023	96	84	77	76	57	100	100	100	100	100	96	87	82	81	67	96	86	81	79	64
November 2024	94	74	63	61	36	100	100	100	100	100	94	77	68	65	42	94	76	66	64	41
November 2025	92	65	52	48	22	100	100	100	100	100	93	68	55	52	26	92	67	54	51	25
November 2026	90	57	42	39	14	100	100	100	100	100	90	59	45	41	16	90	58	44	41	16
November 2027	87	50	35	31	9	100	100	100	100	100	88	52	37	33	10	87	51	36	32	10
November 2028	85	44	28	25	5	100	100	100	100	100	86	46	30	26	6	85	45	29	26	6
November 2029	83	38	23	20	3	100	100	100	100	100	84	40	24	21	4	83	39	24	20	4
November 2030	80	33	18	15	2	100	100	100	100	76	81	35	20	17	2	80	34	19	16	2
November 2031	77	29	15	12	1	100	100	100	100	47	79	30	16	13	2	77	29	15	13	1
November 2032	75	25	12	10	1	100	100	100	100	29	76	26	13	10	1	75	25	12	10	1
November 2033	72	22	10	8	0	100	100	100	100	18	73	23	10	8	1	72	22	10	8	1
November 2034	69	19	8	6	0	100	100	100	100	11	71	19	8	6	0	69	19	8	6	0
November 2035	66	16	6	5	0	100	100	100	100	7	68	17	7	5	0	66	16	6	5	0
November 2036	63	14	5	4	0	100	100	100	100	4	65	14	5	4	0	63	14	5	4	0
November 2037	60	12	4	3	0	100	100	100	95	2	61	12	4	3	0	60	12	4	3	0
November 2038	56	10	3	2	0	100	100	100	73	1	58	10	3	2	0	56	10	3	2	0
November 2039	53	8	2	2	0	100	100	81	56	1	55	9	3	2	0	53	8	2	2	0
November 2040	49	7	2	1	0	100	100	63	43	1	51	7	2	1	0	49	7	2	1	0
November 2041	45	6	1	1	0	100	100	48	32	0	47	6	2	1	0	45	6	1	1	0
November 2042	42	5	1	1	0	100	100	37	24	0	43	5	1	1	0	42	5	1	1	0
November 2043	38	4	1	0	0	100	100	28	18	0	39	4	1	1	0	38	4	1	1	0
November 2044	33	3	1	0	0	100	100	20	13	0	35	3	1	0	0	33	3	1	0	0
November 2045	29	2	0	0	0	100	78	15	9	0	31	3	0	0	0	29	2	0	0	0
November 2046	25	2	0	0	0	100	58	10	6	0	26	2	0	0	0	25	2	0	0	0
November 2047	20	1	0	0	0	100	42	7	4	0	21	1	0	0	0	20	1	0	0	0
November 2048	15	1	0	0	0	100	28	4	2	0	16	1	0	0	0	15	1	0	0	0
November 2049	10	0	0	0	0	100	16	2	1	0	11	1	0	0	0	10	0	0	0	0
November 2050	5	0	0	0	0	100	6	1	0	0	6	0	0	0	0	5	0	0	0	0
November 2051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	17.6	7.8	5.5	5.1	2.9	29.7	25.8	20.7	19.3	10.5	17.9	8.0	5.8	5.4	3.2	17.6	7.9	5.7	5.3	3.1

**Security Group 18
PSA Prepayment Assumption Rates**

Distribution Date	Class IG					Class IH					Class IJ					Class IK				
	0%	165%	270%	300%	600%	0%	165%	270%	300%	600%	0%	165%	270%	300%	600%	0%	165%	270%	300%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2022	98	95	93	93	88	98	95	93	93	87	98	95	93	93	87	98	96	94	94	89
November 2023	96	86	81	79	64	97	86	81	79	64	96	86	81	79	64	97	88	82	81	67
November 2024	94	76	66	64	41	95	76	66	64	40	94	76	66	63	40	95	77	68	65	42
November 2025	93	67	54	51	25	93	67	54	51	25	92	66	54	50	25	93	68	56	52	27
November 2026	90	59	44	41	16	91	59	44	41	16	90	58	44	40	16	91	60	45	42	17
November 2027	88	51	36	32	10	89	52	36	32	10	87	50	35	32	10	89	53	37	33	10
November 2028	86	45	29	26	6	87	45	29	26	6	85	44	29	25	6	87	46	30	27	6
November 2029	84	39	24	20	4	84	40	24	21	4	83	38	23	20	4	85	40	25	21	4
November 2030	81	34	19	16	2	82	34	19	16	2	80	33	19	16	2	83	35	20	17	2
November 2031	79	29	15	13	1	80	30	16	13	1	77	28	15	12	1	80	31	16	13	2
November 2032	76	25	12	10	1	77	26	13	10	1	75	25	12	10	1	78	27	13	11	1
November 2033	73	22	10	8	1	74	22	10	8	1	72	21	10	8	1	75	23	11	8	1
November 2034	71	19	8	6	0	72	19	8	6	0	69	18	8	6	0	72	20	8	7	0
November 2035	68	16	6	5	0	69	17	7	5	0	66	15	6	5	0	69	17	7	5	0
November 2036	65	14	5	4	0	66	14	5	4	0	63	13	5	4	0	66	15	5	4	0
November 2037	61	12	4	3	0	63	12	4	3	0	60	11	4	3	0	63	13	4	3	0
November 2038	58	10	3	2	0	59	10	3	2	0	56	9	3	2	0	60	11	3	2	0
November 2039	55	8	2	2	0	56	9	3	2	0	53	8	2	2	0	56	9	3	2	0
November 2040	51	7	2	1	0	52	7	2	1	0	49	6	2	1	0	53	8	2	1	0
November 2041	47	6	1	1	0	48	6	2	1	0	45	5	1	1	0	49	6	2	1	0
November 2042	43	5	1	1	0	44	5	1	1	0	42	4	1	1	0	45	5	1	1	0
November 2043	39	4	1	1	0	40	4	1	1	0	38	3	1	0	0	41	4	1	1	0
November 2044	35	3	1	0	0	36	3	1	0	0	33	3	1	0	0	36	3	1	0	0
November 2045	31	2	0	0	0	31	2	0	0	0	29	2	0	0	0	32	3	1	0	0
November 2046	26	2	0	0	0	27	2	0	0	0	25	1	0	0	0	27	2	0	0	0
November 2047	21	1	0	0	0	22	1	0	0	0	20	1	0	0	0	22	1	0	0	0
November 2048	16	1	0	0	0	17	1	0	0	0	15	0	0	0	0	17	1	0	0	0
November 2049	11	0	0	0	0	11	0	0	0	0	10	0	0	0	0	12	1	0	0	0
November 2050	6	0	0	0	0	6	0	0	0	0	5	0	0	0	0	6	0	0	0	0
November 2051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	17.9	7.9	5.7	5.3	3.1	18.2	8.0	5.7	5.3	3.1	17.6	7.7	5.6	5.2	3.1	18.3	8.1	5.9	5.4	3.2

PSA Prepayment Assumption Rates

Distribution Date	Class II					Class III					Class IN					Class IP				
	0%	165%	270%	300%	600%	0%	165%	270%	300%	600%	0%	165%	270%	300%	600%	0%	165%	270%	300%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2022	98	95	93	93	88	98	95	93	93	88	98	95	93	93	88	98	95	93	93	87
November 2023	97	87	81	80	65	97	87	81	80	65	97	87	81	80	65	96	86	81	79	64
November 2024	95	77	67	64	41	95	77	67	64	41	95	77	67	64	41	94	76	66	63	40
November 2025	93	67	55	51	26	93	67	55	51	26	93	68	55	51	26	92	66	54	50	25
November 2026	91	59	45	41	16	91	59	45	41	16	91	59	45	41	16	90	58	44	40	16
November 2027	89	52	36	33	10	89	52	36	33	10	89	52	36	33	10	87	50	35	32	10
November 2028	87	45	30	26	6	87	45	30	26	6	87	46	30	26	6	85	44	29	25	6
November 2029	85	40	24	21	4	85	40	24	21	4	85	40	24	21	4	83	38	23	20	4
November 2030	83	35	20	16	2	83	35	20	16	2	83	35	20	17	2	80	33	19	16	2
November 2031	80	30	16	13	1	80	30	16	13	1	80	30	16	13	1	77	28	15	12	1
November 2032	78	26	13	10	1	78	26	13	10	1	78	26	13	10	1	75	25	12	10	1
November 2033	75	23	10	8	1	75	23	10	8	1	75	23	10	8	1	72	21	10	8	1
November 2034	72	20	8	6	0	72	20	8	6	0	72	20	8	6	0	69	18	8	6	0
November 2035	69	17	7	5	0	69	17	7	5	0	69	17	7	5	0	66	15	6	5	0
November 2036	66	14	5	4	0	66	14	5	4	0	66	14	5	4	0	63	13	5	4	0
November 2037	63	12	4	3	0	63	12	4	3	0	63	12	4	3	0	60	11	4	3	0
November 2038	60	10	3	2	0	60	10	3	2	0	60	10	3	2	0	56	9	3	2	0
November 2039	56	9	3	2	0	56	9	3	2	0	56	9	3	2	0	53	8	2	2	0
November 2040	53	7	2	1	0	53	7	2	1	0	53	7	2	1	0	49	6	2	1	0
November 2041	49	6	2	1	0	49	6	2	1	0	49	6	2	1	0	45	5	1	1	0
November 2042	45	5	1	1	0	45	5	1	1	0	45	5	1	1	0	42	4	1	1	0
November 2043	41	4	1	1	0	41	4	1	1	0	41	4	1	1	0	38	3	1	0	0
November 2044	36	3	1	0	0	36	3	1	0	0	36	3	1	0	0	33	3	1	0	0
November 2045	32	2	0	0	0	32	2	0	0	0	32	2	0	0	0	29	2	0	0	0
November 2046	27	2	0	0	0	27	2	0	0	0	27	2	0	0	0	25	1	0	0	0
November 2047	22	1	0	0	0	22	1	0	0	0	22	1	0	0	0	20	1	0	0	0
November 2048	17	1	0	0	0	17	1	0	0	0	17	1	0	0	0	15	0	0	0	0
November 2049	12	0	0	0	0	12	0	0	0	0	12	0	0	0	0	10	0	0	0	0
November 2050	6	0	0	0	0	6	0	0	0	0	6	0	0	0	0	5	0	0	0	0
November 2051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	18.3	8.0	5.8	5.4	3.1	18.3	8.0	5.8	5.4	3.1	18.3	8.0	5.8	5.4	3.1	17.6	7.7	5.6	5.2	3.1

**Security Group 18
PSA Prepayment Assumption Rates**

Distribution Date	Class IR					Class IT					Class KD					Class KI				
	0%	165%	270%	300%	600%	0%	165%	270%	300%	600%	0%	165%	270%	300%	600%	0%	165%	270%	300%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2022	98	95	93	93	88	98	95	93	93	88	98	95	93	93	88	98	95	93	93	87
November 2023	96	87	81	80	65	96	86	81	79	64	96	87	81	79	64	97	86	81	79	63
November 2024	94	76	67	64	41	94	76	66	64	41	95	76	66	63	39	95	76	66	64	40
November 2025	91	67	54	51	25	93	67	54	51	25	93	66	53	50	23	93	67	54	51	25
November 2026	89	59	44	41	16	90	59	44	41	16	90	58	43	39	13	91	59	44	41	16
November 2027	86	51	36	32	10	88	51	36	32	10	88	50	34	31	7	89	52	36	32	10
November 2028	84	45	29	26	6	86	45	29	26	6	86	44	27	24	3	87	45	29	26	6
November 2029	81	39	24	20	4	84	39	24	20	4	84	38	22	18	1	84	39	24	21	4
November 2030	79	34	19	16	2	81	34	19	16	2	81	32	17	14	0	82	34	19	16	2
November 2031	76	30	16	13	1	79	29	15	13	1	79	28	13	10	0	80	30	16	13	1
November 2032	73	26	13	10	1	76	25	12	10	1	76	24	10	7	0	77	26	13	10	1
November 2033	70	22	10	8	1	73	22	10	8	1	73	20	7	5	0	74	22	10	8	1
November 2034	67	19	8	6	0	71	19	8	6	0	70	17	5	3	0	72	19	8	6	0
November 2035	64	16	6	5	0	68	16	6	5	0	67	14	4	2	0	69	17	7	5	0
November 2036	61	14	5	4	0	65	14	5	4	0	64	11	2	1	0	66	14	5	4	0
November 2037	58	12	4	3	0	61	12	4	3	0	61	9	1	0	0	62	12	4	3	0
November 2038	54	10	3	2	0	58	10	3	2	0	57	7	0	0	0	59	10	3	2	0
November 2039	51	8	2	2	0	55	8	2	2	0	54	6	0	0	0	56	9	3	2	0
November 2040	47	7	2	1	0	51	7	2	1	0	50	4	0	0	0	52	7	2	1	0
November 2041	44	6	1	1	0	47	6	1	1	0	46	3	0	0	0	48	6	2	1	0
November 2042	40	5	1	1	0	43	5	1	1	0	42	2	0	0	0	44	5	1	1	0
November 2043	36	4	1	1	0	39	4	1	1	0	38	1	0	0	0	40	4	1	1	0
November 2044	32	3	1	0	0	35	3	1	0	0	33	0	0	0	0	36	3	1	0	0
November 2045	28	2	0	0	0	31	2	0	0	0	29	0	0	0	0	31	2	0	0	0
November 2046	23	2	0	0	0	26	2	0	0	0	24	0	0	0	0	27	2	0	0	0
November 2047	19	1	0	0	0	21	1	0	0	0	19	0	0	0	0	22	1	0	0	0
November 2048	14	1	0	0	0	16	1	0	0	0	14	0	0	0	0	17	1	0	0	0
November 2049	10	0	0	0	0	11	0	0	0	0	8	0	0	0	0	11	0	0	0	0
November 2050	5	0	0	0	0	6	0	0	0	0	3	0	0	0	0	6	0	0	0	0
November 2051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	17.2	7.9	5.7	5.3	3.1	17.9	7.9	5.7	5.3	3.1	17.7	7.4	5.3	4.9	2.9	18.2	8.0	5.7	5.3	3.1

