

**\$1,594,604,910**  
**Government National Mortgage Association**  
**GINNIE MAE®**  
**Guaranteed REMIC Pass-Through Securities**  
**and MX Securities**  
**Ginnie Mae REMIC Trust 2023-115**

**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-11 which highlights some of these risks.**

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

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

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

Class of REMIC Securities	Original Principal Balance(2)	Interest Rate	Principal Type(3)	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
<b>Security Group 1</b>						
DF .....	\$100,000,000	(5)	PT	FLT	38384CB40	August 2053
DS .....	100,000,000	(5)	NTL(PT)	INV/IO	38384CB57	August 2053
<b>Security Group 2</b>						
E .....	91,902,741	5.50%	SEQ	FIX	38384CB65	November 2057
EV .....	22,663,971	5.50	SEQ/AD	FIX	38384CB73	July 2034
EZ .....	27,739,112	5.50	SEQ	FIX/Z	38384CB81	July 2063
<b>Security Group 3</b>						
FA .....	100,000,000	(5)	PT	FLT	38384CB99	August 2053
FB .....	30,000,000	(5)	PT	FLT	38384CC23	August 2053
FD .....	75,000,000	(5)	PT	FLT	38384CC31	August 2053
FH .....	50,000,000	(5)	PT	FLT	38384CC49	August 2053
FJ .....	25,000,000	(5)	PT	FLT	38384CC56	August 2053
G .....	5,300,000	5.00	SEQ/AD	FIX	38384CC64	April 2047
GZ .....	833,472	5.00	SEQ	FIX/Z	38384CC72	August 2053
H .....	12,000,000	5.50	SEQ	FIX	38384CC80	August 2050
HN .....	19,493,537	6.00	SEQ/AD	FIX	38384CC98	April 2046
HV(1) .....	1,694,611	5.50	SEQ/AD	FIX	38384CD22	July 2034
HZ(1) .....	2,074,085	5.50	SEQ	FIX/Z	38384CD30	August 2053
J .....	2,500,000	5.50	SEQ	FIX	38384CD48	October 2048
LV(1) .....	613,735	5.50	SEQ/AD	FIX	38384CD55	July 2034
LZ(1) .....	751,169	5.50	SEQ	FIX/Z	38384CD63	August 2053
MA .....	7,084,712	5.50	SUP	FIX	38384CD71	August 2053
MD .....	4,409,000	5.50	PAC II	FIX	38384CD89	August 2053
MG .....	5,000,000	5.25	SUP	FIX	38384CD97	August 2053
MJ .....	2,500,000	6.00	SUP	FIX	38384CE21	August 2053
NZ(1) .....	2,838,847	6.00	SEQ	FIX/Z	38384CE39	August 2053
P .....	63,542,484	5.50	PAC I	FIX	38384CE47	June 2051
PV(1) .....	7,852,677	5.50	PAC I/AD	FIX	38384CE54	July 2034
PZ(1) .....	9,611,127	5.50	PAC I	FIX/Z	38384CE62	August 2053
SA .....	100,000,000	(5)	NTL(PT)	INV/IO	38384CE70	August 2053
SB .....	30,000,000	(5)	NTL(PT)	INV/IO	38384CE88	August 2053
SD .....	75,000,000	(5)	NTL(PT)	INV/IO	38384CE96	August 2053
SH(1) .....	50,000,000	(5)	NTL(PT)	INV/IO	38384CF20	August 2053
SJ(1) .....	25,000,000	(5)	NTL(PT)	INV/IO	38384CF38	August 2053
<b>Security Group 4</b>						
EA .....	30,567,377	5.00	SEQ	FIX	38384CF46	July 2055
VE .....	9,937,833	5.00	SEQ/AD	FIX	38384CF53	March 2034
VZ .....	14,324,117	5.00	SEQ	FIX/Z	38384CF61	July 2063
<b>Security Group 5</b>						
GE .....	36,957,646	5.50	SEQ	FIX	38384CF79	May 2045
HF(1) .....	38,372,509	(5)	PT	FLT	38384CF87	August 2053
HT(1) .....	38,372,509	(5)	NTL(PT)	INV/IO	38384CF95	August 2053
SG(1) .....	38,372,509	(5)	NTL(PT)	INV/IO	38384CG29	August 2053
UT(1) .....	38,372,509	(5)	NTL(PT)	INV/IO	38384CG37	August 2053
VG .....	19,787,373	5.50	SEQ/AD	FIX	38384CG45	March 2036
ZG .....	20,000,000	5.50	SEQ	FIX/Z	38384CG52	August 2053

(Cover continued on next page)

**J.P. Morgan**

**Mischler Financial Group, Inc.**

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

Class of REMIC Securities	Original Principal Balance(2)	Interest Rate	Principal Type(3)	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
<b>Security Group 6</b>						
A .....	\$148,039,595	6.00%	SEQ	FIX	38384CG60	May 2049
AB .....	10,000,000	6.00	SEQ	FIX	38384CG78	May 2049
AC .....	11,000,000	6.00	SEQ	FIX	38384CG86	May 2049
VA(1) .....	31,977,000	6.00	SEQ/AD	FIX	38384CG94	August 2033
VL(1) .....	3,893,900	6.00	SEQ/AD	FIX	38384CH28	June 2034
Z(1) .....	39,459,148	6.00	SEQ	FIX/Z	38384CH36	August 2053
<b>Security Group 7</b>						
NF .....	30,000,000	(5)	PT	FLT	38384CH44	August 2053
NS .....	30,000,000	(5)	NTL(PT)	INV/IO	38384CH51	August 2053
<b>Security Group 8</b>						
SW(1) .....	165,212,961	(5)	NTL(PT)	INV/IO	38384CH69	August 2053
WF(1) .....	165,212,961	(5)	PT	FLT	38384CH77	August 2053
WT(1) .....	165,212,961	(5)	NTL(PT)	INV/IO	38384CH85	August 2053
<b>Security Group 9</b>						
FT .....	32,691,834	(5)	PT	FLT	38384CH93	August 2053
ST .....	32,691,834	(5)	NTL(PT)	INV/IO	38384CJ26	August 2053
<b>Security Group 10</b>						
B .....	11,881,541	6.00	SEQ	FIX	38384CJ34	April 2050
BA .....	25,000,000	6.00	SEQ	FIX	38384CJ42	April 2050
BS(1) .....	50,000,000	(5)	NTL(PT)	INV/IO	38384CJ59	August 2053
BV(1) .....	6,246,791	6.00	SEQ/AD	FIX	38384CJ67	June 2034
BZ(1) .....	6,871,668	6.00	SEQ	FIX/Z	38384CJ75	August 2053
YF(1) .....	50,000,000	(5)	PT	FLT	38384CJ83	August 2053
YT(1) .....	50,000,000	(5)	NTL(PT)	INV/IO	38384CJ91	August 2053
<b>Security Group 11</b>						
AZ(1) .....	9,309,093	3.50	SC/SEQ	FIX/Z	38384CK24	September 2049
GA(1) .....	33,770,000	3.50	SC/SEQ/AD	FIX	38384CK32	September 2049
<b>Security Group 12</b>						
VC(1) .....	14,503,637	5.00	SC/SEQ/AD	FIX	38384CK40	May 2053
ZC(1) .....	20,000,000	5.00	SC/SEQ	FIX/Z	38384CK57	May 2053
<b>Security Group 13</b>						
PO(1) .....	27,838,829	0.00	SC/PT	PO	38384CK65	June 2053
S(1) .....	76,556,778	(5)	SC/NTL(PT)	INV/IO	38384CK73	June 2053
TF .....	76,556,778	(5)	SC/PT	FLT	38384CK81	June 2053
<b>Residual</b>						
RR .....	0	0.00	NPR	NPR	38384CK99	July 2063

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

## AVAILABLE INFORMATION

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

- this Offering Circular Supplement (this “Supplement”),
- the Base Offering Circular and
- in the case of the Group 11, 12 and 13 securities, each disclosure document relating to the Underlying Certificates (the “Underlying Certificate Disclosure Documents”).

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

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

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

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## TERMS SHEET

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

**Sponsor:** J.P. Morgan Securities LLC

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

**Trustee:** U.S. Bank National Association

**Tax Administrator:** The Trustee

**Closing Date:** August 30, 2023

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

### Trust Assets:

<u>Trust Asset Group or Subgroup<sup>(2)</sup></u>	<u>Trust Asset Type</u>	<u>Certificate Rate</u>	<u>Original Term To Maturity (in years)</u>
1	Ginnie Mae II	6.500%	30
2	Ginnie Mae II	5.500%	40
3A	Ginnie Mae II	6.500%	30
3B	Ginnie Mae II	6.500%	30
3C	Ginnie Mae II	6.500%	30
4	Ginnie Mae II	5.000%	40
5	Ginnie Mae II	6.000%	30
6	Ginnie Mae II	6.000%	30
7	Ginnie Mae II	7.000%	30
8	Ginnie Mae II	7.000%	30
9	Ginnie Mae II	7.500%	30
10	Ginnie Mae II	6.500%	30
11	Underlying Certificates	(1)	(1)
12	Underlying Certificates	(1)	(1)
13	Underlying Certificate	(1)	(1)

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

<sup>(2)</sup> The Group 3 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 3 and 10, payments on each Group will be based solely on payments on the Trust Asset Group with the same numerical designation.

**Assumed Characteristics of the Mortgage Loans Underlying the Group 1, 3, 5, 6, 7, 8, 9 and 10 Trust Assets<sup>(1)</sup>:**

<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<sup>(2)</sup></u>
<b>Group 1 Trust Assets</b>			
\$100,000,000	357	2	7.104%
<b>Subgroup 3A Trust Assets</b>			
\$112,500,000	357	3	7.110%
<b>Subgroup 3B Trust Assets</b>			
\$150,000,000	359	0	7.033%
<b>Subgroup 3C Trust Assets</b>			
\$165,599,456 <sup>(3)</sup>	357	3	7.110%
<b>Group 5 Trust Assets</b>			
\$115,117,528 <sup>(3)</sup>	359	1	6.659%
<b>Group 6 Trust Assets</b>			
\$244,369,643	359	0	6.605%
<b>Group 7 Trust Assets</b>			
\$30,000,000	359	0	7.465%
<b>Group 8 Trust Assets</b>			
\$165,212,961	356	3	7.487%
<b>Group 9 Trust Assets</b>			
\$32,691,834	356	3	7.956%
<b>Group 10 Trust Assets</b>			
\$100,000,000	359	0	7.048%

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

<sup>(2)</sup> The Mortgage Loans underlying the Group 1, 3, 5, 6, 7, 8, 9 and 10 Trust Assets may bear interest at rates ranging from 0.25% to 1.50% per annum above the related Certificate Rate.

<sup>(3)</sup> More than 10% of the Mortgage Loans underlying the Group 5 and Subgroup 3C Trust Assets may be higher balance Mortgage Loans. See “Risk Factors” in this Supplement.

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

**Characteristics of the Group 11, 12 and 13 Trust Assets:** See Exhibit A to this Supplement for certain information regarding the characteristics of the related Underlying Certificates.

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

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

**Increased Minimum Denomination Classes:** Each Class that constitutes a Principal Only, Interest Only or Inverse Floating Rate Class. See “Description of the Securities — Form of Securities” in this Supplement.

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

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

Class	Interest Rate Formula(1)	Initial Interest Rate(2)	Minimum Rate	Maximum Rate	Delay (in days)	30-day Average SOFR for Minimum Interest Rate
<b>Security Group 1</b>						
DF .....	30-day Average SOFR + 1.20%	6.26901%	1.20%	6.50000000%	0	0.00%
DS .....	5.30% — 30-day Average SOFR	0.23099%	0.00%	5.30000000%	0	5.30%
<b>Security Group 3</b>						
FA .....	30-day Average SOFR + 1.05%	6.11935%	1.05%	7.00000000%	0	0.00%
FB .....	30-day Average SOFR + 1.18%	6.30426%	1.18%	7.00000000%	0	0.00%
FD .....	30-day Average SOFR + 1.05%	6.12838%	1.05%	7.00000000%	0	0.00%
FH .....	30-day Average SOFR + 1.10%	6.28048%	1.10%	7.00000000%	0	0.00%
FJ .....	30-day Average SOFR + 1.10%	6.20145%	1.10%	7.00000000%	0	0.00%
SA .....	5.95% — 30-day Average SOFR	0.88065%	0.00%	5.95000000%	0	5.95%
SB .....	5.82% — 30-day Average SOFR	0.69574%	0.00%	5.82000000%	0	5.82%
SD .....	5.95% — 30-day Average SOFR	0.87162%	0.00%	5.95000000%	0	5.95%
SH .....	5.90% — 30-day Average SOFR	0.71952%	0.00%	5.90000000%	0	5.90%
SJ .....	5.90% — 30-day Average SOFR	0.79855%	0.00%	5.90000000%	0	5.90%
SM .....	5.90% — 30-day Average SOFR	0.74586%	0.00%	5.90000000%	0	5.90%
<b>Security Group 5</b>						
FG .....	30-day Average SOFR + 1.30%	6.40145%	1.30%	7.00000000%	0	0.00%
HF .....	30-day Average SOFR + 1.05%	6.15145%	1.05%	7.00000000%	0	0.00%
HS .....	5.95% — 30-day Average SOFR	0.84855%	0.00%	5.95000000%	0	5.95%
HT .....	5.95% — 30-day Average SOFR	0.15000%	0.00%	0.15000000%	0	5.95%
SG .....	5.70% — 30-day Average SOFR	0.59855%	0.00%	5.70000000%	0	5.70%
UF .....	30-day Average SOFR + 1.20%	6.30145%	1.20%	7.00000000%	0	0.00%
US .....	5.80% — 30-day Average SOFR	0.69855%	0.00%	5.80000000%	0	5.80%
UT .....	5.80% — 30-day Average SOFR	0.10000%	0.00%	0.10000000%	0	5.80%

<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>30-day Average SOFR for Minimum Interest Rate</u>
<b>Security Group 7</b>						
NF .....	30-day Average SOFR + 1.00%	6.18048%	1.00%	7.00000000%	0	0.00%
NS .....	6.00% — 30-day Average SOFR	0.81952%	0.00%	6.00000000%	0	6.00%
<b>Security Group 8</b>						
FW .....	30-day Average SOFR + 1.20%	6.38851%	1.20%	7.00000000%	0	0.00%
SW .....	5.80% — 30-day Average SOFR	0.61149%	0.00%	5.80000000%	0	5.80%
WF .....	30-day Average SOFR + 0.90%	6.08851%	0.90%	7.00000000%	0	0.00%
WS .....	6.10% — 30-day Average SOFR	0.91149%	0.00%	6.10000000%	0	6.10%
WT .....	6.10% — 30-day Average SOFR	0.30000%	0.00%	0.30000000%	0	6.10%
<b>Security Group 9</b>						
FT .....	30-day Average SOFR + 0.90%	6.08050%	0.90%	7.50000000%	0	0.00%
ST .....	6.60% — 30-day Average SOFR	1.41950%	0.00%	6.60000000%	0	6.60%
<b>Security Group 10</b>						
BF .....	30-day Average SOFR + 1.20%	6.41325%	1.20%	7.00000000%	0	0.00%
BS .....	5.80% — 30-day Average SOFR	0.58675%	0.00%	5.80000000%	0	5.80%
YF .....	30-day Average SOFR + 0.90%	6.11325%	0.90%	7.00000000%	0	0.00%
YS .....	6.10% — 30-day Average SOFR	0.88675%	0.00%	6.10000000%	0	6.10%
YT .....	6.10% — 30-day Average SOFR	0.30000%	0.00%	0.30000000%	0	6.10%
<b>Security Group 13</b>						
S .....	6.50% — 30-day Average SOFR	1.27835%	0.00%	6.50000000%	0	6.50%
TF .....	30-day Average SOFR + 1.00%	6.22165%	1.00%	7.50000000%	0	0.00%
TS .....	17.87499959% — (30-day Average SOFR x 2.74999994)	3.51546%	0.00%	17.87499959%	0	6.50%

- (1) 30-day Average SOFR will be established as described under “Description of the Securities — Interest Distributions — Floating Rate and Inverse Floating Rate Classes” in this Supplement.
- (2) The initial Interest Rate will be in effect during the first Accrual Period; the Interest Rate will adjust monthly thereafter.

**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 DF, until retired

#### **SECURITY GROUP 2**

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

- The EZ Accrual Amount, sequentially, to EV and EZ, in that order, until retired
- The Group 2 Principal Distribution Amount, sequentially, to E, EV and EZ, in that order, until retired



### **SECURITY GROUP 3**

The Subgroup 3A Principal Distribution Amount, the Subgroup 3B Principal Distribution Amount, the Subgroup 3C Principal Distribution Amount, the GZ Accrual Amount, the HZ Accrual Amount, the LZ Accrual Amount, the NZ Accrual Amount and the PZ Accrual Amount will be allocated as follows:

- The HZ Accrual Amount, sequentially, to HV and HZ, in that order, until retired
- The LZ Accrual Amount, sequentially, to LV and LZ, in that order, until retired
- The PZ Accrual Amount, sequentially, to PV and PZ, in that order, until retired
- 66.666666667% of the Subgroup 3A Principal Distribution Amount to FD, until retired
- 66.666666667% of the Subgroup 3B Principal Distribution Amount to FA, until retired
- 63.4060053917% of the Subgroup 3C Principal Distribution Amount, concurrently, to FB, FH and FJ, pro rata, until retired
- 9.5221907009% of the Subgroup 3C Principal Distribution Amount, sequentially, to H, HV and HZ, in that order, until retired
- 3.7037996067% of the Subgroup 3C Principal Distribution Amount and the GZ Accrual Amount, sequentially, to G and GZ, in that order, until retired
- 13.4857834316% of the Subgroup 3C Principal Distribution Amount and the NZ Accrual Amount, sequentially, to HN and NZ, in that order, until retired
- 2.3338868939% of the Subgroup 3C Principal Distribution Amount, sequentially, to J, LV and LZ, in that order until retired
- The remainder of Subgroup 3A Principal Distribution Amount, the remainder of the Subgroup 3B Principal Distribution Amount and the remainder of the Subgroup 3C Principal Distribution Amount in the following order of priority:
  1. Sequentially, to P, PV and PZ, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
  2. To MD, until reduced to its Scheduled Principal Balance for that Distribution Date
  3. Concurrently, to MA, MG and MJ, pro rata, until retired
  4. To MD, until retired
  5. Sequentially, to P, PV and PZ, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired

### **SECURITY GROUP 4**

The Group 4 Principal Distribution Amount and the VZ Accrual Amount will be allocated as follows:

- The VZ Accrual Amount, sequentially, to VE and VZ, in that order, until retired
- The Group 4 Principal Distribution Amount, sequentially, to EA, VE and VZ, in that order, until retired



#### **SECURITY GROUP 5**

The Group 5 Principal Distribution Amount and the ZG Accrual Amount will be allocated as follows:

- The ZG Accrual Amount, sequentially, to VG and ZG, in that order, until retired
- 66.6666669562% of the Group 5 Principal Distribution Amount, sequentially, to GE, VG and ZG, in that order, until retired
- 33.3333330438% of the Group 5 Principal Distribution Amount to HF, until retired