PSA Prepayment Assumption Rates

Distribution Date	Class L				Class LI					Class LM				Class LN						
	0%	165%	270%	600%	0%	165%	270%	300%	600%	0%	165%	270%	600%	0%	165%	270%	300%	600%		
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
November 2022	100	100	100	100	98	95	93	93	88	100	100	100	100	100	98	94	94	94	94	
November 2023	100	100	100	100	96	87	81	79	64	100	100	100	100	100	96	83	83	83	80	
November 2024	100	100	100	100	94	76	66	64	41	100	100	100	100	100	93	70	70	70	50	
November 2025	100	100	100	100	92	67	54	51	25	100	100	100	100	100	91	58	58	58	30	
November 2026	100	100	100	100	90	59	44	41	16	100	100	100	100	100	88	48	48	48	17	
November 2027	100	100	100	100	88	51	36	32	10	100	100	100	100	100	86	39	39	39	10	
November 2028	100	100	100	100	85	45	29	26	6	100	100	100	100	100	83	30	30	30	5	
November 2029	100	100	100	100	83	39	24	20	4	100	100	100	100	100	80	23	23	23	2	
November 2030	100	100	100	100	81	34	19	16	2	100	100	100	100	98	77	18	18	18	0	
November 2031	100	100	100	100	78	29	15	13	1	100	100	100	100	48	74	14	14	14	0	
November 2032	100	100	100	100	75	25	12	10	1	100	100	100	100	17	70	10	10	10	0	
November 2033	100	100	100	100	72	22	10	8	1	100	100	100	100	0	67	7	7	7	0	
November 2034	100	100	100	100	70	19	8	6	0	100	100	100	100	0	63	5	5	5	0	
November 2035	100	100	100	100	67	16	6	5	0	100	100	100	100	0	60	3	3	3	0	
November 2036	100	100	100	100	63	14	5	4	0	100	100	100	100	0	56	2	2	2	0	
November 2037	100	100	100	100	60	12	4	3	0	100	100	100	100	0	52	1	1	1	0	
November 2038	100	100	100	100	57	10	3	2	0	100	93	93	93	0	47	0	0	0	0	
November 2039	100	100	100	100	53	8	2	2	0	100	64	64	64	0	43	0	0	0	0	
November 2040	100	100	100	100	50	7	2	1	0	100	40	40	40	0	38	0	0	0	0	
November 2041	100	100	100	100	46	6	1	1	0	100	22	22	22	0	33	0	0	0	0	
November 2042	100	100	100	100	42	5	1	1	0	100	8	8	8	0	28	0	0	0	0	
November 2043	100	92	92	92	38	4	1	1	0	100	0	0	0	0	23	0	0	0	0	
November 2044	100	66	66	66	34	3	1	0	0	100	0	0	0	0	18	0	0	0	0	
November 2045	100	47	47	47	30	2	0	0	0	100	0	0	0	0	12	0	0	0	0	
November 2046	100	32	32	32	25	2	0	0	0	100	0	0	0	0	6	0	0	0	0	
November 2047	100	21	21	21	21	1	0	0	0	96	0	0	0	0	0	0	0	0	0	
November 2048	12	12	12	12	16	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
November 2049	6	6	6	6	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
November 2050	2	2	2	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
November 2051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Weighted Average Life (years)	26.6	24.3	24.3	24.3	13.9	17.7	7.9	5.7	5.3	3.1	26.2	18.8	18.8	18.8	10.1	15.3	5.6	5.6	5.6	3.4

**Security Group 18
PSA Prepayment Assumption Rates**

Distribution Date	Class LP					Class IQ					Class LU					Class LZ				
	0%	165%	270%	300%	600%	0%	165%	270%	300%	600%	0%	165%	270%	300%	600%	0%	165%	270%	300%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2022	98	94	94	94	94	100	100	90	90	90	100	100	94	87	23	102	102	102	102	102
November 2023	96	84	84	84	81	100	100	67	67	0	100	100	80	60	0	103	103	103	103	0
November 2024	93	71	71	71	51	100	100	40	40	0	100	100	65	30	0	105	105	105	105	0
November 2025	91	59	59	59	31	100	100	21	21	0	100	100	55	12	0	106	106	106	106	0
November 2026	88	49	49	49	19	100	100	9	9	0	100	100	50	3	0	108	108	108	108	0
November 2027	86	40	40	40	12	100	100	2	2	0	100	100	48	0	0	109	109	109	109	0
November 2028	83	32	32	32	7	100	100	0	0	0	100	100	46	0	0	111	111	87	87	0
November 2029	80	25	25	25	4	100	97	0	0	0	100	100	44	0	0	113	113	87	87	0
November 2030	77	20	20	20	2	100	90	0	0	0	100	100	40	0	0	114	114	87	87	0
November 2031	74	16	16	16	1	100	80	0	0	0	100	100	36	0	0	116	116	87	87	0
November 2032	71	12	12	12	0	100	70	0	0	0	100	100	32	0	0	118	118	87	87	0
November 2033	68	9	9	9	0	100	58	0	0	0	100	100	28	0	0	120	120	87	87	0
November 2034	64	7	7	7	0	100	47	0	0	0	100	100	24	0	0	122	122	87	87	0
November 2035	60	5	5	5	0	100	35	0	0	0	100	100	21	0	0	123	123	87	87	0
November 2036	57	4	4	4	0	100	24	0	0	0	100	100	18	0	0	125	125	87	87	0
November 2037	53	3	3	3	0	100	13	0	0	0	100	100	15	0	0	127	127	87	87	0
November 2038	49	2	2	2	0	100	3	0	0	0	100	100	12	0	0	129	129	87	87	0
November 2039	44	1	1	1	0	100	0	0	0	0	100	91	10	0	0	131	87	87	87	0
November 2040	40	1	1	1	0	100	0	0	0	0	100	77	8	0	0	133	87	87	87	0
November 2041	35	1	1	1	0	100	0	0	0	0	100	65	7	0	0	135	87	87	87	0
November 2042	30	0	0	0	0	100	0	0	0	0	100	55	5	0	0	137	87	87	87	0
November 2043	25	0	0	0	0	100	0	0	0	0	100	45	4	0	0	139	87	87	87	0
November 2044	20	0	0	0	0	100	0	0	0	0	100	36	3	0	0	141	87	87	87	0
November 2045	14	0	0	0	0	100	0	0	0	0	100	28	2	0	0	143	87	87	87	0
November 2046	8	0	0	0	0	100	0	0	0	0	100	22	2	0	0	145	87	87	87	0
November 2047	2	0	0	0	0	100	0	0	0	0	100	16	1	0	0	148	87	87	87	0
November 2048	0	0	0	0	0	76	0	0	0	0	100	10	1	0	0	150	87	87	87	0
November 2049	0	0	0	0	0	31	0	0	0	0	100	6	0	0	0	152	87	87	87	0
November 2050	0	0	0	0	0	0	0	0	0	0	75	2	0	0	0	87	87	87	87	0
November 2051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average																				
Life (years)	15.6	5.9	5.9	5.9	3.5	27.6	12.7	2.8	2.8	1.4	29.4	22.1	8.0	2.4	0.7	29.3	25.7	24.9	24.9	1.9

PSA Prepayment Assumption Rates

Distribution Date	Class VA					Class ZA					Class ZL				
	0%	165%	270%	300%	600%	0%	165%	270%	300%	600%	0%	165%	270%	300%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2022	92	92	92	92	92	102	102	102	102	102	102	102	102	102	102
November 2023	84	84	84	84	84	104	104	104	104	104	103	103	103	103	0
November 2024	76	76	76	76	76	105	105	105	105	105	105	105	105	105	0
November 2025	68	68	68	68	68	107	107	107	107	107	106	106	106	106	0
November 2026	59	59	59	59	59	109	109	109	109	109	108	108	108	108	0
November 2027	51	51	51	51	51	111	111	111	111	111	109	109	109	2	0
November 2028	42	42	42	42	42	113	113	113	113	113	111	111	111	2	0
November 2029	33	33	33	33	33	115	115	115	115	115	113	113	113	2	0
November 2030	24	24	24	24	0	117	117	117	117	93	114	114	114	2	0
November 2031	15	15	15	15	0	119	119	119	119	57	116	116	116	2	0
November 2032	5	5	5	5	0	121	121	121	121	35	118	118	118	2	0
November 2033	0	0	0	0	0	122	122	122	122	22	120	120	120	2	0
November 2034	0	0	0	0	0	122	122	122	122	13	122	122	122	2	0
November 2035	0	0	0	0	0	122	122	122	122	8	123	123	123	2	0
November 2036	0	0	0	0	0	122	122	122	122	5	125	125	125	2	0
November 2037	0	0	0	0	0	122	122	122	116	3	127	127	127	2	0
November 2038	0	0	0	0	0	122	122	122	90	2	129	129	129	2	0
November 2039	0	0	0	0	0	122	122	99	69	1	131	131	131	2	0
November 2040	0	0	0	0	0	122	122	77	52	1	133	133	133	2	0
November 2041	0	0	0	0	0	122	122	59	39	0	135	135	135	2	0
November 2042	0	0	0	0	0	122	122	45	29	0	137	137	137	2	0
November 2043	0	0	0	0	0	122	122	34	22	0	139	139	139	2	0
November 2044	0	0	0	0	0	122	122	25	16	0	141	141	141	2	0
November 2045	0	0	0	0	0	122	95	18	11	0	143	143	143	2	0
November 2046	0	0	0	0	0	122	71	13	8	0	145	145	145	2	0
November 2047	0	0	0	0	0	122	51	8	5	0	148	148	148	2	0
November 2048	0	0	0	0	0	122	34	5	3	0	150	150	150	2	0
November 2049	0	0	0	0	0	122	19	3	2	0	152	152	152	2	0
November 2050	0	0	0	0	0	122	7	1	1	0	154	154	154	2	0
November 2051	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	6.0	5.5	29.7	25.8	20.7	19.3	10.6	30.0	29.9	29.8	6.4	1.2

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 16 Securities, the investor's own projection of payment rates on the Underlying Certificates under a variety of scenarios, and
- in the case of a Floating Rate or an Inverse Floating Rate Class, the investor's own projection of levels of LIBOR or Compounded SOFR, as applicable, under a variety of scenarios.

No representation is made regarding Mortgage Loan prepayment rates, Underlying Certificate payment rates, LIBOR levels, Compounded 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.

LIBOR and Compounded SOFR: Effect on Yields of the Floating Rate and Inverse Floating Rate Classes

Low levels of LIBOR and Compounded SOFR, as applicable, can reduce the yield of the Floating Rate Classes. High levels of LIBOR and Compounded SOFR, as applicable, can reduce the yield of the Inverse Floating Rate Classes. In addition, the Floating Rate Classes will not necessarily benefit from a higher yield at high levels of LIBOR or Compounded SOFR, as applicable, 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 LIBOR and Compounded SOFR, as applicable.

The Mortgage Loans will not prepay at any constant rate until maturity, and it is unlikely that LIBOR or Compounded 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 LIBOR or Compounded SOFR, as applicable, and (2) the purchase price of each Class (expressed as a percentage of original Class Notional Balance) plus accrued interest is as indicated in the related table. **The assumed purchase price is not necessarily that at which actual sales will occur.**

SECURITY GROUP 1

**Sensitivity of Class SA to Prepayments
Assumed Price 2.25%***

<u>Compounded SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>350%</u>	<u>550%</u>	<u>700%</u>
0.01%	83.5%	73.1%	64.7%	58.2%
0.05%	81.2%	70.8%	62.2%	55.8%
0.90%	34.2%	22.0%	12.0%	4.3%
1.75% and above	**	**	**	**

SECURITY GROUP 2

**Sensitivity of Class HI to Prepayments
Assumed Price 14.20313%***

<u>PSA Prepayment Assumption Rates</u>				
<u>150%</u>	<u>240%</u>	<u>270%</u>	<u>407%</u>	<u>500%</u>
6.7%	6.7%	6.7%	0.0%	(5.0)%

SECURITY GROUP 3

**Sensitivity of Class MI to Prepayments
Assumed Price 9.21875%***

<u>PSA Prepayment Assumption Rates</u>				
<u>100%</u>	<u>200%</u>	<u>300%</u>	<u>313%</u>	<u>400%</u>
13.3%	7.4%	0.9%	0.0%	(6.0)%

SECURITY GROUP 4

**Sensitivity of Class S to Prepayments
Assumed Price 10.25%***

<u>Compounded SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>300%</u>	<u>450%</u>	<u>600%</u>
0.010%	31.3%	21.5%	13.9%	6.2%
0.050%	30.8%	21.0%	13.4%	5.7%
1.875%	10.3%	(0.5)%	(9.0)%	(17.7)%
3.700% and above	**	**	**	**

**Sensitivity of Class SD to Prepayments
Assumed Price 9.25%***

<u>LIBOR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>300%</u>	<u>450%</u>	<u>600%</u>
0.0500%	29.5%	19.6%	12.0%	4.2%
0.0890%	29.0%	19.1%	11.4%	3.7%
1.6645%	9.4%	(1.5)%	(10.0)%	(18.8)%
3.2400% 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 5

**Sensitivity of Class NI to Prepayments
Assumed Price 8.0%***

PSA Prepayment Assumption Rates				
<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>	<u>583%</u>
24.9%	17.4%	9.7%	4.4%	0.0%

SECURITY GROUP 6

**Sensitivity of Class CI to Prepayments
Assumed Price 11.625%***

PSA Prepayment Assumption Rates				
<u>100%</u>	<u>250%</u>	<u>272%</u>	<u>400%</u>	<u>500%</u>
12.6%	1.8%	0.0%	(10.4)%	(18.7)%

**Sensitivity of Class DI to Prepayments
Assumed Price 13.1563%***

PSA Prepayment Assumption Rates				
<u>100%</u>	<u>250%</u>	<u>295%</u>	<u>400%</u>	<u>500%</u>
10.9%	2.6%	0.0%	(6.1)%	(12.0)%

**Sensitivity of Class EI to Prepayments
Assumed Price 10.5313%***

PSA Prepayment Assumption Rates				
<u>100%</u>	<u>250%</u>	<u>258%</u>	<u>400%</u>	<u>500%</u>
13.7%	0.8%	0.0%	(13.5)%	(23.0)%

**Sensitivity of Class SE to Prepayments
Assumed Price 9.0%***

<u>LIBOR</u>	PSA Prepayment Assumption Rates			
	<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>
0.0500%	29.9%	22.1%	14.1%	8.6%
0.0890%	29.4%	21.6%	13.5%	8.0%
1.6545%	9.4%	1.1%	(7.6)%	(13.6)%
3.2200% and above	**	**	**	**

SECURITY GROUP 9

**Sensitivity of Class PI to Prepayments
Assumed Price 9.5%***

PSA Prepayment Assumption Rates					
<u>100%</u>	<u>305%</u>	<u>340%</u>	<u>370%</u>	<u>400%</u>	<u>800%</u>
20.3%	0.1%	(3.3)%	(3.3)%	(3.3)%	(11.9)%

* 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.

SECURITY GROUP 10

**Sensitivity of Class JI to Prepayments
Assumed Price 8.12109%***

PSA Prepayment Assumption Rates				
<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>	<u>572%</u>
24.4%	16.9%	9.1%	3.8%	0.0%

SECURITY GROUP 11

**Sensitivity of Class QI to Prepayments
Assumed Price 8.54688%***

PSA Prepayment Assumption Rates				
<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>498%</u>	<u>500%</u>
22.4%	14.4%	5.8%	0.0%	(0.1)%

SECURITY GROUPS 10 AND 11

**Sensitivity of Class IQ to Prepayments
Assumed Price 8.35486%***

PSA Prepayment Assumption Rates				
<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>	<u>530%</u>
23.3%	15.5%	7.3%	1.8%	0.1%

SECURITY GROUP 12

**Sensitivity of Class TI to Prepayments
Assumed Price 10.09375%***

PSA Prepayment Assumption Rates				
<u>100%</u>	<u>350%</u>	<u>521%</u>	<u>550%</u>	<u>700%</u>
23.1%	9.6%	0.0%	(1.6)%	(10.4)%

SECURITY GROUP 15

**Sensitivity of Class GI to Prepayments
Assumed Price 9.5%***

PSA Prepayment Assumption Rates					
<u>100%</u>	<u>303%</u>	<u>335%</u>	<u>380%</u>	<u>415%</u>	<u>800%</u>
20.4%	0.1%	(2.6)%	(2.6)%	(2.6)%	(17.4)%

SECURITY GROUP 16

**Sensitivity of Class IA to Prepayments
Assumed Price 10.5%***

PSA Prepayment Assumption Rates				
<u>100%</u>	<u>350%</u>	<u>549%</u>	<u>550%</u>	<u>700%</u>
21.0%	10.4%	0.0%	0.0%	(8.2)%

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

SECURITY GROUP 17

Sensitivity of Class IC to Prepayments Assumed Price 13.0%*

PSA Prepayment Assumption Rates				
<u>100%</u>	<u>250%</u>	<u>305%</u>	<u>400%</u>	<u>500%</u>
11.2%	3.1%	0.0%	(5.4)%	(11.2)%

SECURITY GROUP 18

Sensitivity of Class BI to Prepayments Assumed Price 20.5%*

PSA Prepayment Assumption Rates				
<u>165%</u>	<u>198%</u>	<u>270%</u>	<u>300%</u>	<u>600%</u>
2.0%	0.0%	(4.2)%	(6.1)%	(25.1)%

Sensitivity of Class IB to Prepayments Assumed Price 15.0%*

PSA Prepayment Assumption Rates				
<u>165%</u>	<u>255%</u>	<u>270%</u>	<u>300%</u>	<u>600%</u>
4.9%	0.0%	(0.8)%	(2.5)%	(19.8)%

Sensitivity of Class ID to Prepayments Assumed Price 13.25%*

PSA Prepayment Assumption Rates				
<u>165%</u>	<u>215%</u>	<u>270%</u>	<u>300%</u>	<u>600%</u>
2.8%	0.0%	(3.1)%	(4.8)%	(22.7)%

Sensitivity of Class IG to Prepayments Assumed Price 18.0%*

PSA Prepayment Assumption Rates				
<u>165%</u>	<u>189%</u>	<u>270%</u>	<u>300%</u>	<u>600%</u>
1.3%	0.0%	(4.6)%	(6.3)%	(24.2)%

Sensitivity of Class IH to Prepayments Assumed Price 20.5%*

PSA Prepayment Assumption Rates				
<u>165%</u>	<u>208%</u>	<u>270%</u>	<u>300%</u>	<u>600%</u>
2.4%	0.0%	(3.5)%	(5.2)%	(23.4)%

Sensitivity of Class IJ to Prepayments Assumed Price 15.0%*

PSA Prepayment Assumption Rates				
<u>165%</u>	<u>171%</u>	<u>270%</u>	<u>300%</u>	<u>600%</u>
0.3%	0.0%	(5.6)%	(7.3)%	(25.3)%

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

**Sensitivity of Class IK to Prepayments
Assumed Price 16.75%***

PSA Prepayment Assumption Rates				
<u>165%</u>	<u>270%</u>	<u>285%</u>	<u>300%</u>	<u>600%</u>
6.6%	0.9%	0.0%	(0.8)%	(18.0)%

**Sensitivity of Class IL to Prepayments
Assumed Price 20.5%***

PSA Prepayment Assumption Rates				
<u>165%</u>	<u>210%</u>	<u>270%</u>	<u>300%</u>	<u>600%</u>
2.5%	0.0%	(3.4)%	(5.1)%	(23.0)%

**Sensitivity of Class IM to Prepayments
Assumed Price 20.5%***

PSA Prepayment Assumption Rates				
<u>165%</u>	<u>210%</u>	<u>270%</u>	<u>300%</u>	<u>600%</u>
2.5%	0.0%	(3.4)%	(5.1)%	(23.0)%

**Sensitivity of Class IN to Prepayments
Assumed Price 15.0%***

PSA Prepayment Assumption Rates				
<u>165%</u>	<u>270%</u>	<u>300%</u>	<u>324%</u>	<u>600%</u>
8.8%	3.0%	1.4%	0.0%	(16.0)%

**Sensitivity of Class IP to Prepayments
Assumed Price 15.0%***

PSA Prepayment Assumption Rates				
<u>165%</u>	<u>171%</u>	<u>270%</u>	<u>300%</u>	<u>600%</u>
0.3%	0.0%	(5.6)%	(7.3)%	(25.3)%

**Sensitivity of Class IR to Prepayments
Assumed Price 18.0%***

PSA Prepayment Assumption Rates				
<u>165%</u>	<u>190%</u>	<u>270%</u>	<u>300%</u>	<u>600%</u>
1.4%	0.1%	(4.5)%	(6.2)%	(24.2)%

**Sensitivity of Class IT to Prepayments
Assumed Price 18.0%***

PSA Prepayment Assumption Rates				
<u>165%</u>	<u>189%</u>	<u>270%</u>	<u>300%</u>	<u>600%</u>
1.3%	0.0%	(4.6)%	(6.3)%	(24.2)%

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

**Sensitivity of Class KI to Prepayments
Assumed Price 20.5%***

PSA Prepayment Assumption Rates				
<u>165%</u>	<u>207%</u>	<u>270%</u>	<u>300%</u>	<u>600%</u>
2.4%	0.1%	(3.5)%	(5.3)%	(23.4)%

**Sensitivity of Class LI to Prepayments
Assumed Price 18.0%***

PSA Prepayment Assumption Rates				
<u>165%</u>	<u>189%</u>	<u>270%</u>	<u>300%</u>	<u>600%</u>
1.4%	0.0%	(4.5)%	(6.2)%	(24.2)%

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

CERTAIN UNITED STATES FEDERAL INCOME TAX CONSEQUENCES

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

REMIC Elections

In the opinion of Cleary Gottlieb Steen & Hamilton LLP, the Trust will constitute a Single REMIC Series as to the Group 1 Trust Assets, the Group 2 Trust Assets, the Group 4 Trust Assets, the Group 5 Trust Assets, the Group 6 Trust Assets, the Group 7 Trust Assets, the Group 8 Trust Assets, the Group 9 Trust Assets, the Group 10 Trust Assets, the Group 12 Trust Assets, the Group 13 Trust Assets, the Group 14 Trust Assets, the Group 15 Trust Asset, the Group 16 Trust Assets, the Group 17 Trust Assets and the Group 18 Trust Assets and a Double REMIC Series as to the Group 3 Trust Assets and the Group 11 Trust Assets, each for United States federal income tax purposes. Separate REMIC elections will be made for the Group 1 REMIC, the Group 2 REMIC, the Group 3 Issuing REMIC, the Group 3 Pooling REMIC, the Group 4 REMIC, the Group 5 REMIC, the Group 6 REMIC, the Group 7 REMIC, the Group 8 REMIC, the Group 9 REMIC, the Group 10 REMIC, the Group 11 Issuing REMIC, the Group 11 Pooling REMIC, the Group 12 REMIC, the Group 13 REMIC, the Group 14 REMIC, the Group 15 REMIC, the Group 16 REMIC, the Group 17 REMIC and the Group 18 REMIC.

Regular Securities

The Regular Securities will be treated as debt instruments issued by the Group 1 REMIC, the Group 2 REMIC, the Group 3 Issuing REMIC, the Group 4 REMIC, the Group 5 REMIC, the Group 6 REMIC, the Group 7 REMIC, the Group 8 REMIC, the Group 9 REMIC, the Group 10 REMIC, the Group 11 Issuing REMIC, the Group 12 REMIC, the Group 13 REMIC, the Group 14 REMIC, the Group 15 REMIC, the Group 16 REMIC, the Group 17 REMIC and the Group 18 REMIC, as applicable, 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:

<u>Group(s)</u>	<u>PSA</u>
1, 12, 13, 14 and 16	350%
2	240%
3	200%
4	300%
5, 6, 10, 11 and 17	250%
7 and 18	270%
8	400%
9	370%
15	380%

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 LIBOR or Compounded 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 R1 Securities will represent the beneficial ownership of the Residual Interest in the Group 1 REMIC. The Class R2 Securities will represent the beneficial ownership of the Residual Interest in the Group 2 REMIC. The Class RR3 Securities will represent the beneficial ownership of the Residual Interest in the Group 3 Issuing REMIC and the beneficial ownership of the Residual Interest in the Group 3 Pooling REMIC. The Class R4 Securities will represent the beneficial ownership of the Residual Interest in the Group 4 REMIC. The Class R5 Securities will represent the beneficial ownership of the Residual Interest in the Group 5 REMIC. The Class R6 Securities will represent the beneficial ownership of the Residual Interest in the Group 6 REMIC. The Class R7 Securities will represent the beneficial ownership of the Residual Interest in the Group 7 REMIC. The Class R8 Securities will represent the beneficial ownership of the Residual Interest in the Group 8 REMIC. The Class R9 Securities will represent the beneficial ownership of the Residual Interest in the Group 9 REMIC. The Class R10 Securities will represent the beneficial ownership of the Residual Interest in the Group 10 REMIC. The Class RR11 Securities

will represent the beneficial ownership of the Residual Interest in the Group 11 Issuing REMIC and the beneficial ownership of the Residual Interest in the Group 11 Pooling REMIC. The Class R12 Securities will represent the beneficial ownership of the Residual Interest in the Group 12 REMIC. The Class R13 Securities will represent the beneficial ownership of the Residual Interest in the Group 13 REMIC. The Class R14 Securities will represent the beneficial ownership of the Residual Interest in the Group 14 REMIC. The Class R15 Securities will represent the beneficial ownership of the Residual Interest in the Group 15 REMIC. The Class R16 Securities will represent the beneficial ownership of the Residual Interest in the Group 16 REMIC. The Class R17 Securities will represent the beneficial ownership of the Residual Interest in the Group 17 REMIC. The Class R18 Securities will represent the beneficial ownership of the Residual Interest in the Group 18 REMIC. The Residual Securities, i.e., the Class R1, R2, RR3, R4, R5, R6, R7, R8, R9, R10, RR11, R12, R13, R14, R15, R16, R17 and R18 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 related Trust REMIC or Trust REMICs, as applicable, and these requirements will continue until there are no outstanding regular interests in the respective Trust REMIC or Trust REMICs, as applicable. 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 related Trust REMIC or Trust REMICs, as applicable, 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) November 1, 2021 on the Fixed Rate Classes and (2) November 20, 2021 on the Floating Rate and Inverse Floating Rate Classes. The Sponsor may effect these transactions by sales to or through certain securities dealers. These dealers may receive compensation in the form of discounts, concessions or commissions from the Sponsor and/or commissions from any purchasers for which they act as agents. Some of the Securities may be sold through

dealers in relatively small sales. In the usual case, the commission charged on a relatively small sale of securities will be a higher percentage of the sales price than that charged on a large sale of securities.