#### **SECURITY GROUP 6**

The Group 6 Principal Distribution Amount and the Z Accrual Amount will be allocated as follows:

- The Z Accrual Amount, sequentially, to VA, VL and Z, in that order, until retired
- The Group 6 Principal Distribution Amount in the following order of priority:
  1. Concurrently, to A, AB and AC, pro rata, until retired
  2. Sequentially, to VA, VL and Z, in that order, until retired

#### **SECURITY GROUP 7**

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

#### **SECURITY GROUP 8**

The Group 8 Principal Distribution Amount will be allocated to WF, until retired

#### **SECURITY GROUP 9**

The Group 9 Principal Distribution Amount will be allocated to FT, until retired

#### **SECURITY GROUP 10**

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

- The BZ Accrual Amount, sequentially, to BV and BZ, in that order, until retired
- 50% of the Group 10 Principal Distribution Amount to YF, until retired
- 50% of the Group 10 Principal Distribution Amount in the following order of priority:
  1. Concurrently, to B and BA, pro rata, until retired
  2. Sequentially, to BV and BZ, in that order, until retired

#### **SECURITY GROUP 11**

The Group 11 Principal Distribution Amount and the AZ Accrual Amount will be allocated, sequentially, to GA and AZ, in that order, until retired

## SECURITY GROUP 12

The Group 12 Principal Distribution Amount and the ZC Accrual Amount will be allocated, sequentially, to VC and ZC, in that order, until retired

## SECURITY GROUP 13

The Group 13 Principal Distribution Amount will be allocated, concurrently, to PO and TF, pro rata, 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>
<b>PAC I Classes</b>	
3    P, PV and PZ (in the aggregate) . . . . .	175% PSA through 300% PSA
<b>PAC II Class</b>	
3    MD . . . . .	200% 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 indicated:

<u>Class</u>	<u>Original Class Notional Balance</u>	<u>Represents Approximately</u>
<b>Security Group 1</b>		
DS . . . . .	\$100,000,000	100% of DF (PT Class)
<b>Security Group 3</b>		
SA . . . . .	\$100,000,000	100% of FA (PT Class)
SB . . . . .	30,000,000	100% of FB (PT Class)
SD . . . . .	75,000,000	100% of FD (PT Class)
SH . . . . .	50,000,000	100% of FH (PT Class)
SJ . . . . .	25,000,000	100% of FJ (PT Class)
SM . . . . .	75,000,000	100% of FH and FJ (in the aggregate) (PT Classes)
<b>Security Group 5</b>		
HS . . . . .	\$ 38,372,509	100% of HF (PT Class)
HT . . . . .	38,372,509	100% of HF (PT Class)
SG . . . . .	38,372,509	100% of HF (PT Class)
US . . . . .	38,372,509	100% of HF (PT Class)
UT . . . . .	38,372,509	100% of HF (PT Class)

<u>Class</u>	<u>Original Class Notional Balance</u>	<u>Represents Approximately</u>
<b>Security Group 6</b>		
IV .....	\$ 10,659,000	33.3333333333% of VA (SEQ/AD Class)
VI .....	11,956,966	33.3333333333% of VA and VL (in the aggregate) (SEQ/AD Classes)
<b>Security Group 7</b>		
NS .....	\$ 30,000,000	100% of NF (PT Class)
<b>Security Group 8</b>		
SW .....	\$165,212,961	100% of WF (PT Class)
WS .....	165,212,961	100% of WF (PT Class)
WT .....	165,212,961	100% of WF (PT Class)
<b>Security Group 9</b>		
ST .....	\$ 32,691,834	100% of FT (PT Class)
<b>Security Group 10</b>		
BS .....	\$ 50,000,000	100% of YF (PT Class)
YS .....	50,000,000	100% of YF (PT Class)
YT .....	50,000,000	100% of YF (PT Class)
<b>Security Group 13</b>		
S .....	\$ 76,556,778	100% of TF (PT Class)

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

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

## RISK FACTORS

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

***The rate of principal payments on the underlying mortgage loans will affect the rate of principal payments on your securities.***

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

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

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

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

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

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

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

principal payments are slower than you expected.

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

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

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

generally, the earlier a change, the greater the effect on your yield. It is doubtful that such index will remain constant.

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

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

***The rate of payments on the underlying certificates will directly affect the rate of payments on the group 11, 12 and 13 securities.*** The underlying certificates will be sensitive in varying degrees to:

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

As described in the related underlying certificate disclosure documents, the underlying certificates included in trust asset group 12 are not entitled

to distributions of principal until certain classes of the related underlying series have been retired and, accordingly, distributions of principal of the related mortgage loans for extended periods may be applied to the distribution of principal of such classes of certificates having priority over these underlying certificates. Accordingly, these underlying certificates may receive no principal distributions for extended periods of time.

In addition, the principal entitlements of one of the underlying certificates included in trust asset group 12 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 underlying certificates have 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 related underlying certificate disclosure documents.

***Up to 10% of the mortgage loans underlying the group 1, 2, 4, 6, 7, 8, 9, 10, 11, 12 and 13 and subgroup 3A and 3B trust assets and up to 100% of the mortgage loans underlying the group 5 and subgroup 3C trust assets may be higher balance mortgage loans.***

Subject to special pooling parameters set forth in the Ginnie Mae Mortgage-Backed Securities Guide, qualifying federally-insured or guaranteed mortgage loans that exceed certain balance thresholds established by Ginnie Mae (“higher balance mortgage loans”) may be included in Ginnie Mae guaranteed pools. There are no historical performance data regarding the prepayment rates for higher balance mortgage loans. If the higher balance mortgage loans prepay faster or slower than expected, the weighted average

lives and yields of the related securities are likely to be affected, perhaps significantly. Furthermore, higher balance mortgage loans tend to be concentrated in certain geographic areas, which may experience relatively higher rates of defaults in the event of adverse economic conditions. No assurances can be given about the prepayment experience or performance of the higher balance mortgage loans.

***An investment in the floating rate and inverse floating rate securities entails risks not associated with an investment in conventional fixed rate securities or securities linked to established market indices.***

The Federal Reserve Bank of New York began to publish SOFR in April 2018 and compounded averages of SOFR in March 2020. Although the Federal Reserve Bank of New York has also published historical indicative SOFR from August 2014 to March 2018, such pre-publication data necessarily involves assumptions, estimates and approximations. You should not rely on any historical changes or trends in SOFR as an indicator of future changes in SOFR. Daily shifts in SOFR have been, and may in the future be, greater than those in comparable market indices. Because the interest rate applicable to any accrual period for securities with an interest rate based on SOFR will be calculated by reference to the daily rates of SOFR during an approximate 30-day period commencing and ending before the related accrual period as described under “Description of the Securities — Interest Distributions — Floating Rate and Inverse Floating Rate Classes” in this supplement, the return on and value of the floating rate and inverse floating rate securities may fluctuate more than debt securities linked to less volatile indices.

30-day Average SOFR is a relatively new market index, and the floating rate and inverse floating rate securities will likely have no established trading market when issued, and an established trading market may never develop or, if developed, may not be liquid. Market terms for securities indexed to 30-day Average SOFR may evolve over time, and trading prices of some securities indexed to 30-day Average SOFR may be lower than those of later-issued securities as a



result. Similarly, if 30-day Average SOFR does not prove to be widely used in similar securities, the trading price of related SOFR-Based Classes may be lower than those of securities linked to indices that are more widely used. Investors in SOFR-Based Classes may not be able to sell their securities at all or may not be able to sell their securities at prices that will provide them with a yield comparable to similar investments that have a developed secondary market, and may consequently suffer from increased pricing volatility and market risk.

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

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

The Federal Reserve Bank of New York has noted that it may alter the methods of calculation, publication schedule, rate revision practices or availability of 30-day Average SOFR at any

time without notice. There can be no assurance that 30-day Average SOFR will not be discontinued or fundamentally altered in a manner that is materially adverse to the interests of investors in the floating rate and inverse floating rate securities.

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

***The securities may not be a suitable investment for you.*** The securities, especially the group 11, 12 and 13 securities and, in particular, the support, interest only, principal only, inverse floating rate, accrual and residual classes, are not suitable investments for all investors.

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

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



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

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

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

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

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

The yield and decrement tables in this supplement are based on assumed characteristics which are likely to be different from the actual characteristics. As a result, the yields on your securities could be lower than you expected, even if the mortgage loans prepay at the constant prepayment rates set forth in the applicable table.

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

## **THE TRUST ASSETS**

### **General**

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

### **The Trust MBS (Groups 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10)**

The Trust MBS are either:

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

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

### **The Underlying Certificates (Groups 11, 12 and 13)**

The Group 11, 12 and 13 Trust Assets are Underlying Certificates that represent beneficial ownership interests in one or more separate trusts, the assets of which evidence direct or indirect beneficial ownership interests in certain Ginnie Mae Certificates. Each Underlying Certificate constitutes all or a portion of a class of a separate Series of certificates described in the related Underlying Certificate Disclosure Document. Each Underlying Certificate Disclosure Document may be obtained from the Information Agent as described under “Available Information” in this Supplement or on [ginniemae.gov](http://ginniemae.gov). Investors are cautioned that material changes in facts and circumstances may have occurred since the date of each Underlying Certificate Disclosure Document, including changes in prepayment rates, prevailing interest rates and other economic factors, which may limit the usefulness of, and be directly contrary to the assumptions used in preparing the information included in, the offering document. See *“Underlying Certificates” in the Base Offering Circular*.

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

### **The Mortgage Loans**

The Mortgage Loans underlying the Group 1, 3, 5, 6, 7, 8, 9 and 10 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, 3, 5, 6, 7, 8, 9 and 10 Trust Assets” and the general characteristics described in the Base Offering Circular. The Mortgage Loans underlying the Group 2 and 4 Trust Assets are expected to have, on a weighted average basis, the characteristics set forth in Exhibit B to this Supplement under “Characteristics of the Mortgage Loans Underlying the Group 2 and 4 Trust Assets” and the general characteristics described in the Base Offering Circular. The Mortgage Loans will consist of first lien, single-family, fixed rate, residential mortgage loans that are insured or guaranteed by the Federal Housing Administration, the United States Department of Veterans Affairs, Rural Development (formerly the Rural Housing Service) or the United States Department of Housing and Urban Development (“HUD”). See *“The Ginnie Mae Certificates — General” in the Base Offering Circular*.

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

### **The Trustee Fee**

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

### **GINNIE MAE GUARANTY**

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

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

## **DESCRIPTION OF THE SECURITIES**

### **General**

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

### **Form of Securities**

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

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

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

### **Distributions**

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

### **Interest Distributions**

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

- Interest will be calculated on the basis of a 360-day year consisting of twelve 30-day months.

- Interest distributable (or accrued in the case of an Accrual Class) on any Class for any Distribution Date will consist of 30 days' interest on its Class Principal Balance (or Class Notional Balance) as of the related Record Date.
- Investors can calculate the amount of interest to be distributed (or accrued in the case of an Accrual Class) on each Class of Securities for any Distribution Date by using the Class Factors published in the preceding month. *See “— Class Factors” below.*

### *Categories of Classes*

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

### *Accrual Periods*

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

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

### *Trading*

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

### *Fixed Rate Classes*

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

### *Floating Rate and Inverse Floating Rate Classes*

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

The Interest Rate for the Floating Rate and Inverse Floating Rate Classes will be based on 30-day Average SOFR. The Trustee or its agent will determine 30-day Average SOFR as described under “Description of the Securities — Interest Rate Indices — Determination of 30-day Average SOFR” in the Base Offering Circular.

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

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

### *Accrual Classes*

Each of Classes AZ, BZ, EZ, GZ, HZ, LZ, NZ, PZ, VZ, Z, ZC and ZG is an Accrual Class. Interest will accrue on the Accrual Classes and be distributed as described under “Terms Sheet — Accrual Classes” in this Supplement.

### **Principal Distributions**

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

### *Categories of Classes*

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

### *Notional Classes*

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

### **Residual Securities**

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

### **Class Factors**

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

- The Class Factor for any Class of Securities for each month following the issuance of the Securities will reflect its remaining Class Principal Balance (or Class Notional Balance) after giving effect to any principal distribution (or addition to principal) to be made or any reduction of Class Notional Balance on the Distribution Date occurring in that month.
- The Class Factor for each Class for the month of issuance is 1.00000000.

- The Class Factors for the MX Classes and the Classes of REMIC Securities that are exchangeable for the MX Classes will be calculated assuming that the maximum possible amount of each Class is outstanding at all times, regardless of any exchanges that may occur.
- Based on the Class Factors published in the preceding and current months (and Interest Rates), investors in any Class (other than an Accrual Class) can calculate the amount of principal and interest to be distributed to that Class and investors in an Accrual Class can calculate the total amount of principal to be distributed to (or interest to be added to the Class Principal Balance of) that Class on the Distribution Date in the current month.
- Investors may obtain current Class Factors on [ginniemae.gov](http://ginniemae.gov).

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

## **Termination**

The Trustee, at its option, may purchase or cause the sale of the Trust Assets and thereby terminate the Trust on any Distribution Date on which the aggregate of the Class Principal Balances of the Securities is less than 1% of the aggregate Original Class Principal Balances of the Securities. The exercise of this option will be influenced by a number of factors, including but not limited to, the value of the Trust Assets then remaining in the Trust and general market conditions. The Trustee will be entitled to retain sale proceeds in excess of the termination price payable to the Securities under the Trust Agreement. On any Distribution Date upon the Trustee’s determination that the REMIC status of any Trust REMIC has been lost or that a substantial risk exists that this status will be lost for the then current taxable year, the Trustee will terminate the Trust and retire the Securities.

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

## **Modification and Exchange**

All or a portion of the Classes of REMIC Securities specified on the front cover may be exchanged for a proportionate interest in the related MX Class or Classes shown on Schedule I to this Supplement. Similarly, all or a portion of the related MX Class or Classes may be exchanged for proportionate interests in the related Class or Classes of REMIC Securities and, in the case of Combinations 9 and 10, 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 9 and 10, the related REMIC Securities may be exchanged for proportionate interests in various subcombinations of MX Classes. Similarly, all or a portion of these MX Classes may be exchanged for proportionate interests in the related REMIC Securities or in other subcombinations of the related MX Classes. Each subcombination may be effected only in proportions that result in the principal and interest entitlements of the Securities received being equal to the entitlements of the Securities surrendered. *See the example under “Description of the Securities — Modification and Exchange” in the Base Offering Circular.*



A Beneficial Owner proposing to effect an exchange must notify the Trustee through the Beneficial Owner's Book-Entry Depository participant. This notice must be received by the Trustee not later than two Business Days before the proposed exchange date. The exchange date can be any Business Day other than the last Business Day of the month. The notice must contain the outstanding principal and notional balances of the Securities to be included in the exchange and the proposed exchange date. The notice is required to be delivered to the Trustee by email to USBGNMATEam@USBank.com or in writing at its Corporate Trust Office at U.S. Bank National Association, One Federal Street, 3rd Floor, Boston, MA 02110, Attention: Ginnie Mae REMIC Program Agency Group 2023-115. The Trustee may be contacted by telephone at (617) 603-6451 and by fax at (617) 603-6644.

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

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

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

## **YIELD, MATURITY AND PREPAYMENT CONSIDERATIONS**

### **General**

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

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

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

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

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



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

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

Investors in the Group 11, 12 and 13 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 11, 12 and 13 securities”* in this Supplement.

### **Accretion Directed Classes**

Classes BV, EV, G, GA, HN, HV, LV, PV, VA, VC, VE, VG and VL are Accretion Directed Classes. The related Accrual Amount will be applied to making principal distributions on those Classes as described in this Supplement.

Each of the Accretion Directed Classes has the AD designation in the suffix position, rather than the prefix position, in its class principal type because it does not have principal payment stability through the applicable pricing prepayment assumption. Classes BV, EV, HV, LV, PV, VA, VC, VE, VG and VL will have principal payment stability only through the prepayment rate shown in the table below and within their Effective Range, if applicable. The remaining Accretion Directed Classes are not listed in the table below because, although they are entitled to receive payments from the related Accrual Amount, they do not have principal payment stability through any constant prepayment rate significantly higher than 0% PSA.

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

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

## Accretion Directed Classes

Security Group	Class	Maximum Weighted Average Life (in years) <sup>(1)</sup>	Final Distribution Date	Prepayment Rate at or below
2	EV .....	6.0	July 2034	146% PSA
3	HV .....	6.0	July 2034	200% PSA
3	LV .....	6.0	July 2034	140% PSA
3	PV .....	6.0	July 2034	137% PSA
4	VE .....	5.8	March 2034	116% PSA
5	VG .....	7.0	March 2036	61% PSA
6	VA .....	5.5	August 2033	183% PSA
6	VL .....	10.4	June 2034	165% PSA
10	BV .....	6.0	June 2034	192% PSA
12	VC .....	6.0	May 2053	170% PSA

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

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

## Securities that Receive Principal on the Basis of Schedules

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

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

Security Group		Initial Effective Ranges
<b>PAC I Classes</b>		
3	P, PV and PZ (in the aggregate) .....	175% PSA through 300% PSA
<b>PAC II Class</b>		
3	MD .....	200% PSA through 300% PSA

- The principal payment stability of the PAC I Classes will be supported by the PAC II and Support Classes.
- The principal payment stability of the PAC II Class will be supported by the 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, 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 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 Mortgage 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, 3, 5, 6, 7, 8, 9 and 10 Trust Assets have the assumed characteristics shown under “Assumed Characteristics of the Mortgage Loans Underlying the Group 1, 3, 5, 6, 7, 8, 9 and 10 Trust Assets” in the Terms Sheet and the Mortgage Loans underlying the Group 2 and 4 Trust Assets have the characteristics shown under “Characteristics of the Mortgage Loans

Underlying the Group 2 and 4 Trust Assets” in Exhibit B, except in the case of information set forth under the 0% PSA Prepayment Assumption Rate, for which each Mortgage Loan underlying a Group 1, 3, 5, 6, 7, 8, 9 or 10 Trust Asset is assumed to have an original and a remaining term to maturity of 360 months and a Mortgage Rate of 1.50% per annum higher than the related Certificate Rate.

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

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

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

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

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

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

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

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

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

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

## **Decrement Tables**

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

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

The decrement tables set forth below illustrate the percentage of the Original Class Principal Balance (or, in the case of a Notional Class, the original Class Notional Balance) that would remain

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

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

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

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

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

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

Distribution Date	Security Group 1 PSA Prepayment Assumption Rates				
	Classes DF and DS				
	0%	100%	353%	600%	800%
Initial Percent . . . . .	100	100	100	100	100
August 2024 . . . . .	99	97	93	89	85
August 2025 . . . . .	98	92	79	66	57
August 2026 . . . . .	97	86	62	42	29
August 2027 . . . . .	96	80	48	27	15
August 2028 . . . . .	95	74	37	17	8
August 2029 . . . . .	94	68	29	11	4
August 2030 . . . . .	92	63	22	7	2
August 2031 . . . . .	91	58	17	4	1
August 2032 . . . . .	89	54	13	3	1
August 2033 . . . . .	88	49	10	2	0
August 2034 . . . . .	86	45	8	1	0
August 2035 . . . . .	84	41	6	1	0
August 2036 . . . . .	82	38	5	0	0
August 2037 . . . . .	79	34	4	0	0
August 2038 . . . . .	77	31	3	0	0
August 2039 . . . . .	74	28	2	0	0
August 2040 . . . . .	71	25	2	0	0
August 2041 . . . . .	68	23	1	0	0
August 2042 . . . . .	64	20	1	0	0
August 2043 . . . . .	60	18	1	0	0
August 2044 . . . . .	56	15	0	0	0
August 2045 . . . . .	52	13	0	0	0
August 2046 . . . . .	47	11	0	0	0
August 2047 . . . . .	42	9	0	0	0
August 2048 . . . . .	36	7	0	0	0
August 2049 . . . . .	30	6	0	0	0
August 2050 . . . . .	23	4	0	0	0
August 2051 . . . . .	16	3	0	0	0
August 2052 . . . . .	8	1	0	0	0
August 2053 . . . . .	0	0	0	0	0
Weighted Average Life (years) . . . . .	20.5	11.5	4.9	3.2	2.5

**Security Group 2  
PSA Prepayment Assumption Rates**

Distribution Date	Class E					Class EV					Class EZ				
	0%	100%	226%	350%	500%	0%	100%	226%	350%	500%	0%	100%	226%	350%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2024	99	95	89	84	77	93	93	93	93	93	106	106	106	106	106
August 2025	98	86	72	58	43	86	86	86	86	86	112	112	112	112	112
August 2026	97	76	54	34	13	78	78	78	78	78	118	118	118	118	118
August 2027	95	68	38	15	0	70	70	70	70	39	125	125	125	125	125
August 2028	94	59	25	0	0	61	61	61	59	0	132	132	132	132	108
August 2029	93	51	13	0	0	52	52	52	2	0	139	139	139	139	75
August 2030	91	44	4	0	0	43	43	43	0	0	147	147	147	110	52
August 2031	90	37	0	0	0	33	33	13	0	0	155	155	155	86	36
August 2032	88	31	0	0	0	22	22	0	0	0	164	164	141	67	25
August 2033	86	24	0	0	0	11	11	0	0	0	173	173	121	52	17
August 2034	84	19	0	0	0	0	0	0	0	0	182	182	103	41	12
August 2035	82	13	0	0	0	0	0	0	0	0	182	182	88	32	8
August 2036	80	8	0	0	0	0	0	0	0	0	182	182	75	25	6
August 2037	78	3	0	0	0	0	0	0	0	0	182	182	63	19	4
August 2038	76	0	0	0	0	0	0	0	0	0	182	178	54	15	3
August 2039	73	0	0	0	0	0	0	0	0	0	182	164	46	12	2
August 2040	70	0	0	0	0	0	0	0	0	0	182	151	39	9	1
August 2041	68	0	0	0	0	0	0	0	0	0	182	139	33	7	1
August 2042	64	0	0	0	0	0	0	0	0	0	182	127	27	5	1
August 2043	61	0	0	0	0	0	0	0	0	0	182	116	23	4	0
August 2044	58	0	0	0	0	0	0	0	0	0	182	106	19	3	0
August 2045	54	0	0	0	0	0	0	0	0	0	182	97	16	2	0
August 2046	50	0	0	0	0	0	0	0	0	0	182	88	14	2	0
August 2047	46	0	0	0	0	0	0	0	0	0	182	79	11	1	0
August 2048	42	0	0	0	0	0	0	0	0	0	182	71	9	1	0
August 2049	37	0	0	0	0	0	0	0	0	0	182	64	8	1	0
August 2050	33	0	0	0	0	0	0	0	0	0	182	57	6	1	0
August 2051	27	0	0	0	0	0	0	0	0	0	182	50	5	0	0
August 2052	22	0	0	0	0	0	0	0	0	0	182	44	4	0	0
August 2053	16	0	0	0	0	0	0	0	0	0	182	38	3	0	0
August 2054	10	0	0	0	0	0	0	0	0	0	182	33	3	0	0
August 2055	3	0	0	0	0	0	0	0	0	0	182	28	2	0	0
August 2056	0	0	0	0	0	0	0	0	0	0	170	23	2	0	0
August 2057	0	0	0	0	0	0	0	0	0	0	146	19	1	0	0
August 2058	0	0	0	0	0	0	0	0	0	0	120	14	1	0	0
August 2059	0	0	0	0	0	0	0	0	0	0	93	10	1	0	0
August 2060	0	0	0	0	0	0	0	0	0	0	64	7	0	0	0
August 2061	0	0	0	0	0	0	0	0	0	0	34	3	0	0	0
August 2062	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0
August 2063	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average															
Life (years)	21.2	6.7	3.4	2.4	1.8	6.0	6.0	5.5	4.4	3.5	36.0	23.9	14.4	10.1	7.3



**Security Group 3  
PSA Prepayment Assumption Rates**

Distribution Date	Classes FA and SA					Classes FB, FH, FJ, SB, SH, SJ and SM					Classes FD and SD					Class G				
	0%	175%	230%	300%	500%	0%	175%	230%	300%	500%	0%	175%	230%	300%	500%	0%	175%	230%	300%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2024	99	97	96	95	92	99	96	95	93	90	99	96	95	93	90	98	94	93	91	87
August 2025	98	89	87	84	74	98	88	84	80	69	98	88	84	80	69	96	84	80	76	63
August 2026	97	79	74	68	52	97	77	72	65	48	97	77	72	65	48	94	71	65	57	38
August 2027	96	70	63	55	36	96	68	61	53	33	96	68	61	53	33	92	60	52	42	19
August 2028	95	62	54	45	25	95	60	52	43	23	95	60	52	43	23	90	50	40	29	6
August 2029	94	55	46	36	17	94	53	44	34	16	94	53	44	34	16	87	40	30	19	0
August 2030	92	48	39	29	12	92	47	37	28	11	92	47	37	28	11	85	32	21	10	0
August 2031	91	42	33	23	8	91	41	32	22	7	91	41	32	22	7	82	24	13	2	0
August 2032	89	37	28	19	6	89	36	27	18	5	89	36	27	18	5	79	17	6	0	0
August 2033	88	32	23	15	4	88	32	23	14	4	88	32	23	14	4	76	11	0	0	0
August 2034	86	28	20	12	3	86	28	19	12	2	86	28	19	12	2	72	5	0	0	0
August 2035	84	25	16	10	2	84	24	16	9	2	84	24	16	9	2	68	0	0	0	0
August 2036	82	21	14	8	1	82	21	13	7	1	82	21	13	7	1	64	0	0	0	0
August 2037	79	19	12	6	1	79	18	11	6	1	79	18	11	6	1	60	0	0	0	0
August 2038	77	16	10	5	1	77	16	9	5	1	77	16	9	5	1	56	0	0	0	0
August 2039	74	14	8	4	0	74	13	8	4	0	74	13	8	4	0	51	0	0	0	0
August 2040	71	12	7	3	0	71	11	6	3	0	71	11	6	3	0	45	0	0	0	0
August 2041	68	10	5	2	0	68	10	5	2	0	68	10	5	2	0	40	0	0	0	0
August 2042	64	8	4	2	0	64	8	4	2	0	64	8	4	2	0	34	0	0	0	0
August 2043	60	7	4	1	0	60	7	3	1	0	60	7	3	1	0	27	0	0	0	0
August 2044	56	6	3	1	0	56	6	3	1	0	56	6	3	1	0	20	0	0	0	0
August 2045	52	5	2	1	0	52	5	2	1	0	52	5	2	1	0	13	0	0	0	0
August 2046	47	4	2	1	0	47	4	2	1	0	47	4	2	1	0	5	0	0	0	0
August 2047	42	3	1	0	0	42	3	1	0	0	42	3	1	0	0	0	0	0	0	0
August 2048	36	2	1	0	0	36	2	1	0	0	36	2	1	0	0	0	0	0	0	0
August 2049	30	2	1	0	0	30	2	1	0	0	30	2	1	0	0	0	0	0	0	0
August 2050	23	1	0	0	0	23	1	0	0	0	23	1	0	0	0	0	0	0	0	0
August 2051	16	1	0	0	0	16	1	0	0	0	16	1	0	0	0	0	0	0	0	0
August 2052	8	0	0	0	0	8	0	0	0	0	8	0	0	0	0	0	0	0	0	0
August 2053	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	20.5	8.5	7.0	5.8	3.9	20.5	8.3	6.8	5.6	3.6	20.5	8.3	6.8	5.6	3.6	14.9	5.4	4.5	3.8	2.6

**PSA Prepayment Assumption Rates**

Distribution Date	Class GZ					Class H					Class HN					Class HV				
	0%	175%	230%	300%	500%	0%	175%	230%	300%	500%	0%	175%	230%	300%	500%	0%	175%	230%	300%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2024	105	105	105	105	105	99	94	93	91	86	98	94	93	91	87	93	93	93	93	93
August 2025	110	110	110	110	110	98	84	79	74	60	96	84	80	76	63	86	86	86	86	86
August 2026	116	116	116	116	116	96	70	63	54	32	94	71	65	57	38	78	78	78	78	78
August 2027	122	122	122	122	122	95	59	49	38	12	92	60	52	42	20	70	70	70	70	70
August 2028	128	128	128	128	128	94	48	37	25	0	89	50	40	29	7	61	61	61	61	53
August 2029	135	135	135	135	117	92	39	27	14	0	87	40	30	19	0	52	52	52	52	0
August 2030	142	142	142	142	80	90	30	18	5	0	84	31	21	10	0	43	43	43	43	0
August 2031	149	149	149	149	55	88	23	10	0	0	81	24	13	2	0	33	33	33	18	0
August 2032	157	157	157	132	38	86	16	4	0	0	78	16	6	0	0	22	22	22	0	0
August 2033	165	165	165	106	26	84	10	0	0	0	74	10	0	0	0	11	11	0	0	0
August 2034	173	173	140	85	18	81	5	0	0	0	70	3	0	0	0	0	0	0	0	0
August 2035	182	177	117	68	12	79	0	0	0	0	66	0	0	0	0	0	0	0	0	0
August 2036	191	154	98	54	8	76	0	0	0	0	62	0	0	0	0	0	0	0	0	0
August 2037	201	133	82	43	6	73	0	0	0	0	57	0	0	0	0	0	0	0	0	0
August 2038	211	115	68	34	4	69	0	0	0	0	52	0	0	0	0	0	0	0	0	0
August 2039	222	99	56	27	3	66	0	0	0	0	47	0	0	0	0	0	0	0	0	0
August 2040	234	84	46	21	2	62	0	0	0	0	41	0	0	0	0	0	0	0	0	0
August 2041	246	72	38	16	1	58	0	0	0	0	35	0	0	0	0	0	0	0	0	0
August 2042	258	61	31	13	1	53	0	0	0	0	28	0	0	0	0	0	0	0	0	0
August 2043	271	51	25	10	0	48	0	0	0	0	21	0	0	0	0	0	0	0	0	0
August 2044	285	42	20	7	0	43	0	0	0	0	13	0	0	0	0	0	0	0	0	0
August 2045	300	34	16	6	0	37	0	0	0	0	5	0	0	0	0	0	0	0	0	0
August 2046	315	28	12	4	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
August 2047	308	22	9	3	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
August 2048	266	17	7	2	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0
August 2049	221	12	5	1	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0
August 2050	172	8	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
August 2051	119	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
August 2052	62	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
August 2053	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	27.1	17.7	15.2	12.7	8.3	18.0	5.3	4.3	3.5	2.4	14.2	5.3	4.5	3.8	2.6	6.0	6.0	5.9	5.5	4.3

Security Group 3 PSA Prepayment Assumption Rates																				
Distribution Date	Class HZ					Class J					Class LV					Class LZ				
	0%	175%	230%	300%	500%	0%	175%	230%	300%	500%	0%	175%	230%	300%	500%	0%	175%	230%	300%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2024	106	106	106	106	106	99	93	92	90	84	93	93	93	93	93	106	106	106	106	106
August 2025	112	112	112	112	112	97	81	76	70	53	86	86	86	86	86	112	112	112	112	112
August 2026	118	118	118	118	118	96	65	57	46	20	78	78	78	78	78	118	118	118	118	118
August 2027	125	125	125	125	125	94	51	40	27	0	70	70	70	70	57	125	125	125	125	125
August 2028	132	132	132	132	132	92	39	26	11	0	61	61	61	61	0	132	132	132	132	118
August 2029	139	139	139	139	120	90	28	14	0	0	52	52	52	47	0	139	139	139	139	81
August 2030	147	147	147	147	83	88	18	3	0	0	43	43	43	0	0	147	147	147	143	56
August 2031	155	155	155	155	57	86	9	0	0	0	33	33	10	0	0	155	155	155	115	39
August 2032	164	164	164	137	39	84	1	0	0	0	22	22	0	0	0	164	164	138	92	26
August 2033	173	173	171	110	27	81	0	0	0	0	11	0	0	0	0	173	163	116	74	18
August 2034	182	182	144	88	18	78	0	0	0	0	0	0	0	0	0	182	142	98	59	12
August 2035	182	182	121	70	12	75	0	0	0	0	0	0	0	0	0	182	124	82	47	8
August 2036	182	159	101	56	8	72	0	0	0	0	0	0	0	0	0	182	107	69	38	6
August 2037	182	138	84	44	6	68	0	0	0	0	0	0	0	0	0	182	93	57	30	4
August 2038	182	119	70	35	4	64	0	0	0	0	0	0	0	0	0	182	80	48	24	3
August 2039	182	102	58	28	3	60	0	0	0	0	0	0	0	0	0	182	69	39	19	2
August 2040	182	87	48	22	2	55	0	0	0	0	0	0	0	0	0	182	59	32	15	1
August 2041	182	74	39	17	1	50	0	0	0	0	0	0	0	0	0	182	50	27	11	1
August 2042	182	63	32	13	1	45	0	0	0	0	0	0	0	0	0	182	42	22	9	1
August 2043	182	52	26	10	1	39	0	0	0	0	0	0	0	0	0	182	35	17	7	0
August 2044	182	43	21	8	0	33	0	0	0	0	0	0	0	0	0	182	29	14	5	0
August 2045	182	36	16	6	0	26	0	0	0	0	0	0	0	0	0	182	24	11	4	0
August 2046	182	29	13	4	0	18	0	0	0	0	0	0	0	0	0	182	19	8	3	0
August 2047	182	23	10	3	0	10	0	0	0	0	0	0	0	0	0	182	15	6	2	0
August 2048	182	17	7	2	0	1	0	0	0	0	0	0	0	0	0	182	12	5	1	0
August 2049	182	13	5	1	0	0	0	0	0	0	0	0	0	0	0	155	9	3	1	0
August 2050	178	9	3	1	0	0	0	0	0	0	0	0	0	0	0	120	6	2	1	0
August 2051	123	5	2	0	0	0	0	0	0	0	0	0	0	0	0	83	3	1	0	0
August 2052	64	2	1	0	0	0	0	0	0	0	0	0	0	0	0	43	1	0	0	0
August 2053	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	28.5	17.8	15.1	12.7	8.3	16.5	4.4	3.6	3.0	2.1	6.0	5.9	5.4	4.9	3.6	27.7	15.9	13.6	11.3	7.4

PSA Prepayment Assumption Rates																				
Distribution Date	Classes MA, MG and MJ					Class MD					Class ML					Class MV				
	0%	175%	230%	300%	500%	0%	175%	230%	300%	500%	0%	175%	230%	300%	500%	0%	175%	230%	300%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2024	100	100	97	89	67	100	100	91	91	91	100	100	100	100	100	93	93	93	93	93
August 2025	100	100	89	64	0	100	100	70	70	56	100	100	100	100	100	86	86	86	86	86
August 2026	100	100	80	36	0	100	100	45	45	0	100	100	100	100	100	78	78	78	78	78
August 2027	100	100	74	18	0	100	100	26	26	0	100	100	100	100	100	70	70	70	70	69
August 2028	100	100	70	7	0	100	100	12	12	0	100	100	100	100	97	61	61	61	61	56
August 2029	100	100	68	1	0	100	100	4	4	0	100	100	100	100	87	52	52	52	52	31
August 2030	100	100	66	0	0	100	100	0	0	0	100	100	100	99	60	43	43	43	40	0
August 2031	100	100	64	0	0	100	95	0	0	0	100	100	99	97	41	33	33	31	28	0
August 2032	100	100	60	0	0	100	81	0	0	0	100	100	99	93	28	22	22	21	17	0
August 2033	100	100	56	0	0	100	60	0	0	0	100	87	85	78	19	11	2	0	0	0
August 2034	100	100	51	0	0	100	35	0	0	0	100	74	69	62	13	0	0	0	0	0
August 2035	100	100	46	0	0	100	8	0	0	0	100	63	56	50	9	0	0	0	0	0
August 2036	100	94	42	0	0	100	0	0	0	0	100	51	45	40	6	0	0	0	0	0
August 2037	100	85	37	0	0	100	0	0	0	0	100	42	36	31	4	0	0	0	0	0
August 2038	100	76	32	0	0	100	0	0	0	0	100	34	29	25	3	0	0	0	0	0
August 2039	100	68	28	0	0	100	0	0	0	0	100	28	23	20	2	0	0	0	0	0
August 2040	100	60	24	0	0	100	0	0	0	0	100	23	18	15	1	0	0	0	0	0
August 2041	100	52	20	0	0	100	0	0	0	0	100	19	15	12	1	0	0	0	0	0
August 2042	100	45	17	0	0	100	0	0	0	0	100	15	11	9	1	0	0	0	0	0
August 2043	100	39	14	0	0	100	0	0	0	0	100	12	9	7	0	0	0	0	0	0
August 2044	100	33	12	0	0	100	0	0	0	0	100	10	7	5	0	0	0	0	0	0
August 2045	100	27	10	0	0	100	0	0	0	0	100	7	5	4	0	0	0	0	0	0
August 2046	100	22	8	0	0	100	0	0	0	0	100	6	4	3	0	0	0	0	0	0
August 2047	100	18	6	0	0	100	0	0	0	0	100	4	3	2	0	0	0	0	0	0
August 2048	100	14	5	0	0	100	0	0	0	0	99	3	2	2	0	0	0	0	0	0
August 2049	100	10	3	0	0	100	0	0	0	0	71	2	1	1	0	0	0	0	0	0
August 2050	100	7	2	0	0	100	0	0	0	0	40	2	1	1	0	0	0	0	0	0
August 2051	100	4	1	0	0	36	0	0	0	0	14	1	1	0	0	0	0	0	0	0
August 2052	58	2	1	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0
August 2053	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	29.1	19.1	11.4	2.7	1.2	27.9	10.3	3.0	3.0	1.8	26.8	14.3	13.7	13.1	8.2	6.0	5.9	5.9	5.7	4.6