INCREASE IN SIZE

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

LEGAL MATTERS

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

Available Combinations(1)

Class	REMIC Securities		MX Securities						
	Original Class Principal Balance or Class Notional Balance	Related MX Class	Maximum Original Class Principal Balance or Class Notional Balance(2)	Principal Type(3)	Interest Rate	Interest Type(3)	CUSIP Number	Final Distribution Date(4)	
Security Group 2									
Combination 1(5)									
HP	\$ 49,146,000		\$ 49,146,000	PAC/AD	1.00%	FIX	38383DGGJ1	November 2051	
			49,146,000	PAC/AD	1.25	FIX	38383DGGK8	November 2051	
			49,146,000	PAC/AD	1.50	FIX	38383DGL6	November 2051	
			49,146,000	PAC/AD	1.75	FIX	38383DGM4	November 2051	
			32,764,000	NTL(PAC/AD)	3.00	FIX/IO	38383DGN2	November 2051	
			49,146,000	PAC/AD	2.00	FIX	38383DGP7	November 2051	
			49,146,000	PAC/AD	2.25	FIX	38383DGG5	November 2051	
			49,146,000	PAC/AD	2.50	FIX	38383DGR3	November 2051	
			49,146,000	PAC/AD	2.75	FIX	38383DGS1	November 2051	
Security Group 6									
Combination 2(5)									
AE	\$ 53,654,225		\$ 53,654,225	SEQ	1.00%	FIX	38383DGT9	February 2049	
			53,654,225	SEQ	1.25	FIX	38383DGU6	February 2049	
			53,654,225	SEQ	1.50	FIX	38383DGV4	February 2049	
			53,654,225	SEQ	1.75	FIX	38383DGW2	February 2049	
			21,461,690	NTL(SEQ)	2.50	FIX/IO	38383DGX0	February 2049	
Combination 3(5)									
AE	\$ 58,440,703		\$ 58,440,703	SEQ	1.50%	FIX	38383DGY8	July 2050	
EK	4,786,478		58,440,703	SEQ	1.00	FIX	38383DGG5	July 2050	
			58,440,703	SEQ	1.25	FIX	38383DHA9	July 2050	
			58,440,703	SEQ	1.75	FIX	38383DHB7	July 2050	
			58,440,703	SEQ	2.00	FIX	38383DHC5	July 2050	
			23,376,281	NTL(SEQ)	2.50	FIX/IO	38383DHD3	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)
	Principal Balance	Notional Balance		Principal Balance	Notional Balance					
Combination 4(5)										
AE	\$ 53,654,225		D	\$ 63,208,585		PT	1.50%	FIX	38383DHE1	November 2051
EB	4,767,882		DB	63,208,585		PT	1.00	FIX	38383DHF8	November 2051
EK	4,786,478		DC	63,208,585		PT	1.25	FIX	38383DHG6	November 2051
			DE	63,208,585		PT	1.75	FIX	38383DHH4	November 2051
			DI	25,283,434		NTL(PT)	2.50	FIX/IO	38383DHJ0	November 2051
			E	63,208,585		PT	2.00	FIX	38383DHIK7	November 2051
Combination 5										
EB	\$ 4,767,882		B	\$ 9,554,360		SEQ	2.00%	FIX	38383DHL5	November 2051
EK	4,786,478									
Security Group 9										
Combination 6(5)										
P	\$145,000,000		PA	\$145,000,000		PAC/AD	1.00%	FIX	38383DHM3	November 2051
			PB	145,000,000		PAC/AD	1.25	FIX	38383DHN1	November 2051
			PC	145,000,000		PAC/AD	1.50	FIX	38383DHP6	November 2051
			PD	145,000,000		PAC/AD	1.75	FIX	38383DHQ4	November 2051
			PE	145,000,000		PAC/AD	2.00	FIX	38383DHR2	November 2051
			PI	96,666,666		NTL(PAC/AD)	3.00	FIX/IO	38383DHS0	November 2051
Security Groups 10 and 11										
Combination 7(6)										
JJ	\$ 11,500,000		IQ	\$ 25,500,000		NTL(PT/SEQ)	2.50%	FIX/IO	38383DHT8	November 2051
QI	14,000,000									
Security Group 15										
Combination 8(5)										
G	\$138,020,000		GA	\$138,020,000		PAC/AD	1.00%	FIX	38383DHU5	March 2051
			GB	138,020,000		PAC/AD	1.25	FIX	38383DHW3	March 2051
			GC	138,020,000		PAC/AD	1.50	FIX	38383DHW1	March 2051
			GD	138,020,000		PAC/AD	1.75	FIX	38383DHX9	March 2051
			GE	138,020,000		PAC/AD	2.00	FIX	38383DHY7	March 2051
			GI	92,013,333		NTL(PAC/AD)	3.00	FIX/IO	38383DHZ4	March 2051

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 9 GA(7)	\$138,020,000	GJ	\$138,020,000	PAC/AD	1.00%	FIX	38383DJA7	March 2051
Combination 10 GB(7)	\$138,020,000	GK	\$138,020,000	PAC/AD	1.25%	FIX	38383DJB5	March 2051
Combination 11 GC(7)	\$138,020,000	GL	\$138,020,000	PAC/AD	1.50%	FIX	38383DJC3	March 2051
Security Group 18								
Combination 12 VA	\$ 1,494,000	BL	\$ 8,153,520	SEQ	1.75%	FIX	38383DJD1	November 2051
Combination 13 ZA	\$ 6,659,520							
Combination 13 BI	\$ 2,063,760	IH	\$ 12,925,389	NTL(PT)	3.00%	FIX/IO	38383DJE9	November 2051
Combination 14 IL	1,690,859							
Combination 14 IM	9,170,770							
Combination 14 BI	\$ 2,063,760	KI	\$ 11,234,530	NTL(PT)	3.00%	FIX/IO	38383DJF6	November 2051
Combination 15 IM	9,170,770							
Combination 15 IG	\$ 4,799,370	LI	\$ 6,921,797	NTL(PT)	2.50%	FIX/IO	38383DJG4	November 2051
Combination 15 IR	2,122,427							

(1) All exchanges must comply with minimum denomination restrictions.

(2) The amount shown for each the 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) In the case of Combinations 1, 2, 3, 4, 6 and 8, various subcombinations are permitted. See *“Description of the Securities — Modification and Exchange” in the Base Offering Circular for a discussion of subcombinations.*
- (6) Derived from REMIC classes relating to separate Groups.
- (7) MX Classes.

Schedule II

SCHEDULED PRINCIPAL BALANCES

<u>Distribution Date</u>	<u>Classes HP and ZH (in the aggregate)</u>	<u>Classes KA and KB (in the aggregate)</u>	<u>Classes KQ and KR (in the aggregate)</u>
Initial Balance	\$49,196,000.00	\$3,920,000.00	\$32,148,196.00
December 2021	49,052,333.47	3,907,177.98	32,050,970.60
January 2022	48,893,909.26	3,890,100.07	31,942,230.99
February 2022	48,720,785.96	3,868,786.84	31,822,032.61
March 2022	48,533,033.47	3,843,267.88	31,690,441.22
April 2022	48,330,732.97	3,813,581.78	31,547,532.88
May 2022	48,113,976.88	3,779,776.13	31,393,393.86
June 2022	47,882,868.79	3,741,907.43	31,228,120.65
July 2022	47,637,523.38	3,700,041.05	31,051,819.79
August 2022	47,378,066.39	3,654,251.13	30,864,607.84
September 2022	47,104,634.41	3,604,620.45	30,666,611.23
October 2022	46,817,374.86	3,551,240.30	30,457,966.13
November 2022	46,516,445.82	3,494,210.28	30,238,818.35
December 2022	46,202,015.87	3,433,638.18	30,009,323.12
January 2023	45,874,263.96	3,369,639.66	29,769,644.97
February 2023	45,533,379.19	3,302,338.09	29,519,957.52
March 2023	45,179,560.71	3,231,864.29	29,260,443.27
April 2023	44,813,017.40	3,158,356.20	28,991,293.40
May 2023	44,433,967.77	3,081,958.63	28,712,707.54
June 2023	44,042,639.66	3,002,822.89	28,424,893.52
July 2023	43,639,270.02	2,921,106.48	28,128,067.13
August 2023	43,224,104.69	2,836,972.72	27,822,451.83
September 2023	42,797,398.08	2,750,590.38	27,508,278.50
October 2023	42,359,412.95	2,662,133.27	27,185,785.11
November 2023	41,910,420.10	2,571,779.85	26,855,216.46
December 2023	41,450,698.06	2,479,712.78	26,516,823.85
January 2024	40,980,532.83	2,386,118.50	26,170,864.75
February 2024	40,500,217.51	2,291,186.77	25,817,602.49
March 2024	40,010,052.03	2,195,110.25	25,457,305.89
April 2024	39,510,342.75	2,101,779.41	25,100,701.62
May 2024	39,014,745.62	2,011,142.05	24,747,753.32
June 2024	38,523,225.64	1,923,146.91	24,398,424.93
July 2024	38,035,748.07	1,837,743.45	24,052,680.79
August 2024	37,552,278.47	1,754,882.06	23,710,485.54
September 2024	37,072,782.67	1,674,513.85	23,371,804.20
October 2024	36,597,226.77	1,596,590.79	23,036,602.09
November 2024	36,125,577.15	1,521,065.61	22,704,844.88
December 2024	35,657,800.48	1,447,891.80	22,376,498.58
January 2025	35,193,863.68	1,377,023.64	22,051,529.52
February 2025	34,733,733.94	1,308,416.14	21,729,904.35
March 2025	34,277,378.71	1,242,025.06	21,411,590.04
April 2025	33,824,765.73	1,177,806.89	21,096,553.88
May 2025	33,375,862.98	1,115,718.82	20,784,763.49
June 2025	32,930,638.69	1,055,718.76	20,476,186.78
July 2025	32,489,061.38	997,765.33	20,170,791.98

<u>Distribution Date</u>	<u>Classes HP and ZH (in the aggregate)</u>	<u>Classes KA and KB (in the aggregate)</u>	<u>Classes KQ and KR (in the aggregate)</u>
August 2025	\$32,051,099.79	\$ 941,817.79	\$19,868,547.63
September 2025	31,616,722.95	887,836.12	19,569,422.57
October 2025	31,185,900.10	835,780.94	19,273,385.94
November 2025	30,758,600.76	785,613.53	18,980,407.17
December 2025	30,334,794.69	737,295.83	18,690,456.00
January 2026	29,914,451.88	690,790.38	18,403,502.45
February 2026	29,497,542.60	646,060.38	18,119,516.84
March 2026	29,084,037.31	603,069.63	17,838,469.77
April 2026	28,673,906.76	561,782.54	17,560,332.11
May 2026	28,267,121.90	522,164.10	17,285,075.05
June 2026	27,863,653.94	484,179.92	17,012,670.01
July 2026	27,463,474.30	447,796.16	16,743,088.73
August 2026	27,066,554.65	412,979.56	16,476,303.19
September 2026	26,672,866.90	379,697.44	16,212,285.65
October 2026	26,282,383.15	347,917.64	15,951,008.66
November 2026	25,895,075.76	317,608.57	15,692,445.00
December 2026	25,510,917.30	288,739.15	15,436,567.74
January 2027	25,129,880.57	261,278.87	15,183,350.19
February 2027	24,751,938.59	235,197.70	14,932,765.94
March 2027	24,377,064.59	210,466.12	14,684,788.83
April 2027	24,005,232.02	187,055.17	14,439,392.92
May 2027	23,636,414.56	164,936.30	14,196,552.58
June 2027	23,270,586.08	144,081.53	13,956,242.38
July 2027	22,907,720.68	124,463.31	13,718,437.15
August 2027	22,547,792.67	106,054.58	13,483,111.97
September 2027	22,190,776.55	88,828.76	13,250,242.16
October 2027	21,836,647.05	72,759.69	13,019,803.28
November 2027	21,485,379.09	57,821.70	12,791,771.11
December 2027	21,136,947.81	44,035.34	12,566,121.68
January 2028	20,791,328.52	32,207.07	12,342,831.26
February 2028	20,448,496.77	22,284.30	12,121,876.34
March 2028	20,108,428.28	14,215.54	11,903,233.62
April 2028	19,771,098.99	7,950.34	11,686,880.06
May 2028	19,437,064.64	3,439.31	11,472,792.82
June 2028	19,108,444.46	634.10	11,260,949.30
July 2028	18,785,153.02	0.00	11,051,327.09
August 2028	18,467,106.24	0.00	10,844,369.44
September 2028	18,154,221.33	0.00	10,641,155.74
October 2028	17,846,416.77	0.00	10,441,619.83
November 2028	17,543,612.33	0.00	10,245,696.71
December 2028	17,245,729.01	0.00	10,053,322.48
January 2029	16,952,689.02	0.00	9,864,434.38
February 2029	16,664,415.81	0.00	9,678,970.74
March 2029	16,380,833.99	0.00	9,496,870.94
April 2029	16,101,869.35	0.00	9,318,075.43
May 2029	15,827,448.82	0.00	9,142,525.70
June 2029	15,557,500.49	0.00	8,970,164.26
July 2029	15,291,953.52	0.00	8,800,934.61

<u>Distribution Date</u>	<u>Classes HP and ZH (in the aggregate)</u>	<u>Classes KA and KB (in the aggregate)</u>	<u>Classes KQ and KR (in the aggregate)</u>
August 2029	\$15,030,738.22	\$ 0.00	\$ 8,634,781.23
September 2029	14,773,785.96	0.00	8,471,649.58
October 2029	14,521,029.17	0.00	8,311,486.07
November 2029	14,272,401.33	0.00	8,154,238.03
December 2029	14,027,836.97	0.00	7,999,853.73
January 2030	13,787,271.63	0.00	7,848,282.32
February 2030	13,550,641.83	0.00	7,699,473.85
March 2030	13,317,885.12	0.00	7,553,379.24
April 2030	13,088,939.98	0.00	7,409,950.25
May 2030	12,863,745.87	0.00	7,269,139.51
June 2030	12,642,243.18	0.00	7,130,900.45
July 2030	12,424,373.25	0.00	6,995,187.33
August 2030	12,210,078.30	0.00	6,861,955.21
September 2030	11,999,301.47	0.00	6,731,159.92
October 2030	11,791,986.79	0.00	6,602,758.07
November 2030	11,588,079.15	0.00	6,476,707.03
December 2030	11,387,524.31	0.00	6,352,964.91
January 2031	11,190,268.85	0.00	6,231,490.56
February 2031	10,996,260.21	0.00	6,112,243.55
March 2031	10,805,446.65	0.00	5,995,184.14
April 2031	10,617,777.21	0.00	5,880,273.31
May 2031	10,433,201.75	0.00	5,767,472.70
June 2031	10,251,670.91	0.00	5,656,744.63
July 2031	10,073,136.09	0.00	5,548,052.10
August 2031	9,897,549.45	0.00	5,441,358.73
September 2031	9,724,863.90	0.00	5,336,628.78
October 2031	9,555,033.10	0.00	5,233,827.14
November 2031	9,388,011.40	0.00	5,132,919.34
December 2031	9,223,753.90	0.00	5,033,871.47
January 2032	9,062,216.37	0.00	4,936,650.26
February 2032	8,903,355.31	0.00	4,841,222.98
March 2032	8,747,127.85	0.00	4,747,557.50
April 2032	8,593,491.83	0.00	4,655,622.26
May 2032	8,442,405.74	0.00	4,565,386.24
June 2032	8,293,828.71	0.00	4,476,818.96
July 2032	8,147,720.53	0.00	4,389,890.48
August 2032	8,004,041.59	0.00	4,304,571.40
September 2032	7,862,752.92	0.00	4,220,832.83
October 2032	7,723,816.16	0.00	4,138,646.37
November 2032	7,587,193.55	0.00	4,057,984.13
December 2032	7,452,847.92	0.00	3,978,818.73
January 2033	7,320,742.68	0.00	3,901,123.25
February 2033	7,190,841.82	0.00	3,824,871.24
March 2033	7,063,109.89	0.00	3,750,036.74
April 2033	6,937,512.00	0.00	3,676,594.21
May 2033	6,814,013.81	0.00	3,604,518.60
June 2033	6,692,581.50	0.00	3,533,785.27
July 2033	6,573,181.80	0.00	3,464,370.03

<u>Distribution Date</u>	<u>Classes HP and ZH (in the aggregate)</u>	<u>Classes KA and KB (in the aggregate)</u>	<u>Classes KQ and KR (in the aggregate)</u>
August 2033	\$ 6,455,781.97	\$ 0.00	\$ 3,396,249.11
September 2033	6,340,349.76	0.00	3,329,399.18
October 2033	6,226,853.45	0.00	3,263,797.28
November 2033	6,115,261.80	0.00	3,199,420.89
December 2033	6,005,544.08	0.00	3,136,247.88
January 2034	5,897,670.02	0.00	3,074,256.49
February 2034	5,791,609.85	0.00	3,013,425.38
March 2034	5,687,334.26	0.00	2,953,733.56
April 2034	5,584,814.39	0.00	2,895,160.41
May 2034	5,484,021.85	0.00	2,837,685.70
June 2034	5,384,928.68	0.00	2,781,289.52
July 2034	5,287,507.39	0.00	2,725,952.35
August 2034	5,191,730.90	0.00	2,671,655.00
September 2034	5,097,572.55	0.00	2,618,378.60
October 2034	5,005,006.12	0.00	2,566,104.64
November 2034	4,914,005.80	0.00	2,514,814.93
December 2034	4,824,546.18	0.00	2,464,491.60
January 2035	4,736,602.26	0.00	2,415,117.09
February 2035	4,650,149.42	0.00	2,366,674.18
March 2035	4,565,163.45	0.00	2,319,145.92
April 2035	4,481,620.49	0.00	2,272,515.67
May 2035	4,399,497.10	0.00	2,226,767.09
June 2035	4,318,770.18	0.00	2,181,884.15
July 2035	4,239,417.00	0.00	2,137,851.06
August 2035	4,161,415.20	0.00	2,094,652.35
September 2035	4,084,742.77	0.00	2,052,272.80
October 2035	4,009,378.03	0.00	2,010,697.47
November 2035	3,935,299.67	0.00	1,969,911.69
December 2035	3,862,486.70	0.00	1,929,901.05
January 2036	3,790,918.48	0.00	1,890,651.38
February 2036	3,720,574.67	0.00	1,852,148.79
March 2036	3,651,435.29	0.00	1,814,379.61
April 2036	3,583,480.63	0.00	1,777,330.42
May 2036	3,516,691.34	0.00	1,740,988.06
June 2036	3,451,048.34	0.00	1,705,339.58
July 2036	3,386,532.88	0.00	1,670,372.26
August 2036	3,323,126.48	0.00	1,636,073.63
September 2036	3,260,810.98	0.00	1,602,431.42
October 2036	3,199,568.50	0.00	1,569,433.60
November 2036	3,139,381.44	0.00	1,537,068.32
December 2036	3,080,232.48	0.00	1,505,323.98
January 2037	3,022,104.57	0.00	1,474,189.16
February 2037	2,964,980.95	0.00	1,443,652.66
March 2037	2,908,845.11	0.00	1,413,703.48
April 2037	2,853,680.81	0.00	1,384,330.80
May 2037	2,799,472.07	0.00	1,355,524.00
June 2037	2,746,203.15	0.00	1,327,272.67
July 2037	2,693,858.59	0.00	1,299,566.57

<u>Distribution Date</u>	<u>Classes HP and ZH (in the aggregate)</u>	<u>Classes KA and KB (in the aggregate)</u>	<u>Classes KQ and KR (in the aggregate)</u>
August 2037	\$ 2,642,423.14	\$ 0.00	\$ 1,272,395.63
September 2037	2,591,881.83	0.00	1,245,749.99
October 2037	2,542,219.89	0.00	1,219,619.93
November 2037	2,493,422.83	0.00	1,193,995.95
December 2037	2,445,476.35	0.00	1,168,868.68
January 2038	2,398,366.40	0.00	1,144,228.94
February 2038	2,352,079.16	0.00	1,120,067.70
March 2038	2,306,601.02	0.00	1,096,376.11
April 2038	2,261,918.58	0.00	1,073,145.47
May 2038	2,218,018.67	0.00	1,050,367.22
June 2038	2,174,888.32	0.00	1,028,032.99
July 2038	2,132,514.78	0.00	1,006,134.52
August 2038	2,090,885.50	0.00	984,663.74
September 2038	2,049,988.11	0.00	963,612.68
October 2038	2,009,810.46	0.00	942,973.55
November 2038	1,970,340.61	0.00	922,738.69
December 2038	1,931,566.77	0.00	902,900.57
January 2039	1,893,477.37	0.00	883,451.80
February 2039	1,856,061.01	0.00	864,385.12
March 2039	1,819,306.49	0.00	845,693.41
April 2039	1,783,202.78	0.00	827,369.68
May 2039	1,747,739.01	0.00	809,407.05
June 2039	1,712,904.52	0.00	791,798.78
July 2039	1,678,688.80	0.00	774,538.23
August 2039	1,645,081.50	0.00	757,618.92
September 2039	1,612,072.46	0.00	741,034.44
October 2039	1,579,651.67	0.00	724,778.53
November 2039	1,547,809.29	0.00	708,845.03
December 2039	1,516,535.62	0.00	693,227.90
January 2040	1,485,821.13	0.00	677,921.19
February 2040	1,455,656.44	0.00	662,919.07
March 2040	1,426,032.34	0.00	648,215.83
April 2040	1,396,939.73	0.00	633,805.84
May 2040	1,368,369.70	0.00	619,683.59
June 2040	1,340,313.45	0.00	605,843.64
July 2040	1,312,762.34	0.00	592,280.70
August 2040	1,285,707.85	0.00	578,989.52
September 2040	1,259,141.64	0.00	565,964.99
October 2040	1,233,055.45	0.00	553,202.07
November 2040	1,207,441.20	0.00	540,695.81
December 2040	1,182,290.92	0.00	528,441.37
January 2041	1,157,596.76	0.00	516,433.97
February 2041	1,133,351.02	0.00	504,668.94
March 2041	1,109,546.11	0.00	493,141.69
April 2041	1,086,174.56	0.00	481,847.70
May 2041	1,063,229.04	0.00	470,782.55
June 2041	1,040,702.31	0.00	459,941.89
July 2041	1,018,587.28	0.00	449,321.46

<u>Distribution Date</u>	<u>Classes HP and ZH (in the aggregate)</u>	<u>Classes KA and KB (in the aggregate)</u>	<u>Classes KQ and KR (in the aggregate)</u>
August 2041	\$ 996,876.95	\$ 0.00	\$ 438,917.07
September 2041	975,564.45	0.00	428,724.60
October 2041	954,643.02	0.00	418,740.01
November 2041	934,105.98	0.00	408,959.35
December 2041	913,946.81	0.00	399,378.73
January 2042	894,159.06	0.00	389,994.31
February 2042	874,736.40	0.00	380,802.36
March 2042	855,672.59	0.00	371,799.19
April 2042	836,961.51	0.00	362,981.19
May 2042	818,597.12	0.00	354,344.81
June 2042	800,573.49	0.00	345,886.58
July 2042	782,884.79	0.00	337,603.06
August 2042	765,525.28	0.00	329,490.91
September 2042	748,489.32	0.00	321,546.83
October 2042	731,771.35	0.00	313,767.60
November 2042	715,365.91	0.00	306,150.02
December 2042	699,267.62	0.00	298,691.01
January 2043	683,471.21	0.00	291,387.48
February 2043	667,971.47	0.00	284,236.45
March 2043	652,763.29	0.00	277,234.96
April 2043	637,841.65	0.00	270,380.13
May 2043	623,201.59	0.00	263,669.12
June 2043	608,838.25	0.00	257,099.13
July 2043	594,746.85	0.00	250,667.45
August 2043	580,922.68	0.00	244,371.37
September 2043	567,361.11	0.00	238,208.28
October 2043	554,057.59	0.00	232,175.58
November 2043	541,007.64	0.00	226,270.74
December 2043	528,206.85	0.00	220,491.26
January 2044	515,650.90	0.00	214,834.71
February 2044	503,335.53	0.00	209,298.68
March 2044	491,256.54	0.00	203,880.82
April 2044	479,409.81	0.00	198,578.82
May 2044	467,791.30	0.00	193,390.41
June 2044	456,397.02	0.00	188,313.37
July 2044	445,223.04	0.00	183,345.51
August 2044	434,265.52	0.00	178,484.69
September 2044	423,520.66	0.00	173,728.81
October 2044	412,984.73	0.00	169,075.80
November 2044	402,654.07	0.00	164,523.63
December 2044	392,525.08	0.00	160,070.33
January 2045	382,594.20	0.00	155,713.93
February 2045	372,857.95	0.00	151,452.53
March 2045	363,312.91	0.00	147,284.24
April 2045	353,955.69	0.00	143,207.23
May 2045	344,782.99	0.00	139,219.68
June 2045	335,791.55	0.00	135,319.82
July 2045	326,978.15	0.00	131,505.91

<u>Distribution Date</u>	<u>Classes HP and ZH (in the aggregate)</u>	<u>Classes KA and KB (in the aggregate)</u>	<u>Classes KQ and KR (in the aggregate)</u>
August 2045	\$ 318,339.65	\$ 0.00	\$ 127,776.24
September 2045	309,872.94	0.00	124,129.13
October 2045	301,574.98	0.00	120,562.94
November 2045	293,442.77	0.00	117,076.05
December 2045	285,473.36	0.00	113,666.89
January 2046	277,663.86	0.00	110,333.89
February 2046	270,011.41	0.00	107,075.53
March 2046	262,513.22	0.00	103,890.32
April 2046	255,166.52	0.00	100,776.78
May 2046	247,968.61	0.00	97,733.49
June 2046	240,916.82	0.00	94,759.01
July 2046	234,008.55	0.00	91,851.98
August 2046	227,241.20	0.00	89,011.03
September 2046	220,612.26	0.00	86,234.82
October 2046	214,119.22	0.00	83,522.05
November 2046	207,759.65	0.00	80,871.43
December 2046	201,531.14	0.00	78,281.71
January 2047	195,431.33	0.00	75,751.64
February 2047	189,457.88	0.00	73,280.02
March 2047	183,608.51	0.00	70,865.65
April 2047	177,880.98	0.00	68,507.37
May 2047	172,273.07	0.00	66,204.04
June 2047	166,782.62	0.00	63,954.53
July 2047	161,407.48	0.00	61,757.74
August 2047	156,145.56	0.00	59,612.60
September 2047	150,994.79	0.00	57,518.04
October 2047	145,953.15	0.00	55,473.02
November 2047	141,018.64	0.00	53,476.52
December 2047	136,189.30	0.00	51,527.55
January 2048	131,463.21	0.00	49,625.13
February 2048	126,838.46	0.00	47,768.29
March 2048	122,313.20	0.00	45,956.08
April 2048	117,885.59	0.00	44,187.59
May 2048	113,553.84	0.00	42,461.91
June 2048	109,316.18	0.00	40,778.15
July 2048	105,170.87	0.00	39,135.43
August 2048	101,116.21	0.00	37,532.89
September 2048	97,150.50	0.00	35,969.71
October 2048	93,272.10	0.00	34,445.06
November 2048	89,479.39	0.00	32,958.12
December 2048	85,770.78	0.00	31,508.11
January 2049	82,144.69	0.00	30,094.25
February 2049	78,599.59	0.00	28,715.79
March 2049	75,133.96	0.00	27,371.96
April 2049	71,746.32	0.00	26,062.05
May 2049	68,435.20	0.00	24,785.33
June 2049	65,199.16	0.00	23,541.11
July 2049	62,036.79	0.00	22,328.68

<u>Distribution Date</u>	<u>Classes HP and ZH (in the aggregate)</u>	<u>Classes KA and KB (in the aggregate)</u>	<u>Classes KQ and KR (in the aggregate)</u>
August 2049	\$ 58,946.71	\$ 0.00	\$ 21,147.38
September 2049	55,927.55	0.00	19,996.54
October 2049	52,977.97	0.00	18,875.51
November 2049	50,096.65	0.00	17,783.65
December 2049	47,282.29	0.00	16,720.34
January 2050	44,533.64	0.00	15,684.96
February 2050	41,849.43	0.00	14,676.92
March 2050	39,228.43	0.00	13,695.62
April 2050	36,669.45	0.00	12,740.49
May 2050	34,171.29	0.00	11,810.96
June 2050	31,732.79	0.00	10,906.47
July 2050	29,352.80	0.00	10,026.49
August 2050	27,030.21	0.00	9,170.48
September 2050	24,763.89	0.00	8,337.91
October 2050	22,552.77	0.00	7,528.27
November 2050	20,395.78	0.00	6,741.07
December 2050	18,291.88	0.00	5,975.80
January 2051	16,240.02	0.00	5,231.99
February 2051	14,239.20	0.00	4,509.16
March 2051	12,288.43	0.00	3,806.85
April 2051	10,386.72	0.00	3,124.61
May 2051	8,533.12	0.00	2,461.99
June 2051	6,726.69	0.00	1,818.54
July 2051	4,966.49	0.00	1,193.86
August 2051	3,251.62	0.00	587.51
September 2051	1,581.19	0.00	0.00
October 2051 and thereafter	0.00	0.00	0.00