Security Group 3 PSA Prepayment Assumption Rates															
Distribution Date	Class MZ					Class NZ					Class P				
	0%	175%	230%	300%	500%	0%	175%	230%	300%	500%	0%	175%	230%	300%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2024	106	106	106	106	106	106	106	106	106	106	99	94	94	94	94
August 2025	112	112	112	112	112	113	113	113	113	113	97	82	82	82	82
August 2026	118	118	118	118	118	120	120	120	120	120	96	66	66	66	52
August 2027	125	125	125	125	125	127	127	127	127	127	94	52	52	52	27
August 2028	132	132	132	132	131	135	135	135	135	135	92	39	39	39	10
August 2029	139	139	139	139	132	143	143	143	143	125	90	27	27	27	0
August 2030	147	147	147	147	109	152	152	152	152	86	88	17	17	17	0
August 2031	155	155	155	153	75	161	161	161	161	59	86	9	9	9	0
August 2032	164	164	162	155	51	171	171	171	141	40	83	1	1	1	0
August 2033	173	157	154	141	35	182	182	177	113	28	81	0	0	0	0
August 2034	182	134	125	113	24	193	193	149	91	19	78	0	0	0	0
August 2035	182	114	101	90	16	205	189	125	72	13	75	0	0	0	0
August 2036	182	93	81	72	11	218	164	105	58	9	71	0	0	0	0
August 2037	182	76	65	57	8	231	142	87	46	6	67	0	0	0	0
August 2038	182	63	52	45	5	245	123	73	36	4	63	0	0	0	0
August 2039	182	51	42	36	3	261	106	60	28	3	59	0	0	0	0
August 2040	182	42	33	28	2	277	90	50	22	2	54	0	0	0	0
August 2041	182	34	26	22	2	294	77	41	17	1	49	0	0	0	0
August 2042	182	27	21	17	1	312	65	33	13	1	44	0	0	0	0
August 2043	182	22	16	13	1	331	54	27	10	1	38	0	0	0	0
August 2044	182	17	13	10	0	351	45	21	8	0	31	0	0	0	0
August 2045	182	14	10	7	0	373	37	17	6	0	24	0	0	0	0
August 2046	182	11	7	5	0	370	30	13	4	0	17	0	0	0	0
August 2047	182	8	5	4	0	329	23	10	3	0	8	0	0	0	0
August 2048	180	6	4	3	0	285	18	7	2	0	0	0	0	0	0
August 2049	129	4	3	2	0	236	13	5	1	0	0	0	0	0	0
August 2050	73	3	2	1	0	184	9	3	1	0	0	0	0	0	0
August 2051	26	2	1	1	0	128	5	2	0	0	0	0	0	0	0
August 2052	14	1	0	0	0	66	2	1	0	0	0	0	0	0	0
August 2053	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	26.8	14.7	14.1	13.8	9.1	26.7	17.5	15.1	12.6	8.3	16.4	4.4	4.4	4.4	3.2

PSA Prepayment Assumption Rates										
Distribution Date	Class PV					Class PZ				
	0%	175%	230%	300%	500%	0%	175%	230%	300%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100
August 2024	93	93	93	93	93	106	106	106	106	106
August 2025	86	86	86	86	86	112	112	112	112	112
August 2026	78	78	78	78	78	118	118	118	118	118
August 2027	70	70	70	70	70	125	125	125	125	125
August 2028	61	61	61	61	61	132	132	132	132	132
August 2029	52	52	52	52	40	139	139	139	139	139
August 2030	43	43	43	43	0	147	147	147	147	118
August 2031	33	33	33	33	0	155	155	155	155	81
August 2032	22	22	22	22	0	164	164	164	164	56
August 2033	11	0	0	0	0	173	154	154	154	38
August 2034	0	0	0	0	0	182	123	123	123	26
August 2035	0	0	0	0	0	182	98	98	98	18
August 2036	0	0	0	0	0	182	78	78	78	12
August 2037	0	0	0	0	0	182	62	62	62	8
August 2038	0	0	0	0	0	182	49	49	49	6
August 2039	0	0	0	0	0	182	39	39	39	4
August 2040	0	0	0	0	0	182	30	30	30	2
August 2041	0	0	0	0	0	182	24	24	24	2
August 2042	0	0	0	0	0	182	18	18	18	1
August 2043	0	0	0	0	0	182	14	14	14	1
August 2044	0	0	0	0	0	182	11	11	11	0
August 2045	0	0	0	0	0	182	8	8	8	0
August 2046	0	0	0	0	0	182	6	6	6	0
August 2047	0	0	0	0	0	182	4	4	4	0
August 2048	0	0	0	0	0	179	3	3	3	0
August 2049	0	0	0	0	0	115	2	2	2	0
August 2050	0	0	0	0	0	46	1	1	1	0
August 2051	0	0	0	0	0	1	1	1	1	0
August 2052	0	0	0	0	0	0	0	0	0	0
August 2053	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	6.0	5.9	5.9	5.9	4.7	26.4	13.8	13.8	13.8	9.2

**Security Group 4  
PSA Prepayment Assumption Rates**

Distribution Date	Class EA					Class VE					Class VZ				
	0%	100%	212%	350%	500%	0%	100%	212%	350%	500%	0%	100%	212%	350%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2024	99	94	88	82	74	93	93	93	93	93	105	105	105	105	105
August 2025	97	84	69	53	35	85	85	85	85	85	110	110	110	110	110
August 2026	96	73	49	24	0	77	77	77	77	77	116	116	116	116	116
August 2027	94	62	32	2	0	68	68	68	68	0	122	122	122	122	118
August 2028	92	53	17	0	0	59	59	59	10	0	128	128	128	128	82
August 2029	91	43	4	0	0	50	50	50	0	0	135	135	135	106	57
August 2030	89	35	0	0	0	40	40	16	0	0	142	142	142	83	39
August 2031	87	27	0	0	0	29	29	0	0	0	149	149	132	64	27
August 2032	85	19	0	0	0	18	18	0	0	0	157	157	114	50	19
August 2033	82	12	0	0	0	7	7	0	0	0	165	165	98	39	13
August 2034	80	5	0	0	0	0	0	0	0	0	169	169	84	30	9
August 2035	78	0	0	0	0	0	0	0	0	0	169	167	72	24	6
August 2036	75	0	0	0	0	0	0	0	0	0	169	154	62	18	4
August 2037	72	0	0	0	0	0	0	0	0	0	169	142	53	14	3
August 2038	69	0	0	0	0	0	0	0	0	0	169	131	46	11	2
August 2039	66	0	0	0	0	0	0	0	0	0	169	121	39	9	1
August 2040	63	0	0	0	0	0	0	0	0	0	169	111	33	7	1
August 2041	59	0	0	0	0	0	0	0	0	0	169	102	28	5	1
August 2042	56	0	0	0	0	0	0	0	0	0	169	93	24	4	0
August 2043	52	0	0	0	0	0	0	0	0	0	169	85	20	3	0
August 2044	48	0	0	0	0	0	0	0	0	0	169	77	17	2	0
August 2045	44	0	0	0	0	0	0	0	0	0	169	70	15	2	0
August 2046	39	0	0	0	0	0	0	0	0	0	169	64	12	1	0
August 2047	34	0	0	0	0	0	0	0	0	0	169	57	10	1	0
August 2048	29	0	0	0	0	0	0	0	0	0	169	52	9	1	0
August 2049	24	0	0	0	0	0	0	0	0	0	169	46	7	1	0
August 2050	18	0	0	0	0	0	0	0	0	0	169	41	6	0	0
August 2051	12	0	0	0	0	0	0	0	0	0	169	36	5	0	0
August 2052	6	0	0	0	0	0	0	0	0	0	169	32	4	0	0
August 2053	0	0	0	0	0	0	0	0	0	0	167	27	3	0	0
August 2054	0	0	0	0	0	0	0	0	0	0	152	23	2	0	0
August 2055	0	0	0	0	0	0	0	0	0	0	136	20	2	0	0
August 2056	0	0	0	0	0	0	0	0	0	0	120	16	1	0	0
August 2057	0	0	0	0	0	0	0	0	0	0	102	13	1	0	0
August 2058	0	0	0	0	0	0	0	0	0	0	83	10	1	0	0
August 2059	0	0	0	0	0	0	0	0	0	0	63	7	1	0	0
August 2060	0	0	0	0	0	0	0	0	0	0	42	5	0	0	0
August 2061	0	0	0	0	0	0	0	0	0	0	22	2	0	0	0
August 2062	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0
August 2063	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average															
Life (years)	18.9	5.6	3.1	2.1	1.6	5.8	5.8	5.0	3.8	3.0	34.8	21.6	13.8	9.2	6.6

**Security Group 5**  
**PSA Prepayment Assumption Rates**

Distribution Date	Classes FG, HF, HS, HT, SG, UF, US and UT					Class GE					Class VG					Class ZG				
	0%	100%	232%	350%	500%	0%	100%	232%	350%	500%	0%	100%	232%	350%	500%	0%	100%	232%	350%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2024	99	97	95	94	91	98	95	91	87	82	94	94	94	94	94	106	106	106	106	106
August 2025	98	93	86	80	73	96	84	70	58	43	88	88	88	88	88	112	112	112	112	112
August 2026	97	86	73	63	51	94	71	44	23	0	82	82	82	82	78	118	118	118	118	118
August 2027	96	80	62	49	35	91	58	21	0	0	75	75	75	64	10	125	125	125	125	125
August 2028	95	74	53	38	24	89	46	2	0	0	68	68	68	15	0	132	132	132	132	93
August 2029	93	68	45	30	17	86	34	0	0	0	61	61	33	0	0	139	139	139	114	64
August 2030	92	63	38	23	11	83	23	0	0	0	53	53	0	0	0	147	147	145	88	44
August 2031	90	58	32	18	8	80	13	0	0	0	44	44	0	0	0	155	155	122	68	30
August 2032	89	53	27	14	5	76	3	0	0	0	35	35	0	0	0	164	164	103	53	21
August 2033	87	49	23	11	4	73	0	0	0	0	26	16	0	0	0	173	173	87	41	14
August 2034	85	45	19	8	3	69	0	0	0	0	16	0	0	0	0	183	173	73	31	10
August 2035	83	41	16	6	2	64	0	0	0	0	6	0	0	0	0	193	158	61	24	7
August 2036	80	38	13	5	1	59	0	0	0	0	0	0	0	0	0	199	144	51	18	4
August 2037	78	34	11	4	1	54	0	0	0	0	0	0	0	0	0	199	131	42	14	3
August 2038	75	31	9	3	1	49	0	0	0	0	0	0	0	0	0	199	119	35	11	2
August 2039	73	28	8	2	0	43	0	0	0	0	0	0	0	0	0	199	107	29	8	1
August 2040	70	25	6	2	0	37	0	0	0	0	0	0	0	0	0	199	96	24	6	1
August 2041	66	22	5	1	0	30	0	0	0	0	0	0	0	0	0	199	86	19	5	1
August 2042	63	20	4	1	0	23	0	0	0	0	0	0	0	0	0	199	76	16	3	0
August 2043	59	17	3	1	0	15	0	0	0	0	0	0	0	0	0	199	67	13	3	0
August 2044	55	15	3	0	0	6	0	0	0	0	0	0	0	0	0	199	58	10	2	0
August 2045	50	13	2	0	0	0	0	0	0	0	0	0	0	0	0	193	50	8	1	0
August 2046	46	11	2	0	0	0	0	0	0	0	0	0	0	0	0	175	42	6	1	0
August 2047	40	9	1	0	0	0	0	0	0	0	0	0	0	0	0	155	35	5	1	0
August 2048	35	7	1	0	0	0	0	0	0	0	0	0	0	0	0	134	28	3	0	0
August 2049	29	6	1	0	0	0	0	0	0	0	0	0	0	0	0	111	22	2	0	0
August 2050	22	4	0	0	0	0	0	0	0	0	0	0	0	0	0	86	16	2	0	0
August 2051	16	3	0	0	0	0	0	0	0	0	0	0	0	0	0	60	10	1	0	0
August 2052	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	31	5	0	0	0
August 2053	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average																				
Life (years)	20.2	11.4	6.9	5.0	3.8	13.7	4.8	2.8	2.2	1.8	7.0	6.7	4.9	3.9	3.2	26.3	18.5	12.4	9.2	6.9

**Security Group 6**  
**PSA Prepayment Assumption Rates**

Distribution Date	Classes A, AB and AC					Class AL					Classes IV, VA, VJ, VK, VM, VN and VQ				
	0%	100%	236%	350%	500%	0%	100%	236%	350%	500%	0%	100%	236%	350%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2024	99	97	94	92	89	100	100	100	100	100	92	92	92	92	92
August 2025	97	90	80	73	63	100	100	100	100	100	84	84	84	84	84
August 2026	96	80	62	48	31	100	100	100	100	100	76	76	76	76	76
August 2027	94	71	46	27	8	100	100	100	100	100	67	67	67	67	67
August 2028	92	63	32	11	0	100	100	100	100	81	57	57	57	57	11
August 2029	90	55	20	0	0	100	100	100	98	56	47	47	47	41	0
August 2030	88	47	10	0	0	100	100	100	76	38	36	36	36	0	0
August 2031	86	40	1	0	0	100	100	100	59	26	24	24	24	0	0
August 2032	84	33	0	0	0	100	100	86	45	18	12	12	0	0	0
August 2033	81	27	0	0	0	100	100	72	35	12	0	0	0	0	0
August 2034	78	21	0	0	0	100	100	61	27	8	0	0	0	0	0
August 2035	75	15	0	0	0	100	100	51	21	6	0	0	0	0	0
August 2036	72	10	0	0	0	100	100	42	16	4	0	0	0	0	0
August 2037	68	5	0	0	0	100	100	35	12	3	0	0	0	0	0
August 2038	64	0	0	0	0	100	100	29	9	2	0	0	0	0	0
August 2039	60	0	0	0	0	100	91	24	7	1	0	0	0	0	0
August 2040	56	0	0	0	0	100	81	19	5	1	0	0	0	0	0
August 2041	51	0	0	0	0	100	73	16	4	1	0	0	0	0	0
August 2042	46	0	0	0	0	100	64	13	3	0	0	0	0	0	0
August 2043	41	0	0	0	0	100	57	10	2	0	0	0	0	0	0
August 2044	35	0	0	0	0	100	49	8	2	0	0	0	0	0	0
August 2045	28	0	0	0	0	100	42	6	1	0	0	0	0	0	0
August 2046	21	0	0	0	0	100	36	5	1	0	0	0	0	0	0
August 2047	14	0	0	0	0	100	30	4	1	0	0	0	0	0	0
August 2048	6	0	0	0	0	100	24	3	0	0	0	0	0	0	0
August 2049	0	0	0	0	0	94	19	2	0	0	0	0	0	0	0
August 2050	0	0	0	0	0	73	13	1	0	0	0	0	0	0	0
August 2051	0	0	0	0	0	50	9	1	0	0	0	0	0	0	0
August 2052	0	0	0	0	0	26	4	0	0	0	0	0	0	0	0
August 2053	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average															
Life (years)	16.7	7.0	4.0	3.0	2.4	28.0	21.4	13.4	9.7	7.1	5.5	5.5	5.3	4.6	3.9

Security Group 6 PSA Prepayment Assumption Rates															
Distribution Date	Classes QV, V, VI, VU, VW and VY					Class VL					Class Z				
	0%	100%	236%	350%	500%	0%	100%	236%	350%	500%	0%	100%	236%	350%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2024	93	93	93	93	93	100	100	100	100	100	106	106	106	106	106
August 2025	86	86	86	86	86	100	100	100	100	100	113	113	113	113	113
August 2026	78	78	78	78	78	100	100	100	100	100	120	120	120	120	120
August 2027	70	70	70	70	70	100	100	100	100	100	127	127	127	127	127
August 2028	62	62	62	62	21	100	100	100	100	100	135	135	135	135	135
August 2029	52	52	52	48	0	100	100	100	100	0	143	143	143	143	106
August 2030	43	43	43	0	0	100	100	100	0	0	152	152	152	145	73
August 2031	32	32	32	0	0	100	100	100	0	0	161	161	161	112	50
August 2032	21	21	0	0	0	100	100	0	0	0	171	171	165	87	34
August 2033	10	10	0	0	0	91	91	0	0	0	182	182	138	67	23
August 2034	0	0	0	0	0	0	0	0	0	0	191	191	116	52	16
August 2035	0	0	0	0	0	0	0	0	0	0	191	191	96	40	11
August 2036	0	0	0	0	0	0	0	0	0	0	191	191	80	30	7
August 2037	0	0	0	0	0	0	0	0	0	0	191	191	67	23	5
August 2038	0	0	0	0	0	0	0	0	0	0	191	191	55	18	3
August 2039	0	0	0	0	0	0	0	0	0	0	191	173	45	13	2
August 2040	0	0	0	0	0	0	0	0	0	0	191	155	37	10	2
August 2041	0	0	0	0	0	0	0	0	0	0	191	139	30	8	1
August 2042	0	0	0	0	0	0	0	0	0	0	191	123	25	6	1
August 2043	0	0	0	0	0	0	0	0	0	0	191	108	20	4	0
August 2044	0	0	0	0	0	0	0	0	0	0	191	94	16	3	0
August 2045	0	0	0	0	0	0	0	0	0	0	191	81	12	2	0
August 2046	0	0	0	0	0	0	0	0	0	0	191	68	9	2	0
August 2047	0	0	0	0	0	0	0	0	0	0	191	57	7	1	0
August 2048	0	0	0	0	0	0	0	0	0	0	191	46	5	1	0
August 2049	0	0	0	0	0	0	0	0	0	0	179	35	4	0	0
August 2050	0	0	0	0	0	0	0	0	0	0	139	26	2	0	0
August 2051	0	0	0	0	0	0	0	0	0	0	96	16	1	0	0
August 2052	0	0	0	0	0	0	0	0	0	0	50	8	1	0	0
August 2053	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	6.0	6.0	5.7	4.9	4.0	10.4	10.4	8.7	6.8	5.2	28.0	21.4	14.0	10.7	8.0

Security Group 7 PSA Prepayment Assumption Rates					
Distribution Date	Classes NF and NS				
	0%	100%	392%	600%	800%
Initial Percent	100	100	100	100	100
August 2024	99	98	94	91	89
August 2025	98	93	79	70	62
August 2026	98	87	61	45	33
August 2027	97	81	46	29	17
August 2028	95	75	35	18	9
August 2029	94	69	26	11	4
August 2030	93	64	20	7	2
August 2031	92	59	15	5	1
August 2032	90	55	11	3	1
August 2033	89	50	8	2	0
August 2034	87	46	6	1	0
August 2035	85	42	5	1	0
August 2036	83	39	3	0	0
August 2037	81	35	3	0	0
August 2038	78	32	2	0	0
August 2039	75	29	1	0	0
August 2040	72	26	1	0	0
August 2041	69	23	1	0	0
August 2042	66	21	1	0	0
August 2043	62	18	0	0	0
August 2044	58	16	0	0	0
August 2045	53	14	0	0	0
August 2046	49	12	0	0	0
August 2047	43	10	0	0	0
August 2048	37	8	0	0	0
August 2049	31	6	0	0	0
August 2050	24	4	0	0	0
August 2051	17	3	0	0	0
August 2052	9	1	0	0	0
August 2053	0	0	0	0	0
Weighted Average Life (years)	20.8	11.7	4.7	3.4	2.7