<u>Distribution Date</u>	<u>Class BP</u>	<u>Class P</u>	<u>Class AP</u>
Initial Balance	\$6,003,000.00	\$145,000,000.00	\$4,710,000.00
December 2021	5,983,046.40	143,901,392.30	4,667,704.60
January 2022	5,959,416.50	142,702,548.07	4,622,788.10
February 2022	5,932,122.02	141,404,692.45	4,575,299.80
March 2022	5,901,180.72	140,009,226.64	4,525,293.00
April 2022	5,866,616.41	138,517,725.97	4,472,824.93
May 2022	5,828,459.01	136,931,937.33	4,417,956.68
June 2022	5,786,744.45	135,253,776.23	4,360,753.03
July 2022	5,741,514.70	133,485,323.23	4,301,282.36
August 2022	5,692,817.70	131,628,819.90	4,239,616.49
September 2022	5,640,707.29	129,686,664.29	4,175,830.57
October 2022	5,585,243.14	127,661,405.92	4,110,002.90
November 2022	5,526,490.64	125,555,740.24	4,042,214.77
December 2022	5,464,520.79	123,372,502.69	3,972,550.32
January 2023	5,399,410.08	121,114,662.25	3,901,096.29
February 2023	5,331,240.31	118,785,314.64	3,827,941.93
March 2023	5,260,098.45	116,387,675.01	3,753,178.73
April 2023	5,186,076.47	113,925,070.37	3,676,900.25
May 2023	5,109,271.12	111,400,931.50	3,599,201.91
June 2023	5,029,783.72	108,818,784.69	3,520,180.81
July 2023	4,947,719.98	106,182,243.04	3,439,935.45
August 2023	4,863,189.69	103,494,997.57	3,361,093.42
September 2023	4,776,306.54	100,760,808.02	3,283,630.00
October 2023	4,687,187.83	97,983,493.45	3,207,520.90
November 2023	4,595,954.19	95,166,922.70	3,132,742.26
December 2023	4,502,729.32	92,405,512.59	3,059,270.63
January 2024	4,407,639.66	89,698,156.50	2,987,082.96
February 2024	4,310,814.14	87,043,769.66	2,916,156.61
March 2024	4,212,383.84	84,441,288.71	2,846,469.32
April 2024	4,112,481.67	81,889,671.31	2,777,999.23
May 2024	4,014,466.65	79,387,895.68	2,710,724.85
June 2024	3,918,302.82	76,934,960.25	2,644,625.05
July 2024	3,823,954.90	74,529,883.22	2,579,679.11
August 2024	3,731,388.26	72,171,702.20	2,515,866.62
September 2024	3,640,568.93	69,859,473.82	2,453,167.55
October 2024	3,551,463.59	67,592,273.35	2,391,562.21
November 2024	3,464,039.52	65,369,194.36	2,331,031.26
December 2024	3,378,264.62	63,189,348.34	2,271,555.70
January 2025	3,294,107.42	61,051,864.33	2,213,116.83
February 2025	3,211,537.00	58,955,888.62	2,155,696.32
March 2025	3,130,523.06	56,900,584.38	2,099,276.11
April 2025	3,051,035.85	54,885,131.35	2,043,838.49
May 2025	2,973,046.17	52,908,725.50	1,989,366.05
June 2025	2,896,525.39	50,970,578.69	1,935,841.68
July 2025	2,821,445.41	49,069,918.43	1,883,248.56
August 2025	2,747,778.65	47,205,987.48	1,831,570.16
September 2025	2,675,498.07	45,378,043.63	1,780,790.27
October 2025	2,604,577.12	43,585,359.35	1,730,892.92
November 2025	2,534,989.75	41,827,221.54	1,682,293.17

<u>Distribution Date</u>	<u>Class BP</u>	<u>Class P</u>	<u>Class AP</u>
December 2025	\$2,466,710.41	\$ 40,102,931.21	\$1,635,040.32
January 2026	2,399,714.02	38,411,905.23	1,589,097.41
February 2026	2,333,976.00	36,760,232.15	1,544,428.48
March 2026	2,269,472.19	35,146,963.81	1,500,998.58
April 2026	2,206,178.92	33,571,174.56	1,458,773.67
May 2026	2,144,591.60	32,031,960.74	1,417,720.67
June 2026	2,084,701.83	30,528,440.15	1,377,807.39
July 2026	2,026,463.29	29,059,751.53	1,339,002.50
August 2026	1,969,830.90	27,625,054.08	1,301,275.56
September 2026	1,914,760.81	26,223,526.99	1,264,596.92
October 2026	1,861,210.35	24,854,368.94	1,228,937.77
November 2026	1,809,138.01	23,516,797.67	1,194,270.07
December 2026	1,758,503.41	22,210,049.50	1,160,566.54
January 2027	1,709,267.24	20,933,378.92	1,127,800.66
February 2027	1,661,391.30	19,686,058.15	1,095,946.61
March 2027	1,614,838.38	18,467,376.70	1,064,979.31
April 2027	1,569,572.30	17,276,641.02	1,034,874.33
May 2027	1,525,557.86	16,113,174.02	1,005,607.92
June 2027	1,482,760.83	14,976,314.75	977,156.98
July 2027	1,441,147.87	13,865,418.00	949,499.03
August 2027	1,400,686.58	12,779,853.88	922,612.24
September 2027	1,361,345.43	11,719,007.55	896,475.32
October 2027	1,323,093.74	10,682,278.78	871,067.61
November 2027	1,285,901.66	9,669,081.64	846,368.98
December 2027	1,249,740.16	8,678,844.18	822,359.88
January 2028	1,214,581.00	7,711,008.06	799,021.28
February 2028	1,180,396.70	6,765,028.25	776,334.66
March 2028	1,147,160.53	5,840,372.72	754,282.03
April 2028	1,114,846.49	4,936,522.12	732,845.87
May 2028	1,083,429.27	4,052,969.49	712,009.15
June 2028	1,052,884.27	3,189,219.97	691,755.31
July 2028	1,023,187.55	2,344,790.47	672,068.23
August 2028	994,315.81	1,519,209.48	652,932.25
September 2028	966,246.41	712,016.70	634,332.13
October 2028	938,957.31	0.00	616,253.03
November 2028	912,427.05	0.00	598,680.55
December 2028	886,634.80	0.00	581,600.65
January 2029	861,560.26	0.00	564,999.71
February 2029	837,183.70	0.00	548,864.45
March 2029	813,485.91	0.00	533,181.98
April 2029	790,448.24	0.00	517,939.75
May 2029	768,052.50	0.00	503,125.56
June 2029	746,281.02	0.00	488,727.54
July 2029	725,116.63	0.00	474,734.15
August 2029	704,542.60	0.00	461,134.15
September 2029	684,542.67	0.00	447,916.65
October 2029	665,101.01	0.00	435,071.01
November 2029	646,202.24	0.00	422,586.92
December 2029	627,831.38	0.00	410,454.32

<u>Distribution Date</u>	<u>Class BP</u>	<u>Class P</u>	<u>Class AP</u>
January 2030	\$ 609,973.89	\$ 0.00	\$ 398,663.47
February 2030	592,615.59	0.00	387,204.85
March 2030	575,742.71	0.00	376,069.24
April 2030	559,341.86	0.00	365,247.64
May 2030	543,399.99	0.00	354,731.34
June 2030	527,904.43	0.00	344,511.82
July 2030	512,842.86	0.00	334,580.84
August 2030	498,203.27	0.00	324,930.35
September 2030	483,974.01	0.00	315,552.55
October 2030	470,143.72	0.00	306,439.84
November 2030	456,701.37	0.00	297,584.83
December 2030	443,636.23	0.00	288,980.34
January 2031	430,937.85	0.00	280,619.38
February 2031	418,596.09	0.00	272,495.16
March 2031	406,601.06	0.00	264,601.07
April 2031	394,943.17	0.00	256,930.69
May 2031	383,613.07	0.00	249,477.78
June 2031	372,601.66	0.00	242,236.25
July 2031	361,900.13	0.00	235,200.20
August 2031	351,499.86	0.00	228,363.90
September 2031	341,392.51	0.00	221,721.74
October 2031	331,569.94	0.00	215,268.31
November 2031	322,024.25	0.00	208,998.33
December 2031	312,747.74	0.00	202,906.66
January 2032	303,732.94	0.00	196,988.30
February 2032	294,972.58	0.00	191,238.40
March 2032	286,459.58	0.00	185,652.25
April 2032	278,187.06	0.00	180,225.26
May 2032	270,148.33	0.00	174,952.96
June 2032	262,336.89	0.00	169,831.01
July 2032	254,746.41	0.00	164,855.19
August 2032	247,370.73	0.00	160,021.41
September 2032	240,203.88	0.00	155,325.67
October 2032	233,240.04	0.00	150,764.11
November 2032	226,473.53	0.00	146,332.94
December 2032	219,898.87	0.00	142,028.50
January 2033	213,510.70	0.00	137,847.24
February 2033	207,303.82	0.00	133,785.68
March 2033	201,273.16	0.00	129,840.45
April 2033	195,413.81	0.00	126,008.29
May 2033	189,720.98	0.00	122,286.00
June 2033	184,190.01	0.00	118,670.50
July 2033	178,816.38	0.00	115,158.77
August 2033	173,595.69	0.00	111,747.89
September 2033	168,523.67	0.00	108,435.01
October 2033	163,596.14	0.00	105,217.36
November 2033	158,809.07	0.00	102,092.27
December 2033	154,158.53	0.00	99,057.11
January 2034	149,640.68	0.00	96,109.35

<u>Distribution Date</u>	<u>Class BP</u>	<u>Class P</u>	<u>Class AP</u>
February 2034	\$ 145,251.80	\$ 0.00	\$ 93,246.51
March 2034	140,988.29	0.00	90,466.19
April 2034	136,846.62	0.00	87,766.06
May 2034	132,823.37	0.00	85,143.86
June 2034	128,915.22	0.00	82,597.37
July 2034	125,118.94	0.00	80,124.45
August 2034	121,431.39	0.00	77,723.01
September 2034	117,849.50	0.00	75,391.04
October 2034	114,370.31	0.00	73,126.55
November 2034	110,990.93	0.00	70,927.64
December 2034	107,708.55	0.00	68,792.44
January 2035	104,520.44	0.00	66,719.15
February 2035	101,423.93	0.00	64,706.01
March 2035	98,416.47	0.00	62,751.30
April 2035	95,495.52	0.00	60,853.37
May 2035	92,658.66	0.00	59,010.59
June 2035	89,903.50	0.00	57,221.41
July 2035	87,227.75	0.00	55,484.30
August 2035	84,629.16	0.00	53,797.77
September 2035	82,105.55	0.00	52,160.37
October 2035	79,654.80	0.00	50,570.72
November 2035	77,274.86	0.00	49,027.45
December 2035	74,963.72	0.00	47,529.23
January 2036	72,719.42	0.00	46,074.77
February 2036	70,540.09	0.00	44,662.84
March 2036	68,423.87	0.00	43,292.21
April 2036	66,368.99	0.00	41,961.69
May 2036	64,373.70	0.00	40,670.16
June 2036	62,436.30	0.00	39,416.48
July 2036	60,555.17	0.00	38,199.58
August 2036	58,728.69	0.00	37,018.39
September 2036	56,955.33	0.00	35,871.90
October 2036	55,233.56	0.00	34,759.12
November 2036	53,561.92	0.00	33,679.07
December 2036	51,938.99	0.00	32,630.81
January 2037	50,363.37	0.00	31,613.44
February 2037	48,833.73	0.00	30,626.06
March 2037	47,348.75	0.00	29,667.81
April 2037	45,907.15	0.00	28,737.85
May 2037	44,507.71	0.00	27,835.38
June 2037	43,149.22	0.00	26,959.59
July 2037	41,830.50	0.00	26,109.72
August 2037	40,550.42	0.00	25,285.02
September 2037	39,307.89	0.00	24,484.76
October 2037	38,101.82	0.00	23,708.25
November 2037	36,931.16	0.00	22,954.79
December 2037	35,794.92	0.00	22,223.71
January 2038	34,692.10	0.00	21,514.38
February 2038	33,621.74	0.00	20,826.15

<u>Distribution Date</u>	<u>Class BP</u>	<u>Class P</u>	<u>Class AP</u>
March 2038	\$ 32,582.92	\$ 0.00	\$ 20,158.43
April 2038	31,574.72	0.00	19,510.61
May 2038	30,596.28	0.00	18,882.12
June 2038	29,646.73	0.00	18,272.40
July 2038	28,725.24	0.00	17,680.91
August 2038	27,831.01	0.00	17,107.10
September 2038	26,963.26	0.00	16,550.48
October 2038	26,121.21	0.00	16,010.54
November 2038	25,304.14	0.00	15,486.80
December 2038	24,511.32	0.00	14,978.78
January 2039	23,742.04	0.00	14,486.03
February 2039	22,995.64	0.00	14,008.10
March 2039	22,271.46	0.00	13,544.55
April 2039	21,568.84	0.00	13,094.98
May 2039	20,887.17	0.00	12,658.97
June 2039	20,225.83	0.00	12,236.12
July 2039	19,584.25	0.00	11,826.06
August 2039	18,961.85	0.00	11,428.40
September 2039	18,358.07	0.00	11,042.78
October 2039	17,772.38	0.00	10,668.85
November 2039	17,204.24	0.00	10,306.27
December 2039	16,653.16	0.00	9,954.70
January 2040	16,118.62	0.00	9,613.83
February 2040	15,600.16	0.00	9,283.33
March 2040	15,097.30	0.00	8,962.90
April 2040	14,609.59	0.00	8,652.25
May 2040	14,136.59	0.00	8,351.08
June 2040	13,677.87	0.00	8,059.12
July 2040	13,233.01	0.00	7,776.10
August 2040	12,801.61	0.00	7,501.75
September 2040	12,383.28	0.00	7,235.82
October 2040	11,977.62	0.00	6,978.05
November 2040	11,584.28	0.00	6,728.21
December 2040	11,202.89	0.00	6,486.06
January 2041	10,833.10	0.00	6,251.37
February 2041	10,474.57	0.00	6,023.93
March 2041	10,126.98	0.00	5,803.51
April 2041	9,789.99	0.00	5,589.91
May 2041	9,463.29	0.00	5,382.93
June 2041	9,146.60	0.00	5,182.37
July 2041	8,839.60	0.00	4,988.03
August 2041	8,542.01	0.00	4,799.74
September 2041	8,253.57	0.00	4,617.30
October 2041	7,973.99	0.00	4,440.56
November 2041	7,703.01	0.00	4,269.33
December 2041	7,440.39	0.00	4,103.45
January 2042	7,185.87	0.00	3,942.77
February 2042	6,939.21	0.00	3,787.12
March 2042	6,700.18	0.00	3,636.36

<u>Distribution Date</u>	<u>Class BP</u>	<u>Class P</u>	<u>Class AP</u>
April 2042	\$ 6,468.56	\$ 0.00	\$ 3,490.33
May 2042	6,244.12	0.00	3,348.91
June 2042	6,026.66	0.00	3,211.94
July 2042	5,815.96	0.00	3,079.29
August 2042	5,611.82	0.00	2,950.84
September 2042	5,414.04	0.00	2,826.46
October 2042	5,222.45	0.00	2,706.02
November 2042	5,036.85	0.00	2,589.40
December 2042	4,857.06	0.00	2,476.50
January 2043	4,682.91	0.00	2,367.19
February 2043	4,514.24	0.00	2,261.37
March 2043	4,350.87	0.00	2,158.94
April 2043	4,192.65	0.00	2,059.78
May 2043	4,039.42	0.00	1,963.81
June 2043	3,891.04	0.00	1,870.92
July 2043	3,747.35	0.00	1,781.01
August 2043	3,608.22	0.00	1,694.01
September 2043	3,473.51	0.00	1,609.82
October 2043	3,343.09	0.00	1,528.35
November 2043	3,216.82	0.00	1,449.52
December 2043	3,094.59	0.00	1,373.25
January 2044	2,976.26	0.00	1,299.47
February 2044	2,861.73	0.00	1,228.08
March 2044	2,750.87	0.00	1,159.03
April 2044	2,643.57	0.00	1,092.24
May 2044	2,539.73	0.00	1,027.64
June 2044	2,439.24	0.00	965.16
July 2044	2,342.00	0.00	904.74
August 2044	2,247.91	0.00	846.32
September 2044	2,156.88	0.00	789.82
October 2044	2,068.80	0.00	735.20
November 2044	1,983.59	0.00	682.38
December 2044	1,901.17	0.00	631.33
January 2045	1,821.44	0.00	581.98
February 2045	1,744.32	0.00	534.28
March 2045	1,669.74	0.00	488.18
April 2045	1,597.61	0.00	443.62
May 2045	1,527.86	0.00	400.57
June 2045	1,460.42	0.00	358.97
July 2045	1,395.22	0.00	318.77
August 2045	1,332.18	0.00	279.94
September 2045	1,271.23	0.00	242.43
October 2045	1,212.32	0.00	206.20
November 2045	1,155.39	0.00	171.21
December 2045	1,100.36	0.00	137.41
January 2046	1,047.18	0.00	104.78
February 2046	995.79	0.00	73.27
March 2046	946.14	0.00	42.85
April 2046	898.17	0.00	13.48

<u>Distribution Date</u>	<u>Class BP</u>	<u>Class P</u>	<u>Class AP</u>
May 2046	\$ 851.82	\$ 0.00	\$ 0.00
June 2046	807.06	0.00	0.00
July 2046	763.82	0.00	0.00
August 2046	722.07	0.00	0.00
September 2046	681.75	0.00	0.00
October 2046	642.81	0.00	0.00
November 2046	605.22	0.00	0.00
December 2046	568.94	0.00	0.00
January 2047	533.91	0.00	0.00
February 2047	500.10	0.00	0.00
March 2047	467.47	0.00	0.00
April 2047	435.99	0.00	0.00
May 2047	405.62	0.00	0.00
June 2047	376.32	0.00	0.00
July 2047	348.05	0.00	0.00
August 2047	320.79	0.00	0.00
September 2047	294.50	0.00	0.00
October 2047	269.16	0.00	0.00
November 2047	244.72	0.00	0.00
December 2047	221.16	0.00	0.00
January 2048	198.46	0.00	0.00
February 2048	176.58	0.00	0.00
March 2048	155.50	0.00	0.00
April 2048	135.19	0.00	0.00
May 2048	115.62	0.00	0.00
June 2048	96.78	0.00	0.00
July 2048	78.64	0.00	0.00
August 2048	61.17	0.00	0.00
September 2048	44.36	0.00	0.00
October 2048	28.18	0.00	0.00
November 2048	12.61	0.00	0.00
December 2048 and thereafter	0.00	0.00	0.00

<u>Distribution Date</u>	<u>Class G</u>	<u>Classes L, LM, LN and LP (in the aggregate)</u>	<u>Classes LQ and LZ (in the aggregate)</u>
Initial Balance	\$138,020,000.00	\$56,592,000.00	\$8,174,000.00
December 2021	136,635,418.12	56,420,982.52	8,150,698.68
January 2022	135,163,544.55	56,230,489.82	8,118,599.71
February 2022	133,606,156.49	56,020,615.73	8,077,741.90
March 2022	131,965,181.57	55,791,470.57	8,028,182.20
April 2022	130,242,694.16	55,543,181.04	7,969,995.72
May 2022	128,440,911.16	55,275,890.19	7,903,275.66
June 2022	126,562,187.48	54,989,757.27	7,828,133.24
July 2022	124,609,010.91	54,684,957.61	7,744,697.58
August 2022	122,583,996.76	54,361,682.49	7,653,115.45
September 2022	120,489,881.93	54,020,138.94	7,553,551.10
October 2022	118,329,518.76	53,660,549.54	7,446,185.96
November 2022	116,105,868.36	53,283,152.19	7,331,218.31
December 2022	113,821,993.71	52,888,199.90	7,208,862.88
January 2023	111,481,052.38	52,475,960.49	7,079,350.49
February 2023	109,086,288.96	52,046,716.30	6,942,927.54
March 2023	106,641,027.20	51,600,763.91	6,799,855.52
April 2023	104,148,661.95	51,138,413.78	6,650,410.43
May 2023	101,612,650.81	50,659,989.90	6,494,882.25
June 2023	99,036,505.63	50,165,829.45	6,333,574.23
July 2023	96,423,783.84	49,656,282.38	6,166,802.27
August 2023	93,861,929.32	49,131,711.00	5,994,894.20
September 2023	91,349,936.22	48,592,489.55	5,818,189.06
October 2023	88,886,818.25	48,039,003.81	5,637,036.25
November 2023	86,471,608.33	47,471,650.54	5,451,794.82
December 2023	84,103,358.20	46,891,096.23	5,262,945.49
January 2024	81,781,138.06	46,297,750.79	5,070,856.58
February 2024	79,504,036.24	45,692,033.63	4,875,903.34
March 2024	77,271,158.79	45,074,373.08	4,678,467.18
April 2024	75,081,629.23	44,455,145.87	4,483,235.10
May 2024	72,934,588.10	43,841,958.53	4,293,534.33
June 2024	70,829,192.74	43,234,754.65	4,109,261.13
July 2024	68,764,616.89	42,633,478.35	3,930,313.37
August 2024	66,740,050.40	42,038,074.23	3,756,590.62
September 2024	64,754,698.93	41,448,487.41	3,587,994.02
October 2024	62,807,783.61	40,864,663.52	3,424,426.33
November 2024	60,898,540.78	40,286,548.66	3,265,791.85
December 2024	59,026,221.68	39,714,089.43	3,111,996.47
January 2025	57,190,092.16	39,147,232.93	2,962,947.55
February 2025	55,389,432.39	38,585,926.73	2,818,553.98
March 2025	53,623,536.60	38,030,118.88	2,678,726.11
April 2025	51,891,712.79	37,479,757.90	2,543,375.77
May 2025	50,193,282.49	36,934,792.78	2,412,416.20
June 2025	48,527,580.46	36,395,172.99	2,285,762.06
July 2025	46,893,954.47	35,860,848.43	2,163,329.39
August 2025	45,291,765.03	35,331,769.49	2,045,035.62
September 2025	43,720,385.16	34,807,886.99	1,930,799.52

<u>Distribution Date</u>	<u>Class G</u>	<u>Classes L, LM, LN and LP (in the aggregate)</u>	<u>Classes LQ and LZ (in the aggregate)</u>
October 2025	\$ 42,184,980.93	\$34,289,152.21	\$1,820,541.17
November 2025	40,687,504.11	33,775,516.86	1,714,182.01
December 2025	39,227,002.40	33,266,933.12	1,611,644.70
January 2026	37,802,547.13	32,763,353.57	1,512,853.24
February 2026	36,413,232.65	32,264,731.25	1,417,732.82
March 2026	35,058,175.78	31,771,019.61	1,326,209.92
April 2026	33,736,515.24	31,282,172.55	1,238,212.18
May 2026	32,447,411.12	30,798,144.36	1,153,668.48
June 2026	31,190,044.36	30,318,889.77	1,072,508.85
July 2026	29,963,616.23	29,844,363.91	994,664.50
August 2026	28,767,347.81	29,374,522.33	920,067.76
September 2026	27,600,479.56	28,909,320.98	848,652.11
October 2026	26,462,270.75	28,448,716.22	780,352.12
November 2026	25,351,999.11	27,992,664.80	715,103.45
December 2026	24,268,960.26	27,541,123.87	652,842.85
January 2027	23,212,467.36	27,094,050.96	593,508.13
February 2027	22,181,850.63	26,651,404.02	537,038.12
March 2027	21,176,456.94	26,213,141.35	483,372.70
April 2027	20,195,649.40	25,779,221.65	432,452.75
May 2027	19,238,806.96	25,349,603.99	384,220.15
June 2027	18,305,324.02	24,924,247.82	338,617.77
July 2027	17,394,610.06	24,503,112.96	295,589.43
August 2027	16,506,089.23	24,086,159.59	255,079.91
September 2027	15,639,200.03	23,673,348.26	217,034.93
October 2027	14,793,394.94	23,264,639.90	181,401.11
November 2027	13,968,140.07	22,859,995.77	148,126.00
December 2027	13,162,914.82	22,459,377.49	117,334.32
January 2028	12,377,211.57	22,062,747.04	90,378.61
February 2028	11,610,535.34	21,670,066.74	67,157.86
March 2028	10,862,403.50	21,281,299.28	47,573.11
April 2028	10,132,345.43	20,896,407.65	31,527.49
May 2028	9,419,902.26	20,515,355.22	18,926.09
June 2028	8,724,626.56	20,138,105.66	9,675.97
July 2028	8,046,082.06	19,764,623.01	3,686.09
August 2028	7,383,843.36	19,394,871.60	867.34
September 2028	6,737,495.69	19,029,081.21	867.34
October 2028	6,106,634.65	18,669,950.13	867.34
November 2028	5,490,865.89	18,317,359.98	867.34
December 2028	4,889,804.95	17,971,194.49	867.34
January 2029	4,303,076.95	17,631,339.39	867.34
February 2029	3,730,316.38	17,297,682.43	867.34
March 2029	3,171,166.86	16,970,113.29	867.34
April 2029	2,625,280.93	16,648,523.62	867.34
May 2029	2,092,319.79	16,332,806.93	867.34
June 2029	1,571,953.14	16,022,858.61	867.34
July 2029	1,063,858.93	15,718,575.89	867.34
August 2029	567,723.14	15,419,857.77	867.34

Distribution Date	Class G	Classes L, LM, LN and LP (in the aggregate)	Classes LQ and LZ (in the aggregate)
September 2029	\$ 83,239.66	\$15,126,605.05	\$ 867.34
October 2029	0.00	14,838,720.25	867.34
November 2029	0.00	14,556,107.59	867.34
December 2029	0.00	14,278,672.99	867.34
January 2030	0.00	14,006,324.00	867.33
February 2030	0.00	13,738,969.79	867.33
March 2030	0.00	13,476,521.14	867.33
April 2030	0.00	13,218,890.39	867.33
May 2030	0.00	12,965,991.39	867.33
June 2030	0.00	12,717,739.54	867.33
July 2030	0.00	12,474,051.70	867.33
August 2030	0.00	12,234,846.21	867.33
September 2030	0.00	12,000,042.81	867.33
October 2030	0.00	11,769,562.69	867.33
November 2030	0.00	11,543,328.39	867.33
December 2030	0.00	11,321,263.83	867.33
January 2031	0.00	11,103,294.27	867.33
February 2031	0.00	10,889,346.26	867.33
March 2031	0.00	10,679,347.68	867.33
April 2031	0.00	10,473,227.65	867.33
May 2031	0.00	10,270,916.53	867.33
June 2031	0.00	10,072,345.93	867.33
July 2031	0.00	9,877,448.66	867.33
August 2031	0.00	9,686,158.69	867.33
September 2031	0.00	9,498,411.18	867.33
October 2031	0.00	9,314,142.43	867.33
November 2031	0.00	9,133,289.83	867.33
December 2031	0.00	8,955,791.91	867.33
January 2032	0.00	8,781,588.28	867.33
February 2032	0.00	8,610,619.59	867.33
March 2032	0.00	8,442,827.56	867.33
April 2032	0.00	8,278,154.93	867.33
May 2032	0.00	8,116,545.45	867.33
June 2032	0.00	7,957,943.87	867.33
July 2032	0.00	7,802,295.90	867.33
August 2032	0.00	7,649,548.23	867.33
September 2032	0.00	7,499,648.48	867.33
October 2032	0.00	7,352,545.19	867.33
November 2032	0.00	7,208,187.82	867.33
December 2032	0.00	7,066,526.73	867.33
January 2033	0.00	6,927,513.13	867.33
February 2033	0.00	6,791,099.12	867.33
March 2033	0.00	6,657,237.65	867.33
April 2033	0.00	6,525,882.47	867.33
May 2033	0.00	6,396,988.19	867.33
June 2033	0.00	6,270,510.20	867.33
July 2033	0.00	6,146,404.69	867.33