Security Group 8 PSA Prepayment Assumption Rates						
Classes FW, SW, WF, WS and WT						
Distribution Date	0%	100%	250%	402%	650%	900%
Initial Percent . . .	100	100	100	100	100	100
August 2024 . . . .	99	97	94	91	87	82
August 2025 . . . .	98	92	83	75	62	49
August 2026 . . . .	98	86	70	56	37	23
August 2027 . . . .	97	79	59	42	23	10
August 2028 . . . .	95	74	49	32	14	5
August 2029 . . . .	94	68	41	24	8	2
August 2030 . . . .	93	63	35	18	5	1
August 2031 . . . .	92	58	29	13	3	0
August 2032 . . . .	90	54	24	10	2	0
August 2033 . . . .	89	49	20	7	1	0
August 2034 . . . .	87	45	17	5	1	0
August 2035 . . . .	85	42	14	4	0	0
August 2036 . . . .	83	38	11	3	0	0
August 2037 . . . .	81	35	9	2	0	0
August 2038 . . . .	78	31	8	2	0	0
August 2039 . . . .	75	28	6	1	0	0
August 2040 . . . .	72	25	5	1	0	0
August 2041 . . . .	69	23	4	1	0	0
August 2042 . . . .	66	20	3	0	0	0
August 2043 . . . .	62	18	3	0	0	0
August 2044 . . . .	58	16	2	0	0	0
August 2045 . . . .	53	13	2	0	0	0
August 2046 . . . .	49	11	1	0	0	0
August 2047 . . . .	43	9	1	0	0	0
August 2048 . . . .	37	7	1	0	0	0
August 2049 . . . .	31	6	0	0	0	0
August 2050 . . . .	24	4	0	0	0	0
August 2051 . . . .	17	2	0	0	0	0
August 2052 . . . .	9	1	0	0	0	0
August 2053 . . . .	0	0	0	0	0	0
Weighted Average Life (years) . . . .	20.8	11.5	6.4	4.4	2.9	2.2

Security Group 9 PSA Prepayment Assumption Rates						
Classes FT and ST						
Distribution Date	0%	100%	300%	521%	800%	1,100%
Initial Percent . . .	100	100	100	100	100	100
August 2024 . . . .	99	97	93	89	84	78
August 2025 . . . .	99	92	81	69	54	40
August 2026 . . . .	98	86	66	47	28	14
August 2027 . . . .	97	80	53	32	14	5
August 2028 . . . .	96	74	43	22	7	2
August 2029 . . . .	95	69	35	15	4	1
August 2030 . . . .	94	64	28	10	2	0
August 2031 . . . .	92	59	23	7	1	0
August 2032 . . . .	91	54	18	5	1	0
August 2033 . . . .	89	50	15	3	0	0
August 2034 . . . .	88	46	12	2	0	0
August 2035 . . . .	86	42	9	1	0	0
August 2036 . . . .	84	39	8	1	0	0
August 2037 . . . .	82	35	6	1	0	0
August 2038 . . . .	79	32	5	0	0	0
August 2039 . . . .	77	29	4	0	0	0
August 2040 . . . .	74	26	3	0	0	0
August 2041 . . . .	71	23	2	0	0	0
August 2042 . . . .	67	21	2	0	0	0
August 2043 . . . .	64	18	1	0	0	0
August 2044 . . . .	59	16	1	0	0	0
August 2045 . . . .	55	14	1	0	0	0
August 2046 . . . .	50	12	1	0	0	0
August 2047 . . . .	45	10	0	0	0	0
August 2048 . . . .	39	8	0	0	0	0
August 2049 . . . .	32	6	0	0	0	0
August 2050 . . . .	25	4	0	0	0	0
August 2051 . . . .	18	3	0	0	0	0
August 2052 . . . .	9	1	0	0	0	0
August 2053 . . . .	0	0	0	0	0	0
Weighted Average Life (years) . . . .	21.0	11.6	5.6	3.5	2.5	1.9



Security Group 10 PSA Prepayment Assumption Rates															
Distribution Date	Classes B and BA					Classes BF, BS, YF, YS and YT					Class BL				
	0%	100%	230%	350%	500%	0%	100%	230%	350%	500%	0%	100%	230%	350%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2024	99	97	95	92	90	99	98	96	94	92	100	100	100	100	100
August 2025	98	91	82	75	65	98	93	87	81	74	100	100	100	100	100
August 2026	96	82	65	51	35	97	87	74	64	52	100	100	100	100	100
August 2027	95	73	50	32	14	96	80	63	50	36	100	100	100	100	100
August 2028	93	65	37	17	0	95	75	54	39	25	100	100	100	100	95
August 2029	92	58	26	6	0	94	69	46	30	17	100	100	100	100	66
August 2030	90	51	17	0	0	92	64	39	24	12	100	100	100	90	45
August 2031	88	44	9	0	0	91	59	33	18	8	100	100	100	70	31
August 2032	86	38	2	0	0	89	54	28	14	6	100	100	100	54	21
August 2033	83	32	0	0	0	88	50	23	11	4	100	100	89	42	15
August 2034	81	26	0	0	0	86	46	20	8	3	100	100	75	32	10
August 2035	78	21	0	0	0	84	42	17	6	2	100	100	63	25	7
August 2036	75	16	0	0	0	82	38	14	5	1	100	100	53	19	5
August 2037	72	12	0	0	0	79	35	12	4	1	100	100	44	14	3
August 2038	69	7	0	0	0	77	32	10	3	1	100	100	37	11	2
August 2039	65	3	0	0	0	74	28	8	2	0	100	100	30	8	1
August 2040	61	0	0	0	0	71	26	7	2	0	100	98	25	6	1
August 2041	56	0	0	0	0	68	23	5	1	0	100	87	20	5	1
August 2042	52	0	0	0	0	64	20	4	1	0	100	77	17	4	0
August 2043	46	0	0	0	0	60	18	4	1	0	100	68	13	3	0
August 2044	41	0	0	0	0	56	16	3	1	0	100	59	11	2	0
August 2045	35	0	0	0	0	52	13	2	0	0	100	51	8	1	0
August 2046	28	0	0	0	0	47	11	2	0	0	100	43	7	1	0
August 2047	21	0	0	0	0	42	9	1	0	0	100	36	5	1	0
August 2048	13	0	0	0	0	36	8	1	0	0	100	29	4	0	0
August 2049	5	0	0	0	0	30	6	1	0	0	100	23	3	0	0
August 2050	0	0	0	0	0	23	4	0	0	0	89	16	2	0	0
August 2051	0	0	0	0	0	16	3	0	0	0	62	10	1	0	0
August 2052	0	0	0	0	0	8	1	0	0	0	32	5	0	0	0
August 2053	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	17.7	7.7	4.4	3.2	2.6	20.5	11.6	7.0	5.1	3.9	28.4	22.6	14.6	10.4	7.5

PSA Prepayment Assumption Rates										
Distribution Date	Class BV					Class BZ				
	0%	100%	230%	350%	500%	0%	100%	230%	350%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100
August 2024	93	93	93	93	93	106	106	106	106	106
August 2025	86	86	86	86	86	113	113	113	113	113
August 2026	78	78	78	78	78	120	120	120	120	120
August 2027	70	70	70	70	70	127	127	127	127	127
August 2028	62	62	62	62	52	135	135	135	135	135
August 2029	52	52	52	52	0	143	143	143	143	125
August 2030	43	43	43	21	0	152	152	152	152	86
August 2031	32	32	32	0	0	161	161	161	133	59
August 2032	21	21	21	0	0	171	171	171	103	41
August 2033	10	10	0	0	0	182	182	170	80	28
August 2034	0	0	0	0	0	191	191	143	61	19
August 2035	0	0	0	0	0	191	191	120	47	13
August 2036	0	0	0	0	0	191	191	101	36	9
August 2037	0	0	0	0	0	191	191	84	28	6
August 2038	0	0	0	0	0	191	191	70	21	4
August 2039	0	0	0	0	0	191	191	58	16	3
August 2040	0	0	0	0	0	191	186	48	12	2
August 2041	0	0	0	0	0	191	166	39	9	1
August 2042	0	0	0	0	0	191	148	32	7	1
August 2043	0	0	0	0	0	191	130	26	5	1
August 2044	0	0	0	0	0	191	114	21	4	0
August 2045	0	0	0	0	0	191	98	16	3	0
August 2046	0	0	0	0	0	191	83	13	2	0
August 2047	0	0	0	0	0	191	69	10	1	0
August 2048	0	0	0	0	0	191	56	7	1	0
August 2049	0	0	0	0	0	191	43	5	1	0
August 2050	0	0	0	0	0	170	31	3	0	0
August 2051	0	0	0	0	0	118	20	2	0	0
August 2052	0	0	0	0	0	61	9	1	0	0
August 2053	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	6.0	6.0	5.9	5.1	4.3	28.4	22.6	14.9	11.2	8.4

**Security Groups 3 and 10  
PSA Prepayment Assumption Rates**

Distribution Date	Class ZU						
	0%	100%	175%	230%	300%	350%	500%
Initial Percent . . .	100	100	100	100	100	100	100
August 2024 . . . . .	106	106	106	106	106	106	106
August 2025 . . . . .	113	113	113	113	113	113	113
August 2026 . . . . .	120	120	120	120	120	120	120
August 2027 . . . . .	127	127	127	127	127	127	127
August 2028 . . . . .	135	135	135	135	135	135	135
August 2029 . . . . .	143	143	143	143	143	143	125
August 2030 . . . . .	152	152	152	152	152	152	86
August 2031 . . . . .	161	161	161	161	161	134	59
August 2032 . . . . .	171	171	171	171	138	104	41
August 2033 . . . . .	182	182	182	172	111	80	28
August 2034 . . . . .	192	192	192	145	89	62	19
August 2035 . . . . .	195	195	182	122	71	47	13
August 2036 . . . . .	199	199	159	102	56	36	9
August 2037 . . . . .	203	203	137	85	45	28	6
August 2038 . . . . .	207	206	119	71	35	21	4
August 2039 . . . . .	211	199	102	58	28	16	3
August 2040 . . . . .	216	190	87	48	22	12	2
August 2041 . . . . .	221	169	74	39	17	9	1
August 2042 . . . . .	226	150	63	32	13	7	1
August 2043 . . . . .	232	132	53	26	10	5	1
August 2044 . . . . .	238	115	44	21	8	4	0
August 2045 . . . . .	244	99	36	16	6	3	0
August 2046 . . . . .	243	84	29	13	4	2	0
August 2047 . . . . .	231	70	23	10	3	1	0
August 2048 . . . . .	218	56	17	7	2	1	0
August 2049 . . . . .	204	43	13	5	1	1	0
August 2050 . . . . .	174	31	9	3	1	0	0
August 2051 . . . . .	121	20	5	2	1	0	0
August 2052 . . . . .	63	9	2	1	0	0	0
August 2053 . . . . .	0	0	0	0	0	0	0
Weighted Average Life (years) . . . . .	27.6	22.1	17.5	15.0	12.6	11.2	8.4

**Security Group 11  
PSA Prepayment Assumption Rates**

Distribution Date	Class AZ					Class GA					Class GT				
	0%	100%	126%	250%	400%	0%	100%	126%	250%	400%	0%	100%	126%	250%	400%
Initial Percent . . . . .	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2024 . . . . .	104	104	104	104	104	96	89	87	77	66	98	92	90	83	74
August 2025 . . . . .	107	107	107	107	107	92	78	74	58	41	95	84	81	69	55
August 2026 . . . . .	111	111	111	111	111	88	68	63	42	21	93	77	73	57	41
August 2027 . . . . .	115	115	115	115	115	84	58	52	28	7	90	71	66	47	30
August 2028 . . . . .	119	119	119	119	103	79	49	43	17	0	88	64	59	39	22
August 2029 . . . . .	123	123	123	123	76	74	41	34	7	0	85	59	53	32	16
August 2030 . . . . .	128	128	128	122	56	69	33	25	0	0	82	53	47	26	12
August 2031 . . . . .	132	132	132	100	41	64	25	17	0	0	79	48	42	22	9
August 2032 . . . . .	137	137	137	81	30	59	18	10	0	0	76	44	37	18	6
August 2033 . . . . .	142	142	142	66	22	54	11	3	0	0	73	39	33	14	5
August 2034 . . . . .	147	147	135	54	16	48	4	0	0	0	69	35	29	12	3
August 2035 . . . . .	152	145	119	43	11	42	0	0	0	0	66	31	26	9	2
August 2036 . . . . .	158	129	104	35	8	36	0	0	0	0	62	28	22	8	2
August 2037 . . . . .	163	114	90	28	6	30	0	0	0	0	58	25	19	6	1
August 2038 . . . . .	169	100	77	22	4	23	0	0	0	0	54	22	17	5	1
August 2039 . . . . .	175	87	66	17	3	16	0	0	0	0	50	19	14	4	1
August 2040 . . . . .	181	74	56	13	2	9	0	0	0	0	46	16	12	3	0
August 2041 . . . . .	188	63	47	10	1	1	0	0	0	0	42	14	10	2	0
August 2042 . . . . .	171	53	38	8	1	0	0	0	0	0	37	11	8	2	0
August 2043 . . . . .	149	43	31	6	1	0	0	0	0	0	32	9	7	1	0
August 2044 . . . . .	126	34	24	4	0	0	0	0	0	0	27	7	5	1	0
August 2045 . . . . .	102	26	18	3	0	0	0	0	0	0	22	6	4	1	0
August 2046 . . . . .	77	18	13	2	0	0	0	0	0	0	17	4	3	0	0
August 2047 . . . . .	50	11	8	1	0	0	0	0	0	0	11	2	2	0	0
August 2048 . . . . .	23	5	3	0	0	0	0	0	0	0	5	1	1	0	0
August 2049 . . . . .	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
August 2050 . . . . .	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years) . . . . .	22.2	17.5	16.3	11.4	7.8	10.2	5.2	4.6	2.8	1.8	15.1	9.1	8.1	5.1	3.3

Security Group 12 PSA Prepayment Assumption Rates															
Distribution Date	Class LC					Class VC					Class ZC				
	0%	100%	204%	350%	500%	0%	100%	204%	350%	500%	0%	100%	204%	350%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
August 2024	100	100	100	100	100	93	93	93	93	93	105	105	105	105	105
August 2025	100	100	100	100	100	86	86	86	86	86	110	110	110	110	110
August 2026	100	100	100	100	100	78	78	78	78	78	116	116	116	116	116
August 2027	100	100	100	100	100	70	70	70	70	70	122	122	122	122	122
August 2028	100	100	100	100	94	61	61	61	61	46	128	128	128	128	128
August 2029	100	100	100	100	68	52	52	52	52	0	135	135	135	135	117
August 2030	100	100	100	92	48	42	42	42	24	0	142	142	142	142	83
August 2031	100	100	100	74	33	32	32	32	0	0	149	149	149	128	57
August 2032	100	100	100	60	22	22	22	22	0	0	157	157	157	103	39
August 2033	100	100	99	46	15	11	11	9	0	0	165	165	165	79	26
August 2034	100	100	94	35	10	0	0	0	0	0	173	173	162	61	18
August 2035	100	100	82	27	7	0	0	0	0	0	173	173	141	47	12
August 2036	100	100	69	21	5	0	0	0	0	0	173	173	120	36	8
August 2037	100	100	58	16	3	0	0	0	0	0	173	173	101	27	6
August 2038	100	100	49	12	2	0	0	0	0	0	173	173	85	21	4
August 2039	100	100	41	9	1	0	0	0	0	0	173	172	71	16	3
August 2040	100	97	34	7	1	0	0	0	0	0	173	168	59	12	2
August 2041	100	88	28	5	1	0	0	0	0	0	173	151	48	9	1
August 2042	100	76	23	4	0	0	0	0	0	0	173	131	40	6	1
August 2043	100	65	19	3	0	0	0	0	0	0	173	112	32	5	0
August 2044	100	55	15	2	0	0	0	0	0	0	173	95	26	3	0
August 2045	100	47	12	1	0	0	0	0	0	0	173	81	21	2	0
August 2046	100	39	9	1	0	0	0	0	0	0	173	67	16	2	0
August 2047	100	32	7	1	0	0	0	0	0	0	173	55	12	1	0
August 2048	100	25	5	0	0	0	0	0	0	0	173	43	9	1	0
August 2049	95	19	4	0	0	0	0	0	0	0	164	32	6	0	0
August 2050	66	13	2	0	0	0	0	0	0	0	115	22	4	0	0
August 2051	39	7	1	0	0	0	0	0	0	0	68	13	2	0	0
August 2052	14	2	0	0	0	0	0	0	0	0	23	4	1	0	0
August 2053	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average															
Life (years)	27.6	22.2	16.0	10.7	7.6	6.0	6.0	5.9	5.1	4.2	27.6	22.2	16.2	11.4	8.4

Security Group 13 PSA Prepayment Assumption Rates					
Distribution Date	Classes PO, S, TF and TS				
	0%	100%	295%	450%	600%
Initial Percent	100	100	100	100	100
August 2024	99	97	93	90	87
August 2025	98	92	80	71	63
August 2026	97	85	65	52	40
August 2027	95	79	53	37	25
August 2028	94	73	43	27	16
August 2029	93	68	35	19	10
August 2030	91	63	28	14	6
August 2031	89	58	23	10	4
August 2032	87	53	18	7	3
August 2033	86	49	15	5	2
August 2034	83	45	12	4	1
August 2035	81	41	9	3	1
August 2036	79	37	8	2	0
August 2037	76	34	6	1	0
August 2038	73	31	5	1	0
August 2039	70	28	4	1	0
August 2040	67	25	3	0	0
August 2041	64	22	2	0	0
August 2042	60	20	2	0	0
August 2043	56	17	1	0	0
August 2044	52	15	1	0	0
August 2045	47	13	1	0	0
August 2046	43	11	1	0	0
August 2047	37	9	0	0	0
August 2048	32	7	0	0	0
August 2049	26	5	0	0	0
August 2050	19	4	0	0	0
August 2051	12	2	0	0	0
August 2052	5	1	0	0	0
August 2053	0	0	0	0	0
Weighted Average					
Life (years)	19.6	11.3	5.6	4.0	3.1

## Yield Considerations

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

- the anticipated yield of that Class resulting from its purchase price,
- the investor's own projection of Mortgage Loan prepayment rates under a variety of scenarios,
- in the case of the Group 11, 12 and 13 Securities, the investor's own projection of payment rates on the Underlying Certificates under a variety of scenarios and
- in the case of a Floating Rate or an Inverse Floating Rate Class, the investor's own projection of levels of 30-day Average SOFR under a variety of scenarios.

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

### *Prepayments: Effect on Yields*

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

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

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

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

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

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

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

The Mortgage Loans will not prepay at any constant rate until maturity, nor will all of the Mortgage Loans underlying any Trust Asset Group prepay at the same rate at any one time. The timing of changes in the rate of prepayments may affect the actual yield to an investor, even if the average rate of principal prepayments is consistent with the investor's expectation. In general, the earlier a prepayment of principal on the Mortgage Loans, the greater the effect on an investor's yield. As a result, the effect on an investor's yield of principal prepayments occurring at a rate higher (or lower) than the rate antici-

pated by the investor during the period immediately following the Closing Date is not likely to be offset by a later equivalent reduction (or increase) in the rate of principal prepayments.

### *30-day Average SOFR: Effect on Yields of the Floating Rate and Inverse Floating Rate Classes*

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

### *Payment Delay: Effect on Yields of the Fixed Rate Classes*

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

## **Yield Tables**

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

The Mortgage Loans will not prepay at any constant rate until maturity , and it is unlikely that 30-day Average SOFR will remain constant. Moreover, it is likely that the Mortgage Loans will experience actual prepayment rates that differ from those of the Modeling Assumptions. **Therefore, the actual pre-tax yield of any Class may differ from those shown in the applicable table below for that Class even if the Class is purchased at the assumed price shown.**

The yields were calculated by

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

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

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

## SECURITY GROUP 1

### Sensitivity of Class DS to Prepayments Assumed Price 2.875%\*

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>353%</u>	<u>600%</u>	<u>800%</u>
4.06901% .....	39.5%	26.9%	14.1%	3.5%
5.06901% .....	(1.0)%	(15.6)%	(31.2)%	(44.9)%
5.18451% .....	(7.4)%	(22.2)%	(37.9)%	(52.3)%
5.30000% and above .....	**	**	**	**

## SECURITY GROUP 3

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

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>175%</u>	<u>230%</u>	<u>300%</u>	<u>500%</u>
4.06935% .....	50.1%	47.7%	44.6%	35.7%
5.06935% .....	16.1%	13.3%	9.6%	(0.9)%
5.50968% .....	1.1%	(1.9)%	(5.9)%	(17.5)%
5.95000% and above .....	**	**	**	**

### Sensitivity of Class SB to Prepayments Assumed Price 4.09375%\*

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>175%</u>	<u>230%</u>	<u>300%</u>	<u>500%</u>
4.12426% .....	34.2%	31.4%	27.7%	17.0%
5.12426% .....	5.9%	2.8%	(1.2)%	(13.1)%
5.47213% .....	(4.6)%	(7.8)%	(11.9)%	(24.3)%
5.82000% and above .....	**	**	**	**

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

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>175%</u>	<u>230%</u>	<u>300%</u>	<u>500%</u>
4.07838% .....	38.0%	35.1%	31.5%	21.0%
5.07838% .....	10.3%	7.3%	3.3%	(8.4)%
5.51419% .....	(2.1)%	(5.3)%	(9.4)%	(21.7)%
5.95000% and above .....	**	**	**	**

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

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

**Sensitivity of Class SH to Prepayments**  
**Assumed Price 4.8125%\***

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>175%</u>	<u>230%</u>	<u>300%</u>	<u>500%</u>
4.18048% .....	27.5%	24.6%	20.9%	10.0%
5.18048% .....	3.5%	0.4%	(3.7)%	(15.7)%
5.54024% .....	(6.0)%	(9.2)%	(13.4)%	(25.8)%
5.90000% and above .....	**	**	**	**

**Sensitivity of Class SJ to Prepayments**  
**Assumed Price 4.8125%\***

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>175%</u>	<u>230%</u>	<u>300%</u>	<u>500%</u>
4.10145% .....	29.5%	26.6%	22.9%	12.0%
5.10145% .....	5.5%	2.4%	(1.7)%	(13.6)%
5.50073% .....	(4.9)%	(8.1)%	(12.2)%	(24.6)%
5.90000% and above .....	**	**	**	**

**Sensitivity of Class SM to Prepayments**  
**Assumed Price 4.8125%\***

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>175%</u>	<u>230%</u>	<u>300%</u>	<u>500%</u>
4.15414% .....	28.2%	25.3%	21.5%	10.6%
5.15414% .....	4.2%	1.0%	(3.0)%	(15.0)%
5.52707% .....	(5.6)%	(8.8)%	(13.0)%	(25.4)%
5.90000% and above .....	**	**	**	**

**SECURITY GROUP 5**

**Sensitivity of Class HS to Prepayments**  
**Assumed Price 4.25%\***

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>232%</u>	<u>350%</u>	<u>500%</u>
4.10145% .....	40.7%	34.5%	28.8%	21.4%
5.10145% .....	13.7%	6.6%	0.1%	(8.4)%
5.52573% .....	1.7%	(5.7)%	(12.5)%	(21.6)%
5.95000% and above .....	**	**	**	**

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

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



**Sensitivity of Class HT to Prepayments**  
**Assumed Price 0.0625%\***

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>232%</u>	<u>350%</u>	<u>500%</u>
5.800% and below .....	388.3%	383.4%	379.0%	373.3%
5.875% .....	161.0%	156.1%	151.7%	146.0%
5.950% and above .....	**	**	**	**

**Sensitivity of Class SG to Prepayments**  
**Assumed Price 4.125%\***

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>232%</u>	<u>350%</u>	<u>500%</u>
4.10145% .....	35.1%	28.6%	22.8%	15.3%
5.10145% .....	7.3%	0.0%	(6.7)%	(15.5)%
5.40073% .....	(2.0)%	(9.5)%	(16.4)%	(25.6)%
5.70000% and above .....	**	**	**	**

**Sensitivity of Class US to Prepayments**  
**Assumed Price 4.1875%\***

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>232%</u>	<u>350%</u>	<u>500%</u>
4.10145% .....	37.2%	30.9%	25.1%	17.6%
5.10145% .....	9.8%	2.6%	(4.0)%	(12.7)%
5.45073% .....	(0.5)%	(7.9)%	(14.8)%	(24.0)%
5.80000% and above .....	**	**	**	**

**Sensitivity of Class UT to Prepayments**  
**Assumed Price 0.0625%\***

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>232%</u>	<u>350%</u>	<u>500%</u>
5.70% and below .....	217.5%	212.7%	208.4%	202.8%
5.75% .....	93.6%	88.3%	83.4%	77.2%
5.80% and above .....	**	**	**	**

**SECURITY GROUP 6**

**Sensitivity of Class IV to Prepayments**  
**Assumed Price 17.9375%\***

<u>PSA Prepayment Assumption Rates</u>				
<u>100%</u>	<u>236%</u>	<u>350%</u>	<u>500%</u>	<u>746%</u>
20.4%	20.1%	17.3%	11.5%	0.0%

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

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

**Sensitivity of Class VI to Prepayments**  
**Assumed Price 18.46875%\***

<b>PSA Prepayment Assumption Rates</b>				
<b>100%</b>	<b>236%</b>	<b>350%</b>	<b>500%</b>	<b>746%</b>
21.2%	20.6%	17.6%	11.7%	0.1%

**SECURITY GROUP 7**

**Sensitivity of Class NS to Prepayments**  
**Assumed Price 2.984375%\***

<b>30-day Average SOFR</b>	<b>PSA Prepayment Assumption Rates</b>			
	<b>100%</b>	<b>392%</b>	<b>600%</b>	<b>800%</b>
4.18048% .....	62.3%	50.0%	41.0%	32.3%
5.18048% .....	22.7%	7.8%	(3.1)%	(13.9)%
5.59024% .....	6.7%	(9.5)%	(21.8)%	(34.2)%
6.00000% and above .....	**	**	**	**

**SECURITY GROUP 8**

**Sensitivity of Class SW to Prepayments**  
**Assumed Price 4.875%\***

<b>30-day Average SOFR</b>	<b>PSA Prepayment Assumption Rates</b>				
	<b>100%</b>	<b>250%</b>	<b>402%</b>	<b>650%</b>	<b>900%</b>
4.18851% .....	28.4%	20.4%	12.2%	(1.9)%	(16.7)%
5.18851% .....	4.9%	(3.7)%	(12.7)%	(28.4)%	(45.6)%
5.49426% .....	(3.5)%	(12.1)%	(21.4)%	(37.5)%	(55.8)%
5.80000% and above ....	**	**	**	**	**

**Sensitivity of Class WS to Prepayments**  
**Assumed Price 5.375%\***

<b>30-day Average SOFR</b>	<b>PSA Prepayment Assumption Rates</b>				
	<b>100%</b>	<b>250%</b>	<b>402%</b>	<b>650%</b>	<b>900%</b>
4.18851% .....	31.3%	23.5%	15.3%	1.4%	(13.2)%
5.18851% .....	10.2%	1.7%	(7.2)%	(22.5)%	(39.0)%
5.64426% .....	(0.3)%	(8.9)%	(18.1)%	(34.1)%	(52.0)%
6.10000% and above .....	**	**	**	**	**

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

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

**Sensitivity of Class WT to Prepayments**  
**Assumed Price 0.5%\***

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>				
	<u>100%</u>	<u>250%</u>	<u>402%</u>	<u>650%</u>	<u>900%</u>
5.80% and below . . . . .	61.8%	54.6%	47.1%	34.4%	21.3%
5.95% . . . . .	25.8%	17.8%	9.5%	(4.7)%	(19.8)%
6.10% and above . . . . .	**	**	**	**	**

**SECURITY GROUP 9**

**Sensitivity of Class ST to Prepayments**  
**Assumed Price 5.78125%\***

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>				
	<u>100%</u>	<u>300%</u>	<u>521%</u>	<u>800%</u>	<u>1,100%</u>
4.18050% . . . . .	38.9%	28.6%	16.8%	1.3%	(16.3)%
5.18050% . . . . .	19.0%	8.0%	(4.7)%	(21.7)%	(41.2)%
5.89025% . . . . .	4.8%	(6.7)%	(20.3)%	(38.8)%	(60.8)%
6.60000% and above . . . . .	**	**	**	**	**

**SECURITY GROUP 10**

**Sensitivity of Class BS to Prepayments**  
**Assumed Price 3.15625%\***

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>230%</u>	<u>350%</u>	<u>500%</u>
4.21325% . . . . .	49.0%	43.2%	37.8%	31.0%
5.21325% . . . . .	12.2%	5.4%	(1.2)%	(9.5)%
5.50663% . . . . .	1.0%	(6.3)%	(13.2)%	(22.2)%
5.80000% and above . . . . .	**	**	**	**

**Sensitivity of Class YS to Prepayments**  
**Assumed Price 3.65625%\***

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>230%</u>	<u>350%</u>	<u>500%</u>
4.21325% . . . . .	50.7%	45.0%	39.7%	33.0%
5.21325% . . . . .	18.8%	12.2%	5.9%	(2.1)%
5.65663% . . . . .	4.6%	(2.5)%	(9.3)%	(18.1)%
6.10000% and above . . . . .	**	**	**	**

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

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

**Sensitivity of Class YT to Prepayments**  
**Assumed Price 0.5%\***

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>230%</u>	<u>350%</u>	<u>500%</u>
5.80% and below .....	62.4%	56.9%	51.8%	45.4%
5.95% .....	26.1%	19.7%	13.7%	6.1%
6.10% and above .....	**	**	**	**

**SECURITY GROUP 13**

**Sensitivity of Class PO to Prepayments**  
**Assumed Price 80.040625%**

<u>PSA Prepayment Assumption Rates</u>			
<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>
2.1%	4.3%	6.1%	7.8%

**Sensitivity of Class S to Prepayments**  
**Assumed Price 4.90625%\***

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>
4.22165% .....	44.1%	34.0%	25.8%	17.7%
5.22165% .....	20.5%	9.8%	0.9%	(7.9)%
5.86083% .....	5.5%	(5.8)%	(15.1)%	(24.6)%
6.50000% and above .....	**	**	**	**

**Sensitivity of Class TS to Prepayments**  
**Assumed Price 93.532812244%\***

<u>30-day Average SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>295%</u>	<u>450%</u>	<u>600%</u>
4.22165% .....	7.3%	7.9%	8.4%	8.9%
5.22165% .....	4.3%	5.0%	5.5%	6.0%
5.86083% .....	2.5%	3.1%	3.6%	4.1%
6.50000% and above .....	0.6%	1.3%	1.8%	2.3%

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

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

**CERTAIN UNITED STATES FEDERAL INCOME TAX CONSEQUENCES**

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

## REMIC Elections

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

## Regular Securities

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

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

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

<u>Group(s)</u>	<u>PSA</u>
1	353%
2	226%
3 and 10	230%
4	212%
5	232%
6	236%
7	392%
8	402%
9	521%
11	126%
12	204%
13	295%

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

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

## Residual Securities

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

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

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

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

## MX Securities

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

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

## ERISA MATTERS

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

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

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

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

*See “ERISA Considerations” in the Base Offering Circular.*

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

### **LEGAL INVESTMENT CONSIDERATIONS**

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

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

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

### **PLAN OF DISTRIBUTION**

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

### **INCREASE IN SIZE**

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



Group will increase by the same proportion. The Trust Agreement, the Final Data Statement, the Final Schedules and the Supplemental Statement, if any, will reflect any increase in the size of the transaction.

#### **LEGAL MATTERS**

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

## Available Combinations(1)

REMIC Securities		MX Securities						
Class	Original Class Principal Balance or Class Notional Balance	Related MX Class	Maximum Original Class Principal Balance or Class Notional Balance(2)	Principal Type(3)	Interest Rate	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
Security Group 3								
Combination 1								
HV	\$ 1,694,611	MV	\$10,161,023	PAC I/SEQ/AD	5.50%	FIX	38384CL23	July 2034
LV	613,735							
PV	7,852,677							
Combination 2								
HZ	\$ 2,074,085	MZ	\$12,436,381	PAC I/SEQ	5.50%	FIX/Z	38384CL31	August 2053
LZ	751,169							
PZ	9,611,127							
Combination 3								
HV	\$ 1,694,611	ML	\$22,597,404	PAC I/SEQ	5.50%	FIX	38384CL49	August 2053
HZ	2,074,085							
LV	613,735							
LZ	751,169							
PV	7,852,677							
PZ	9,611,127							
Combination 4								
SH	\$50,000,000	SM	\$75,000,000	NTL(PT)	(5)	INV/IO	38384CL56	August 2053
SJ	25,000,000							
Security Group 5								
Combination 5								
HF	\$38,372,509	FG	\$38,372,509	PT	(5)	FLT	38384CL64	August 2053
HT	38,372,509							
UT	38,372,509							
Combination 6								
SG	\$38,372,509	US	\$38,372,509	NTL(PT)	(5)	INV/IO	38384CL72	August 2053
UT	38,372,509							

REMIC Securities			MX Securities					
Class	Original Class Principal Balance or Class Notional Balance	Related MX Class	Maximum Original Class Principal Balance or Class Notional Balance(2)	Principal Type(3)	Interest Rate	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
Combination 7								
HF	\$ 38,372,509	UF	\$ 38,372,509	PT	(5)	FLT	38384CL80	August 2053
HT	38,372,509							
Combination 8								
HT	\$ 38,372,509	HS	\$ 38,372,509	NTL(PT)	(5)	INV/IO	38384CL98	August 2053
SG	38,372,509							
UT	38,372,509							
<b>Security Group 6</b>								
Combination 9(6)								
VA	\$ 31,977,000	QV	\$ 35,870,900	SEQ/AD	5.50%	FIX	38384CM22	June 2034
VL	3,893,900	V	35,870,900	SEQ/AD	6.00	FIX	38384CM30	June 2034
		VI	11,956,966	NTL(SEQ/AD)	6.00	FIX/IO	38384CM48	June 2034
		VU	35,870,900	SEQ/AD	5.00	FIX	38384CM55	June 2034
		VW	35,870,900	SEQ/AD	4.50	FIX	38384CM63	June 2034
		VY	35,870,900	SEQ/AD	4.00	FIX	38384CM71	June 2034
Combination 10(6)								
VA	\$ 31,977,000	IV	\$ 10,659,000	NTL(SEQ/AD)	6.00%	FIX/IO	38384CM89	August 2033
		VJ	31,977,000	SEQ/AD	6.00	FIX	38384CM97	August 2033
		VK	31,977,000	SEQ/AD	5.50	FIX	38384CN21	August 2033
		VM	31,977,000	SEQ/AD	5.00	FIX	38384CN39	August 2033
		VN	31,977,000	SEQ/AD	4.50	FIX	38384CN47	August 2033
		VQ	31,977,000	SEQ/AD	4.00	FIX	38384CN54	August 2033
Combination 11								
VA	\$ 31,977,000	AL	\$ 75,330,048	SEQ	6.00%	FIX	38384CN62	August 2053
VL	3,893,900							
Z	39,459,148							
<b>Security Group 8</b>								
Combination 12								
SW	\$165,212,961	WS	\$165,212,961	NTL(PT)	(5)	INV/IO	38384CN70	August 2053
WT	165,212,961							

REMIC Securities		MX Securities						
Class	Original Class Principal Balance or Class Notional Balance	Related MX Class	Maximum Original Class Principal Balance or Class Notional Balance(2)	Principal Type(3)	Interest Rate	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
Combination 13								
WF	\$165,212,961	FW	\$165,212,961	PT	(5)	FLT	38384CN88	August 2053
WT	165,212,961							
Security Group 10								
Combination 14								
BV	\$ 6,246,791	BL	\$ 13,118,459	SEQ	6.00%	FIX	38384CN96	August 2053
BZ	6,871,668							
Combination 15								
YF	\$ 50,000,000	BF	\$ 50,000,000	PT	(5)	FLT	38384CP29	August 2053
YT	50,000,000							
Combination 16								
BS	\$ 50,000,000	YS	\$ 50,000,000	NTL(PT)	(5)	INV/IO	38384CP37	August 2053
YT	50,000,000							
Security Groups 3 and 10								
Combination 17(7)								
BZ	\$ 6,871,668	ZU	\$ 9,710,515	SEQ	6.00%	FIX/Z	38384CP45	August 2053
NZ	2,838,847							
Security Group 11								
Combination 18								
AZ	\$ 9,309,093	GT	\$ 43,079,093	SC/PT	3.50%	FIX	38384CP52	September 2049
GA	33,770,000							
Security Group 12								
Combination 19								
VC	\$ 14,503,637	LC	\$ 34,503,637	SC/PT	5.00%	FIX	38384CP60	May 2053
ZC	20,000,000							
Security Group 13								
Combination 20								
PO	\$ 27,838,829	TS	\$ 27,838,829	SC/PT	(5)	INV	38384CP78	June 2053
S	76,556,778							

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

- (2) The amount shown for each MX Class represents the maximum Original Class Principal Balance (or original Class Notional Balance) of that Class, assuming it were to be issued on the Closing Date.
- (3) As defined under “Class Types” in Appendix I to the Base Offering Circular.
- (4) See “*Yield, Maturity and Prepayment Considerations — Final Distribution Date*” in this Supplement.
- (5) The Interest Rate will be calculated as described under “Terms Sheet — Interest Rates” in this Supplement.
- (6) In the case of Combinations 9 and 10, various subcombinations are permitted. See “*Description of the Securities — Modifications and Exchange*” in the Base Offering Circular for a discussion of subcombinations.
- (7) Derived from REMIC Classes relating to separate Groups.