<u>Distribution Date</u>	<u>Class G</u>	<u>Classes L, LM, LN and LP (in the aggregate)</u>	<u>Classes LQ and LZ (in the aggregate)</u>
August 2033	\$ 0.00	\$ 6,024,628.61	\$ 867.33
September 2033	0.00	5,905,139.69	867.33
October 2033	0.00	5,787,896.41	867.33
November 2033	0.00	5,672,857.98	867.33
December 2033	0.00	5,559,984.34	867.33
January 2034	0.00	5,449,236.12	867.33
February 2034	0.00	5,340,574.68	867.33
March 2034	0.00	5,233,962.06	867.33
April 2034	0.00	5,129,360.94	867.33
May 2034	0.00	5,026,734.71	867.33
June 2034	0.00	4,926,047.39	867.33
July 2034	0.00	4,827,263.63	867.33
August 2034	0.00	4,730,348.72	867.33
September 2034	0.00	4,635,268.57	867.33
October 2034	0.00	4,541,989.70	867.33
November 2034	0.00	4,450,479.21	867.33
December 2034	0.00	4,360,704.80	867.33
January 2035	0.00	4,272,634.74	867.33
February 2035	0.00	4,186,237.86	867.33
March 2035	0.00	4,101,483.56	867.33
April 2035	0.00	4,018,341.78	867.33
May 2035	0.00	3,936,782.99	867.33
June 2035	0.00	3,856,778.18	867.33
July 2035	0.00	3,778,298.89	867.33
August 2035	0.00	3,701,317.13	867.33
September 2035	0.00	3,625,805.44	867.33
October 2035	0.00	3,551,736.83	867.33
November 2035	0.00	3,479,084.80	867.33
December 2035	0.00	3,407,823.32	867.33
January 2036	0.00	3,337,926.84	867.33
February 2036	0.00	3,269,370.26	867.33
March 2036	0.00	3,202,128.91	867.33
April 2036	0.00	3,136,178.58	867.33
May 2036	0.00	3,071,495.50	867.33
June 2036	0.00	3,008,056.32	867.33
July 2036	0.00	2,945,838.10	867.33
August 2036	0.00	2,884,818.31	867.33
September 2036	0.00	2,824,974.84	867.33
October 2036	0.00	2,766,285.97	867.33
November 2036	0.00	2,708,730.36	867.33
December 2036	0.00	2,652,287.07	867.33
January 2037	0.00	2,596,935.52	867.33
February 2037	0.00	2,542,655.51	867.33
March 2037	0.00	2,489,427.20	867.33
April 2037	0.00	2,437,231.11	867.33
May 2037	0.00	2,386,048.10	867.33
June 2037	0.00	2,335,859.38	867.33

<u>Distribution Date</u>	<u>Class G</u>	<u>Classes L, LM, LN and LP (in the aggregate)</u>	<u>Classes LQ and LZ (in the aggregate)</u>
July 2037	\$ 0.00	\$ 2,286,646.51	\$ 867.33
August 2037	0.00	2,238,391.37	867.33
September 2037	0.00	2,191,076.16	867.33
October 2037	0.00	2,144,683.42	867.33
November 2037	0.00	2,099,195.98	867.33
December 2037	0.00	2,054,597.01	867.33
January 2038	0.00	2,010,869.96	867.33
February 2038	0.00	1,967,998.58	867.33
March 2038	0.00	1,925,966.93	867.33
April 2038	0.00	1,884,759.35	867.33
May 2038	0.00	1,844,360.44	867.33
June 2038	0.00	1,804,755.12	867.33
July 2038	0.00	1,765,928.56	867.33
August 2038	0.00	1,727,866.19	867.33
September 2038	0.00	1,690,553.72	867.33
October 2038	0.00	1,653,977.11	867.33
November 2038	0.00	1,618,122.57	867.33
December 2038	0.00	1,582,976.58	867.33
January 2039	0.00	1,548,525.85	867.33
February 2039	0.00	1,514,757.32	867.33
March 2039	0.00	1,481,658.20	867.33
April 2039	0.00	1,449,215.90	867.33
May 2039	0.00	1,417,418.06	867.33
June 2039	0.00	1,386,252.58	867.33
July 2039	0.00	1,355,707.54	867.33
August 2039	0.00	1,325,771.25	867.33
September 2039	0.00	1,296,432.24	867.33
October 2039	0.00	1,267,679.24	867.33
November 2039	0.00	1,239,501.20	867.33
December 2039	0.00	1,211,887.24	867.33
January 2040	0.00	1,184,826.72	867.33
February 2040	0.00	1,158,309.15	867.33
March 2040	0.00	1,132,324.28	867.33
April 2040	0.00	1,106,861.99	867.33
May 2040	0.00	1,081,912.40	867.33
June 2040	0.00	1,057,465.77	867.33
July 2040	0.00	1,033,512.57	867.33
August 2040	0.00	1,010,043.41	867.33
September 2040	0.00	987,049.10	867.33
October 2040	0.00	964,520.60	867.33
November 2040	0.00	942,449.05	867.33
December 2040	0.00	920,825.75	867.33
January 2041	0.00	899,642.15	867.33
February 2041	0.00	878,889.86	867.33
March 2041	0.00	858,560.65	867.33
April 2041	0.00	838,646.43	867.33
May 2041	0.00	819,139.27	867.33

<u>Distribution Date</u>	<u>Class G</u>	<u>Classes L, LM, LN and LP (in the aggregate)</u>	<u>Classes LQ and LZ (in the aggregate)</u>
June 2041	\$ 0.00	\$ 800,031.38	\$ 867.33
July 2041	0.00	781,315.12	867.33
August 2041	0.00	762,982.98	867.33
September 2041	0.00	745,027.58	867.33
October 2041	0.00	727,441.71	867.33
November 2041	0.00	710,218.26	867.33
December 2041	0.00	693,350.27	867.33
January 2042	0.00	676,830.89	867.33
February 2042	0.00	660,653.41	867.33
March 2042	0.00	644,811.24	867.33
April 2042	0.00	629,297.92	867.33
May 2042	0.00	614,107.10	867.33
June 2042	0.00	599,232.54	867.33
July 2042	0.00	584,668.14	867.33
August 2042	0.00	570,407.88	867.33
September 2042	0.00	556,445.88	867.33
October 2042	0.00	542,776.36	867.33
November 2042	0.00	529,393.64	867.33
December 2042	0.00	516,292.15	867.33
January 2043	0.00	503,466.42	867.33
February 2043	0.00	490,911.09	867.33
March 2043	0.00	478,620.89	867.33
April 2043	0.00	466,590.67	867.33
May 2043	0.00	454,815.33	867.33
June 2043	0.00	443,289.92	867.33
July 2043	0.00	432,009.54	867.33
August 2043	0.00	420,969.40	867.33
September 2043	0.00	410,164.79	867.33
October 2043	0.00	399,591.11	867.33
November 2043	0.00	389,243.81	867.33
December 2043	0.00	379,118.46	867.33
January 2044	0.00	369,210.69	867.33
February 2044	0.00	359,516.22	867.33
March 2044	0.00	350,030.86	867.33
April 2044	0.00	340,750.46	867.33
May 2044	0.00	331,671.01	867.33
June 2044	0.00	322,788.51	867.33
July 2044	0.00	314,099.08	867.33
August 2044	0.00	305,598.90	867.33
September 2044	0.00	297,284.21	867.33
October 2044	0.00	289,151.34	867.33
November 2044	0.00	281,196.68	867.33
December 2044	0.00	273,416.68	867.33
January 2045	0.00	265,807.87	867.33
February 2045	0.00	258,366.83	867.33
March 2045	0.00	251,090.22	867.33
April 2045	0.00	243,974.77	867.33

<u>Distribution Date</u>	<u>Class G</u>	<u>Classes L, LM, LN and LP (in the aggregate)</u>	<u>Classes LQ and LZ (in the aggregate)</u>
May 2045	\$ 0.00	\$ 237,017.24	\$ 867.33
June 2045	0.00	230,214.47	867.33
July 2045	0.00	223,563.38	867.33
August 2045	0.00	217,060.90	867.33
September 2045	0.00	210,704.07	867.33
October 2045	0.00	204,489.95	867.33
November 2045	0.00	198,415.67	867.33
December 2045	0.00	192,478.41	867.33
January 2046	0.00	186,675.40	867.33
February 2046	0.00	181,003.95	867.33
March 2046	0.00	175,461.37	867.33
April 2046	0.00	170,045.08	867.33
May 2046	0.00	164,752.50	867.33
June 2046	0.00	159,581.12	867.33
July 2046	0.00	154,528.48	867.33
August 2046	0.00	149,592.16	867.33
September 2046	0.00	144,769.80	867.33
October 2046	0.00	140,059.07	867.33
November 2046	0.00	135,457.69	867.33
December 2046	0.00	130,963.41	867.33
January 2047	0.00	126,574.05	867.33
February 2047	0.00	122,287.46	867.33
March 2047	0.00	118,101.51	867.33
April 2047	0.00	114,014.16	867.33
May 2047	0.00	110,023.35	867.33
June 2047	0.00	106,127.10	867.33
July 2047	0.00	102,323.46	867.33
August 2047	0.00	98,610.51	867.33
September 2047	0.00	94,986.38	867.33
October 2047	0.00	91,449.21	867.33
November 2047	0.00	87,997.21	867.33
December 2047	0.00	84,628.59	867.33
January 2048	0.00	81,341.63	867.33
February 2048	0.00	78,134.62	867.33
March 2048	0.00	75,005.89	867.33
April 2048	0.00	71,953.80	867.33
May 2048	0.00	68,976.73	867.33
June 2048	0.00	66,073.13	867.33
July 2048	0.00	63,241.43	867.33
August 2048	0.00	60,480.13	867.33
September 2048	0.00	57,787.73	867.33
October 2048	0.00	55,162.80	867.33
November 2048	0.00	52,603.88	867.33
December 2048	0.00	50,109.59	867.33
January 2049	0.00	47,678.55	867.33
February 2049	0.00	45,309.42	867.33
March 2049	0.00	43,000.87	867.33

<u>Distribution Date</u>	<u>Class G</u>	<u>Classes L, LM, LN and LP (in the aggregate)</u>	<u>Classes LQ and LZ (in the aggregate)</u>
April 2049	\$ 0.00	\$ 40,751.61	\$ 867.33
May 2049	0.00	38,560.37	867.33
June 2049	0.00	36,425.91	867.33
July 2049	0.00	34,347.01	867.33
August 2049	0.00	32,322.48	867.33
September 2049	0.00	30,351.13	867.33
October 2049	0.00	28,431.83	867.33
November 2049	0.00	26,563.45	867.33
December 2049	0.00	24,744.88	867.33
January 2050	0.00	22,975.04	867.33
February 2050	0.00	21,252.88	867.33
March 2050	0.00	19,577.34	867.33
April 2050	0.00	17,947.42	867.33
May 2050	0.00	16,362.11	867.33
June 2050	0.00	14,820.43	867.33
July 2050	0.00	13,432.40	867.33
August 2050	0.00	12,082.68	867.33
September 2050	0.00	10,788.34	867.33
October 2050	0.00	9,530.11	867.33
November 2050	0.00	8,307.17	867.33
December 2050	0.00	7,118.77	867.33
January 2051	0.00	5,964.12	867.33
February 2051	0.00	4,842.48	867.33
March 2051	0.00	3,834.98	867.33
April 2051	0.00	2,878.36	867.33
May 2051	0.00	1,949.48	867.33
June 2051	0.00	1,047.73	867.33
July 2051	0.00	515.81	867.33
August 2051	0.00	0.00	866.84
September 2051	0.00	0.00	416.58
October 2051 and thereafter	0.00	0.00	0.00

Exhibit A

Underlying Certificates

Trust Asset Group	Issuer	Series	Class	Issue Date	CUSIP Number	Interest Rate	Interest Type(1)	Final Distribution Date	Principal Type(1)	Original Notional Balance of Class	Underlying Certificate Factor(2)	Notional Balance in Trust	Percentage of Class in Trust	Ginnie Mae I or II
16	Ginnie Mae	2021-177	IK(3)	October 29, 2021	38383CHAI	3.00%	FIX/IO	October 2051	NTL(PT)	\$13,868,387	0.99377438	\$13,782,047	100.000000000000%	II
16	Ginnie Mae	2021-177	KI(3)(4)	October 29, 2021	38383CMCI	3.00	FIX/IO	August 2051	NTL(PAC D)	10,628,333	0.99757508	6,797,642	64.1132151204	II

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

(2) Underlying Certificate Factors are as of November 2021.

(3) More than 10% of the Mortgage Loans underlying this Underlying Certificate may be higher balance Mortgage Loans. See “Risk Factors” in *this Supplement*.

(4) MX Class.



\$1,816,879,503

**Government National
Mortgage Association**

GINNIE MAE[®]

**Guaranteed REMIC
Pass-Through Securities
and MX Securities
Ginnie Mae REMIC Trust 2021-194**

OFFERING CIRCULAR SUPPLEMENT
November 23, 2021

**Goldman Sachs & Co. LLC
Ramirez & Co., Inc.**