**Schedule II**

**SCHEDULED PRINCIPAL BALANCES**

<u>Distribution Date</u>	<u>Class MD</u>	<u>Classes P, PV and PZ (in the aggregate)</u>
Initial Balance . . . . .	\$4,409,000.00	\$81,006,288.00
September 2023 . . . . .	4,398,468.52	80,851,120.44
October 2023 . . . . .	4,383,736.23	80,666,283.04
November 2023 . . . . .	4,364,809.52	80,451,833.56
December 2023 . . . . .	4,341,702.80	80,207,856.23
January 2024 . . . . .	4,314,438.50	79,934,461.79
February 2024 . . . . .	4,283,047.06	79,631,787.53
March 2024 . . . . .	4,247,567.04	79,299,997.16
April 2024 . . . . .	4,208,044.98	78,939,280.79
May 2024 . . . . .	4,164,535.38	78,549,854.81
June 2024 . . . . .	4,117,100.70	78,131,961.68
July 2024 . . . . .	4,065,811.19	77,685,869.77
August 2024 . . . . .	4,010,744.89	77,211,873.09
September 2024 . . . . .	3,951,987.44	76,710,291.02
October 2024 . . . . .	3,889,631.94	76,181,468.00
November 2024 . . . . .	3,823,778.81	75,625,773.16
December 2024 . . . . .	3,754,535.66	75,043,599.91
January 2025 . . . . .	3,682,016.99	74,435,365.53
February 2025 . . . . .	3,606,344.09	73,801,510.67
March 2025 . . . . .	3,527,644.73	73,142,498.86
April 2025 . . . . .	3,446,052.92	72,458,815.97
May 2025 . . . . .	3,361,708.73	71,750,969.58
June 2025 . . . . .	3,274,757.88	71,019,488.45
July 2025 . . . . .	3,185,351.54	70,264,921.79
August 2025 . . . . .	3,093,645.98	69,487,838.64
September 2025 . . . . .	2,999,802.26	68,688,827.10
October 2025 . . . . .	2,903,985.87	67,868,493.67
November 2025 . . . . .	2,806,366.44	67,027,462.39
December 2025 . . . . .	2,709,000.49	66,180,099.32
January 2026 . . . . .	2,611,954.88	65,326,682.07
February 2026 . . . . .	2,515,298.44	64,467,496.80
March 2026 . . . . .	2,420,972.21	63,616,497.65
April 2026 . . . . .	2,328,939.16	62,773,608.35
May 2026 . . . . .	2,239,162.79	61,938,753.34
June 2026 . . . . .	2,151,607.10	61,111,857.74
July 2026 . . . . .	2,066,236.54	60,292,847.40
August 2026 . . . . .	1,983,016.09	59,481,648.82
September 2026 . . . . .	1,901,911.22	58,678,189.18
October 2026 . . . . .	1,822,887.80	57,882,396.37
November 2026 . . . . .	1,745,912.24	57,094,198.91
December 2026 . . . . .	1,670,951.38	56,313,525.99
January 2027 . . . . .	1,597,972.54	55,540,307.45
February 2027 . . . . .	1,526,943.44	54,774,473.80
March 2027 . . . . .	1,457,832.29	54,015,956.18

<u>Distribution Date</u>	<u>Class MD</u>	<u>Classes P, PV and PZ (in the aggregate)</u>
April 2027 . . . . .	\$1,390,607.72	\$53,264,686.36
May 2027 . . . . .	1,325,238.81	52,520,596.73
June 2027 . . . . .	1,261,695.03	51,783,620.35
July 2027 . . . . .	1,199,946.31	51,053,690.85
August 2027 . . . . .	1,139,962.99	50,330,742.50
September 2027 . . . . .	1,081,715.79	49,614,710.17
October 2027 . . . . .	1,025,175.87	48,905,529.34
November 2027 . . . . .	970,314.78	48,203,136.07
December 2027 . . . . .	917,104.47	47,507,467.03
January 2028 . . . . .	865,517.27	46,818,459.46
February 2028 . . . . .	815,525.90	46,136,051.20
March 2028 . . . . .	767,103.46	45,460,180.65
April 2028 . . . . .	720,223.45	44,790,786.77
May 2028 . . . . .	674,859.68	44,127,809.12
June 2028 . . . . .	630,986.40	43,471,187.77
July 2028 . . . . .	588,578.18	42,820,863.39
August 2028 . . . . .	547,609.95	42,176,777.17
September 2028 . . . . .	508,056.98	41,538,870.87
October 2028 . . . . .	469,894.93	40,907,086.75
November 2028 . . . . .	433,099.78	40,281,367.63
December 2028 . . . . .	397,647.83	39,661,656.87
January 2029 . . . . .	363,515.73	39,047,898.34
February 2029 . . . . .	330,680.48	38,440,036.41
March 2029 . . . . .	299,119.37	37,838,016.00
April 2029 . . . . .	268,810.05	37,241,782.51
May 2029 . . . . .	239,730.44	36,651,281.88
June 2029 . . . . .	211,858.84	36,066,460.50
July 2029 . . . . .	185,173.78	35,487,265.31
August 2029 . . . . .	159,654.16	34,913,643.71
September 2029 . . . . .	135,279.17	34,345,543.58
October 2029 . . . . .	112,028.26	33,782,913.31
November 2029 . . . . .	89,881.20	33,225,701.75
December 2029 . . . . .	68,818.08	32,673,858.22
January 2030 . . . . .	48,819.22	32,127,332.52
February 2030 . . . . .	29,865.26	31,586,074.90
March 2030 . . . . .	11,937.11	31,050,036.10
April 2030 . . . . .	0.00	30,519,167.28
May 2030 . . . . .	0.00	29,993,420.07
June 2030 . . . . .	0.00	29,472,746.55
July 2030 . . . . .	0.00	28,957,099.25
August 2030 . . . . .	0.00	28,446,431.11
September 2030 . . . . .	0.00	27,940,695.53
October 2030 . . . . .	0.00	27,441,662.57
November 2030 . . . . .	0.00	26,951,246.86
December 2030 . . . . .	0.00	26,469,302.47
January 2031 . . . . .	0.00	25,995,685.92
February 2031 . . . . .	0.00	25,530,256.13



<u>Distribution Date</u>	<u>Class MD</u>	<u>Classes P, PV and PZ (in the aggregate)</u>
March 2031 .....	\$ 0.00	\$25,072,874.40
April 2031 .....	0.00	24,623,404.32
May 2031 .....	0.00	24,181,711.78
June 2031 .....	0.00	23,747,664.93
July 2031 .....	0.00	23,321,134.09
August 2031 .....	0.00	22,901,991.79
September 2031 .....	0.00	22,490,112.68
October 2031 .....	0.00	22,085,373.51
November 2031 .....	0.00	21,687,653.09
December 2031 .....	0.00	21,296,832.27
January 2032 .....	0.00	20,912,793.90
February 2032 .....	0.00	20,535,422.78
March 2032 .....	0.00	20,164,605.65
April 2032 .....	0.00	19,800,231.16
May 2032 .....	0.00	19,442,189.80
June 2032 .....	0.00	19,090,373.91
July 2032 .....	0.00	18,744,677.66
August 2032 .....	0.00	18,404,996.95
September 2032 .....	0.00	18,071,229.47
October 2032 .....	0.00	17,743,274.59
November 2032 .....	0.00	17,421,033.39
December 2032 .....	0.00	17,104,408.62
January 2033 .....	0.00	16,793,304.63
February 2033 .....	0.00	16,487,627.41
March 2033 .....	0.00	16,187,284.51
April 2033 .....	0.00	15,892,185.04
May 2033 .....	0.00	15,602,239.62
June 2033 .....	0.00	15,317,360.41
July 2033 .....	0.00	15,037,461.00
August 2033 .....	0.00	14,762,456.46
September 2033 .....	0.00	14,492,263.28
October 2033 .....	0.00	14,226,799.36
November 2033 .....	0.00	13,965,983.98
December 2033 .....	0.00	13,709,737.76
January 2034 .....	0.00	13,457,982.67
February 2034 .....	0.00	13,210,642.00
March 2034 .....	0.00	12,967,640.32
April 2034 .....	0.00	12,728,903.47
May 2034 .....	0.00	12,494,358.53
June 2034 .....	0.00	12,263,933.82
July 2034 .....	0.00	12,037,558.86
August 2034 .....	0.00	11,815,164.38
September 2034 .....	0.00	11,596,682.23
October 2034 .....	0.00	11,382,045.44
November 2034 .....	0.00	11,171,188.18
December 2034 .....	0.00	10,964,045.69
January 2035 .....	0.00	10,760,554.33

<u>Distribution Date</u>	<u>Class MD</u>	<u>Classes P, PV and PZ (in the aggregate)</u>
February 2035 .....	\$ 0.00	\$10,560,651.52
March 2035 .....	0.00	10,364,275.76
April 2035 .....	0.00	10,171,366.54
May 2035 .....	0.00	9,981,864.42
June 2035 .....	0.00	9,795,710.93
July 2035 .....	0.00	9,612,848.59
August 2035 .....	0.00	9,433,220.91
September 2035 .....	0.00	9,256,772.34
October 2035 .....	0.00	9,083,448.25
November 2035 .....	0.00	8,913,194.96
December 2035 .....	0.00	8,745,959.69
January 2036 .....	0.00	8,581,690.54
February 2036 .....	0.00	8,420,336.50
March 2036 .....	0.00	8,261,847.40
April 2036 .....	0.00	8,106,173.96
May 2036 .....	0.00	7,953,267.68
June 2036 .....	0.00	7,803,080.92
July 2036 .....	0.00	7,655,566.83
August 2036 .....	0.00	7,510,679.35
September 2036 .....	0.00	7,368,373.20
October 2036 .....	0.00	7,228,603.88
November 2036 .....	0.00	7,091,327.62
December 2036 .....	0.00	6,956,501.40
January 2037 .....	0.00	6,824,082.94
February 2037 .....	0.00	6,694,030.66
March 2037 .....	0.00	6,566,303.69
April 2037 .....	0.00	6,440,861.86
May 2037 .....	0.00	6,317,665.66
June 2037 .....	0.00	6,196,676.28
July 2037 .....	0.00	6,077,855.53
August 2037 .....	0.00	5,961,165.89
September 2037 .....	0.00	5,846,570.49
October 2037 .....	0.00	5,734,033.05
November 2037 .....	0.00	5,623,517.94
December 2037 .....	0.00	5,514,990.10
January 2038 .....	0.00	5,408,415.10
February 2038 .....	0.00	5,303,759.07
March 2038 .....	0.00	5,200,988.72
April 2038 .....	0.00	5,100,071.33
May 2038 .....	0.00	5,000,974.74
June 2038 .....	0.00	4,903,667.32
July 2038 .....	0.00	4,808,117.99
August 2038 .....	0.00	4,714,296.20
September 2038 .....	0.00	4,622,171.91
October 2038 .....	0.00	4,531,715.59
November 2038 .....	0.00	4,442,898.23
December 2038 .....	0.00	4,355,691.30

<u>Distribution Date</u>	<u>Class MD</u>	<u>Classes P, PV and PZ (in the aggregate)</u>
January 2039 . . . . .	\$ 0.00	\$ 4,270,066.75
February 2039 . . . . .	0.00	4,185,997.01
March 2039 . . . . .	0.00	4,103,454.99
April 2039 . . . . .	0.00	4,022,414.06
May 2039 . . . . .	0.00	3,942,848.02
June 2039 . . . . .	0.00	3,864,731.15
July 2039 . . . . .	0.00	3,788,038.15
August 2039 . . . . .	0.00	3,712,744.15
September 2039 . . . . .	0.00	3,638,824.71
October 2039 . . . . .	0.00	3,566,255.80
November 2039 . . . . .	0.00	3,495,013.81
December 2039 . . . . .	0.00	3,425,075.52
January 2040 . . . . .	0.00	3,356,418.12
February 2040 . . . . .	0.00	3,289,019.17
March 2040 . . . . .	0.00	3,222,856.65
April 2040 . . . . .	0.00	3,157,908.87
May 2040 . . . . .	0.00	3,094,154.53
June 2040 . . . . .	0.00	3,031,572.72
July 2040 . . . . .	0.00	2,970,142.84
August 2040 . . . . .	0.00	2,909,844.67
September 2040 . . . . .	0.00	2,850,658.34
October 2040 . . . . .	0.00	2,792,564.30
November 2040 . . . . .	0.00	2,735,543.36
December 2040 . . . . .	0.00	2,679,576.63
January 2041 . . . . .	0.00	2,624,645.56
February 2041 . . . . .	0.00	2,570,731.92
March 2041 . . . . .	0.00	2,517,817.79
April 2041 . . . . .	0.00	2,465,885.54
May 2041 . . . . .	0.00	2,414,917.87
June 2041 . . . . .	0.00	2,364,897.76
July 2041 . . . . .	0.00	2,315,808.49
August 2041 . . . . .	0.00	2,267,633.60
September 2041 . . . . .	0.00	2,220,356.96
October 2041 . . . . .	0.00	2,173,962.68
November 2041 . . . . .	0.00	2,128,435.15
December 2041 . . . . .	0.00	2,083,759.03
January 2042 . . . . .	0.00	2,039,919.26
February 2042 . . . . .	0.00	1,996,901.01
March 2042 . . . . .	0.00	1,954,689.72
April 2042 . . . . .	0.00	1,913,271.08
May 2042 . . . . .	0.00	1,872,631.04
June 2042 . . . . .	0.00	1,832,755.75
July 2042 . . . . .	0.00	1,793,631.65
August 2042 . . . . .	0.00	1,755,245.38
September 2042 . . . . .	0.00	1,717,583.81
October 2042 . . . . .	0.00	1,680,634.06
November 2042 . . . . .	0.00	1,644,383.44

<u>Distribution Date</u>	<u>Class MD</u>	<u>Classes P, PV and PZ (in the aggregate)</u>
December 2042 .....	\$ 0.00	\$ 1,608,819.51
January 2043 .....	0.00	1,573,930.03
February 2043 .....	0.00	1,539,702.96
March 2043 .....	0.00	1,506,126.49
April 2043 .....	0.00	1,473,189.00
May 2043 .....	0.00	1,440,879.07
June 2043 .....	0.00	1,409,185.48
July 2043 .....	0.00	1,378,097.21
August 2043 .....	0.00	1,347,603.42
September 2043 .....	0.00	1,317,693.47
October 2043 .....	0.00	1,288,356.89
November 2043 .....	0.00	1,259,583.40
December 2043 .....	0.00	1,231,362.89
January 2044 .....	0.00	1,203,685.44
February 2044 .....	0.00	1,176,541.29
March 2044 .....	0.00	1,149,920.84
April 2044 .....	0.00	1,123,814.69
May 2044 .....	0.00	1,098,213.56
June 2044 .....	0.00	1,073,108.36
July 2044 .....	0.00	1,048,490.15
August 2044 .....	0.00	1,024,350.15
September 2044 .....	0.00	1,000,679.71
October 2044 .....	0.00	977,470.37
November 2044 .....	0.00	954,713.78
December 2044 .....	0.00	932,401.75
January 2045 .....	0.00	910,526.24
February 2045 .....	0.00	889,079.34
March 2045 .....	0.00	868,053.27
April 2045 .....	0.00	847,440.41
May 2045 .....	0.00	827,233.24
June 2045 .....	0.00	807,424.40
July 2045 .....	0.00	788,006.66
August 2045 .....	0.00	768,972.88
September 2045 .....	0.00	750,316.07
October 2045 .....	0.00	732,029.38
November 2045 .....	0.00	714,106.04
December 2045 .....	0.00	696,539.42
January 2046 .....	0.00	679,323.02
February 2046 .....	0.00	662,450.42
March 2046 .....	0.00	645,915.33
April 2046 .....	0.00	629,711.59
May 2046 .....	0.00	613,833.10
June 2046 .....	0.00	598,273.91
July 2046 .....	0.00	583,028.15
August 2046 .....	0.00	568,090.08
September 2046 .....	0.00	553,454.02
October 2046 .....	0.00	539,114.42

<u>Distribution Date</u>	<u>Class MD</u>	<u>Classes P, PV and PZ (in the aggregate)</u>
November 2046 .....	\$ 0.00	\$ 525,065.83
December 2046 .....	0.00	511,302.87
January 2047 .....	0.00	497,820.27
February 2047 .....	0.00	484,612.86
March 2047 .....	0.00	471,675.56
April 2047 .....	0.00	459,003.35
May 2047 .....	0.00	446,591.34
June 2047 .....	0.00	434,434.71
July 2047 .....	0.00	422,528.70
August 2047 .....	0.00	410,868.68
September 2047 .....	0.00	399,450.06
October 2047 .....	0.00	388,268.36
November 2047 .....	0.00	377,319.16
December 2047 .....	0.00	366,598.13
January 2048 .....	0.00	356,101.01
February 2048 .....	0.00	345,823.62
March 2048 .....	0.00	335,761.85
April 2048 .....	0.00	325,911.67
May 2048 .....	0.00	316,269.11
June 2048 .....	0.00	306,830.27
July 2048 .....	0.00	297,591.34
August 2048 .....	0.00	288,548.55
September 2048 .....	0.00	279,698.22
October 2048 .....	0.00	271,036.72
November 2048 .....	0.00	262,560.49
December 2048 .....	0.00	254,266.04
January 2049 .....	0.00	246,149.92
February 2049 .....	0.00	238,208.76
March 2049 .....	0.00	230,439.26
April 2049 .....	0.00	222,838.16
May 2049 .....	0.00	215,402.25
June 2049 .....	0.00	208,128.41
July 2049 .....	0.00	201,013.54
August 2049 .....	0.00	194,054.63
September 2049 .....	0.00	187,248.69
October 2049 .....	0.00	180,592.80
November 2049 .....	0.00	174,084.10
December 2049 .....	0.00	167,719.77
January 2050 .....	0.00	161,497.04
February 2050 .....	0.00	155,413.19
March 2050 .....	0.00	149,465.56
April 2050 .....	0.00	143,651.52
May 2050 .....	0.00	137,968.51
June 2050 .....	0.00	132,413.99
July 2050 .....	0.00	126,985.49
August 2050 .....	0.00	121,680.56
September 2050 .....	0.00	116,496.81

<u>Distribution Date</u>	<u>Class MD</u>	<u>Classes P, PV and PZ (in the aggregate)</u>
October 2050 . . . . .	\$ 0.00	\$ 111,431.89
November 2050 . . . . .	0.00	106,483.51
December 2050 . . . . .	0.00	101,649.37
January 2051 . . . . .	0.00	96,927.28
February 2051 . . . . .	0.00	92,315.03
March 2051 . . . . .	0.00	87,810.49
April 2051 . . . . .	0.00	83,411.54
May 2051 . . . . .	0.00	79,116.13
June 2051 . . . . .	0.00	74,922.21
July 2051 . . . . .	0.00	70,827.79
August 2051 . . . . .	0.00	66,830.93
September 2051 . . . . .	0.00	62,929.68
October 2051 . . . . .	0.00	59,122.18
November 2051 . . . . .	0.00	55,406.55
December 2051 . . . . .	0.00	51,780.99
January 2052 . . . . .	0.00	48,243.71
February 2052 . . . . .	0.00	44,792.96
March 2052 . . . . .	0.00	41,427.01
April 2052 . . . . .	0.00	38,144.17
May 2052 . . . . .	0.00	34,942.79
June 2052 . . . . .	0.00	31,821.23
July 2052 . . . . .	0.00	28,777.90
August 2052 . . . . .	0.00	25,811.23
September 2052 . . . . .	0.00	22,919.67
October 2052 . . . . .	0.00	20,101.71
November 2052 . . . . .	0.00	17,355.88
December 2052 . . . . .	0.00	14,680.70
January 2053 . . . . .	0.00	12,074.76
February 2053 . . . . .	0.00	9,536.64
March 2053 . . . . .	0.00	7,064.96
April 2053 . . . . .	0.00	4,658.39
May 2053 . . . . .	0.00	2,315.58
June 2053 . . . . .	0.00	1,142.08
July 2053 and thereafter . . . . .	0.00	0.00

## Underlying Certificates

Trust Asset Group	Issuer	Series	Class	Issue Date	CUSIP Number	Interest Rate	Interest Type(1)	Final Distribution Date	Principal Type(1)	Original Principal or Notional Balance of Class	Underlying Certificate Factor(2)	Principal or Notional Balance in Trust	Percentage of Class in Trust	Ginnie Mae I or II
11	Ginnie Mae	2019-110	FG	September 30, 2019	38381YWW6	(4)	FLT	September 2049	PT	\$130,000,000	0.43079093	\$ 43,079,093.00	76.9230769231%	II
11	Ginnie Mae	2019-110	SG	September 30, 2019	38381YWW3	(4)	INV/IO	September 2049	NTL(PT)	130,000,000	0.43079093	43,079,093.00	76.9230769231	II
12	Ginnie Mae	2022-208	PL(3)	September 30, 2022	38383L2N9	5.00%	FIX	December 2052	PAC	3,832,824	1.00000000	3,832,824.00	100.0000000000	II
12	Ginnie Mae	2023-053	L(3)	April 28, 2023	38383XK29	5.00	FIX	April 2053	SEQ	24,203,421	1.00000000	4,203,421.00	17.3670531947	II
12	Ginnie Mae	2023-063	LDC(3)	May 30, 2023	38384ACK7	5.00	FIX	May 2053	SEQ	26,467,392	1.00000000	26,467,392.00	100.0000000000	II
13	Ginnie Mae	2023-082	MH(3)	June 30, 2023	38384AU92	5.50	FIX	June 2053	PT	105,000,000	0.99424388	104,395,607.40	100.0000000000	II

- (1) As defined under “Class Types” in Appendix I to the Base Offering Circular.
- (2) Underlying Certificate Factors are as of August 2023.
- (3) MX Class.
- (4) The Interest Rate will be calculated as described under “Terms Sheet — Interest Rates” in the related Underlying Certificate Disclosure Document.



**Exhibit B**

**Characteristics of the Mortgage Loans Underlying the Group 2 and 4 Trust Assets<sup>(1)</sup>**

<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<sup>(2)</sup></u>
<b>Group 2 Trust Assets<sup>(3)</sup></b>				
BX6189 .....	\$ 56,379.92	451	11	6.000%
CB0630 .....	265,827.15	466	12	5.889
CJ6560 .....	138,597.03	470	10	6.000
CL2998 .....	3,638,899.14	468	8	5.938
CL6592 .....	263,400.24	464	11	6.000
CN2551 .....	271,771.27	468	12	5.897
CN2831 .....	299,868.58	467	13	5.750
CN5374 .....	6,639,944.92	466	11	5.812
CN6557 .....	271,646.48	470	10	6.000
CN6561 .....	186,738.59	469	11	6.000
CN9078 .....	959,429.02	467	12	5.830
CO4248 .....	131,769.84	468	12	5.750
CO5773 .....	84,576.16	440	12	5.750
CO6978 .....	278,823.51	463	12	6.250
CO7737 .....	404,941.87	470	10	6.058
CP0695 .....	903,507.33	456	13	5.857
CP1543 .....	147,037.44	404	11	5.750
CP1705 .....	199,443.46	470	10	5.750
CP1954 .....	400,497.83	470	10	6.078
CP2366 .....	763,037.60	468	12	6.250
CP2370 .....	793,179.67	468	12	6.250
CP2851 .....	58,173.31	462	11	5.750
CP2940 .....	311,352.85	463	13	5.750
CP3986 .....	254,220.56	470	10	5.956
CP4275 .....	534,506.33	465	13	5.750
CP4317 .....	207,884.80	467	11	6.000
CP4731 .....	6,585,584.06	472	8	5.948
CP5961 .....	3,566,238.14	469	11	5.855
CP6184 .....	9,904,213.83	467	12	5.750
CP6185 .....	9,260,975.28	466	11	6.000
CP6246 .....	59,874.97	468	12	5.750
CP6902 .....	220,240.20	435	12	6.000
CP6956 .....	289,143.37	463	11	6.000
CP7334 .....	236,269.84	468	12	5.750
CP7526 .....	457,202.47	468	12	6.000
CP9365 .....	158,401.41	470	10	5.875
CP9964 .....	242,153.52	469	11	5.989
CP9982 .....	61,569.71	470	10	6.125
CQ1184 .....	293,039.07	468	11	6.000
CQ1911 .....	1,428,209.16	469	10	5.985
CQ1918 .....	341,289.57	469	11	6.000
CQ1922 .....	260,510.35	469	11	6.000

<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<sup>(2)</sup></u>
CQ1930 .....	\$ 490,054.71	469	11	5.928%
CQ1935 .....	712,868.29	469	11	6.043
CQ1942 .....	995,561.17	468	12	5.924
CQ1954 .....	304,510.53	467	12	6.090
CQ1962 .....	668,862.82	468	12	6.250
CQ2436 .....	42,924.99	469	11	5.750
CQ2846 .....	148,861.16	463	12	5.750
CQ3376 .....	2,526,332.69	469	11	5.839
CQ3448 .....	2,079,792.00	468	11	5.979
CQ3997 .....	94,219.01	467	13	5.750
CQ4665 .....	74,839.01	469	11	5.750
CQ6823 .....	220,645.25	468	12	6.250
CQ7013 .....	396,780.75	468	12	6.000
CQ7014 .....	116,452.81	468	12	6.000
CQ7620 .....	3,003,065.22	471	8	5.872
CQ8642 .....	147,077.66	468	12	5.750
CQ9985 .....	542,417.49	468	12	5.902
CR0107 .....	171,903.57	435	8	5.750
CR1533 .....	309,496.08	472	8	6.125
CR1558 .....	317,521.32	466	8	5.847
CR3198 .....	904,594.55	468	10	6.178
CR3320 .....	160,006.56	463	11	6.000
CR5115 .....	229,021.41	470	10	6.000
CR5119 .....	857,861.42	463	10	6.094
CR5149 .....	544,938.53	470	10	6.030
CR5152 .....	365,026.76	470	10	6.000
CR5186 .....	132,584.27	474	5	6.130
CR6837 .....	477,573.97	469	11	6.077
CR6867 .....	49,141.38	469	11	6.000
CR9274 .....	356,735.38	421	9	5.818
CS0337 .....	203,631.46	469	11	6.000
CS0501 .....	557,264.73	465	10	5.966
CS0530 .....	1,296,842.62	455	10	5.957
CS0534 .....	1,016,943.31	460	10	5.948
CS1951 .....	712,120.25	469	10	5.943
CS3910 .....	1,780,668.48	472	8	5.907
CS3931 .....	1,270,513.44	470	7	5.954
CS3935 .....	400,925.01	473	7	6.007
CS4186 .....	135,676.49	462	13	6.000
CS4212 .....	1,062,852.91	469	11	6.120
CS4518 .....	201,480.85	467	13	5.750
CS4533 .....	152,924.68	469	11	5.750
CS4843 .....	88,081.40	469	10	6.000
CS4847 .....	327,923.68	469	11	5.869
CS4850 .....	238,238.04	468	12	6.250
CS4906 .....	47,185.56	468	12	6.250
CS5784 .....	457,887.89	460	11	5.831

<b>Pool Number</b>	<b>Principal Balance</b>	<b>Weighted Average Remaining Term to Maturity (in months)</b>	<b>Weighted Average Loan Age (in months)</b>	<b>Weighted Average Mortgage Rate<sup>(2)</sup></b>
CS5985 .....	\$ 280,823.52	470	10	5.875%
CS6874 .....	110,296.90	470	10	6.125
CS7050 .....	140,560.93	468	12	6.000
CS7546 .....	1,127,530.75	443	8	5.863
CS7616 .....	1,734,411.52	441	7	5.916
CS8297 .....	388,255.48	467	10	5.875
CS9203 .....	219,571.66	474	5	6.103
CS9546 .....	254,268.11	471	9	6.100
CS9583 .....	597,537.24	467	10	6.139
CT2410 .....	117,991.42	470	10	5.750
CT2494 .....	86,349.25	467	13	6.000
CT2763 .....	433,350.56	468	12	6.025
CT2969 .....	117,310.85	472	8	5.750
CT3118 .....	541,744.38	470	10	5.945
CT4172 .....	2,089,823.19	458	10	6.026
CT4231 .....	346,290.08	470	10	6.034
CT4341 .....	251,924.35	455	5	6.125
CT4432 .....	893,487.69	459	5	6.154
CT5331 .....	303,366.34	475	5	6.125
CT5334 .....	938,280.82	466	7	6.081
CT5379 .....	467,239.11	469	6	6.025
CT5411 .....	1,225,000.18	474	6	6.044
CT5435 .....	52,445.56	472	8	6.000
CT5591 .....	870,793.94	476	4	5.951
CT5611 .....	472,735.17	471	8	6.164
CT5667 .....	164,888.29	475	5	5.875
CT5672 .....	804,819.73	475	5	5.989
CT5979 .....	67,448.60	468	12	5.750
CT5986 .....	91,328.26	468	12	5.750
CT8466 .....	145,046.10	475	5	6.125
CU0240 .....	462,198.54	469	11	6.000
CU0241 .....	110,691.78	469	11	5.750
CU0970 .....	778,551.18	456	3	5.830
CU1053 .....	3,626,083.19	472	2	5.846
CU1135 .....	17,563,168.08	467	2	5.878
CU1301 .....	165,426.89	475	5	6.120
CU1342 .....	1,095,581.54	469	11	6.136
CU1399 .....	412,715.55	467	11	6.104
CU2244 .....	175,980.71	468	12	5.750
CU2658 .....	235,623.71	469	11	5.795
CU2790 .....	130,854.29	468	12	5.750
CU3860 .....	268,016.60	464	6	6.125
CU3883 .....	226,430.48	467	13	6.250
CU4065 .....	166,985.53	475	5	6.125
CU4070 .....	112,943.34	421	9	5.990
CU5096 .....	189,669.43	469	11	6.000
CU6495 .....	493,684.17	465	3	5.990

<b>Pool Number</b>	<b>Principal Balance</b>	<b>Weighted Average Remaining Term to Maturity (in months)</b>	<b>Weighted Average Loan Age (in months)</b>	<b>Weighted Average Mortgage Rate<sup>(2)</sup></b>
CV0949 .....	\$ 229,459.21	475	5	6.130%
CV1062 .....	890,204.16	477	3	6.250
CV1140 .....	90,181.95	477	3	6.250
CV1177 .....	165,847.66	478	2	6.250
CV1667 .....	533,221.56	465	10	5.926
CV1675 .....	1,018,262.09	469	9	5.984
CV1704 .....	555,418.04	466	9	5.946
CV1900 .....	142,778.81	477	3	6.250
CV1916 .....	158,967.37	474	5	6.125
CV4194 .....	165,461.19	469	11	5.750
CV5596 .....	1,459,491.06	478	2	6.014
CV5635 .....	381,330.07	475	4	5.999
CV5646 .....	773,030.03	474	6	6.085
CV5656 .....	5,815,855.93	478	2	6.018
CV6072 .....	269,257.51	470	10	6.125
CV9805 .....	325,646.27	470	10	6.125
CW2068 .....	626,683.68	475	5	6.077
CW2075 .....	429,453.13	478	2	5.941
CW2096 .....	7,134,418.39	478	2	6.023
CW3272 .....	368,130.28	476	4	6.250
	<u>\$142,305,824.79</u>			
<b>Group 4 Trust Assets<sup>(3)</sup></b>				
CI4345 .....	\$ 262,504.90	472	7	5.564%
CJ6566 .....	18,471.84	469	11	5.625
CK5302 .....	27,297.94	469	11	5.500
CK7260 .....	50,852.96	469	11	5.375
CL3437 .....	140,883.31	468	11	5.367
CL3620 .....	35,980.99	468	12	5.500
CM2996 .....	26,999.09	469	11	5.250
CM3005 .....	10,601.35	445	11	5.500
CN2832 .....	25,577.31	468	12	5.500
CN5126 .....	9,484.52	467	13	5.250
CN5376 .....	368,847.96	466	11	5.356
CN5672 .....	46,658.00	469	11	5.375
CN5866 .....	19,051.09	469	11	5.250
CN6566 .....	20,984.21	469	11	5.750
CN9077 .....	34,631.53	469	11	5.500
CO1637 .....	14,689.94	469	11	5.500
CO1922 .....	30,366.56	420	12	5.625
CO4369 .....	35,315.82	466	14	5.250
CO5616 .....	21,264.48	470	10	5.625
CO6202 .....	19,697.05	469	11	5.750
CO6669 .....	21,336.35	464	15	5.625
CO6977 .....	47,802.89	463	12	5.750
CO7519 .....	97,799.11	465	14	5.250
CP0413 .....	23,319.85	469	11	5.250

<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<sup>(2)</sup></u>
CP1536 .....	\$ 43,377.96	467	11	5.500%
CP1653 .....	18,131.38	467	12	5.250
CP2391 .....	25,298.59	468	12	5.750
CP2479 .....	17,077.57	470	10	5.500
CP3108 .....	50,495.61	468	12	5.750
CP3953 .....	253,489.64	467	11	5.567
CP4268 .....	76,491.41	467	13	5.625
CP4338 .....	25,483.72	469	11	5.500
CP4773 .....	238,362.84	472	8	5.528
CP4908 .....	29,686.18	466	13	5.750
CP5960 .....	18,994.35	468	12	5.250
CP6183 .....	195,372.13	469	11	5.268
CP6343 .....	1,282,055.87	469	10	5.625
CP6541 .....	1,476,118.70	468	10	5.574
CP6542 .....	1,358,614.04	464	10	5.625
CP6901 .....	73,604.52	465	11	5.302
CP6905 .....	92,758.87	462	10	5.459
CP6955 .....	17,728.18	469	11	5.500
CP7162 .....	59,398.47	467	13	5.500
CP8767 .....	13,858.96	446	14	5.250
CP9364 .....	80,115.78	469	10	5.500
CP9955 .....	12,983.52	469	11	5.625
CP9963 .....	83,314.00	468	11	5.517
CP9976 .....	20,065.59	469	11	5.625
CQ0540 .....	24,777.82	466	14	5.300
CQ1183 .....	9,722.39	469	11	5.540
CQ1912 .....	22,215.80	470	10	5.500
CQ1919 .....	107,502.30	468	12	5.627
CQ1923 .....	191,191.33	469	10	5.687
CQ1936 .....	69,846.77	468	11	5.685
CQ1943 .....	11,886.44	469	11	5.250
CQ1963 .....	90,924.44	467	12	5.750
CQ2749 .....	17,718.50	468	11	5.250
CQ2845 .....	10,266.13	466	14	5.250
CQ2857 .....	867,837.66	464	11	5.368
CQ2860 .....	61,176.41	468	12	5.500
CQ2864 .....	132,481.55	463	12	5.250
CQ2865 .....	31,819.32	470	10	5.625
CQ2938 .....	60,088.04	464	11	5.500
CQ3159 .....	132,870.52	469	11	5.500
CQ3196 .....	36,414.29	467	13	5.250
CQ3249 .....	40,622.76	470	10	5.625
CQ3375 .....	709,914.35	467	11	5.459
CQ3424 .....	114,876.79	469	11	5.462
CQ3491 .....	221,044.57	446	10	5.607
CQ3513 .....	137,066.72	469	10	5.625
CQ4097 .....	71,649.08	469	11	5.500

<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<sup>(2)</sup></u>
CQ4184 .....	\$ 69,909.11	469	11	5.500%
CQ4204 .....	124,536.25	469	11	5.350
CQ4407 .....	666,496.80	468	11	5.659
CQ4667 .....	47,882.17	469	11	5.500
CQ5495 .....	173,605.06	469	11	5.250
CQ6148 .....	495,173.31	464	10	5.545
CQ6671 .....	266,179.44	465	11	5.365
CQ6692 .....	88,920.43	470	10	5.500
CQ6954 .....	50,458.93	469	11	5.625
CQ6975 .....	52,599.51	469	11	5.625
CQ7602 .....	175,469.88	472	8	5.500
CQ7605 .....	32,828.13	472	8	5.500
CQ7629 .....	173,053.58	472	8	5.528
CQ8010 .....	1,853,339.17	466	11	5.678
CQ8329 .....	47,793.28	470	10	5.625
CQ8722 .....	38,068.65	469	11	5.250
CQ8834 .....	193,856.55	467	11	5.459
CQ9991 .....	60,008.31	469	11	5.500
CQ9998 .....	65,147.09	468	12	5.250
CR0784 .....	98,170.23	470	10	5.625
CR2057 .....	30,167.66	469	11	5.500
CR2324 .....	33,645.19	467	13	5.625
CR2580 .....	20,774.47	469	11	5.625
CR2595 .....	121,603.71	469	11	5.625
CR3319 .....	49,634.66	461	11	5.500
CR4251 .....	271,471.23	469	11	5.625
CR4547 .....	195,105.06	449	9	5.433
CR4650 .....	230,043.46	469	11	5.355
CR4664 .....	100,523.14	469	11	5.393
CR4719 .....	247,135.47	469	11	5.360
CR5120 .....	77,906.23	469	11	5.540
CR5150 .....	62,515.68	469	10	5.500
CR5153 .....	123,649.48	470	10	5.625
CR6523 .....	178,865.06	468	12	5.500
CR6525 .....	24,767.19	446	13	5.625
CR7992 .....	386,803.93	466	10	5.508
CR8065 .....	294,724.60	470	10	5.674
CR8402 .....	88,468.13	469	11	5.341
CR9273 .....	1,126,547.32	446	7	5.515
CR9526 .....	94,311.16	417	9	5.625
CS1809 .....	450,457.27	463	11	5.679
CS2914 .....	49,673.32	470	10	5.625
CS3557 .....	18,823.57	469	9	5.500
CS3571 .....	27,045.69	469	11	5.375
CS3933 .....	29,233.09	472	7	5.625
CS3936 .....	275,851.53	472	7	5.591
CS4191 .....	69,294.99	469	11	5.375

<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<sup>(2)</sup></u>
CS4218 .....	\$ 137,794.33	464	11	5.474%
CS4517 .....	70,748.61	468	12	5.250
CS4532 .....	24,532.97	414	12	5.500
CS5454 .....	322,259.07	469	11	5.667
CS5783 .....	196,013.61	469	10	5.406
CS5813 .....	346,576.65	470	9	5.625
CS7529 .....	1,852,673.44	454	6	5.499
CS7670 .....	3,124,717.31	457	5	5.386
CS8615 .....	97,343.91	471	5	5.375
CS9003 .....	120,736.26	472	8	5.625
CS9091 .....	154,071.31	467	11	5.533
CS9252 .....	84,501.70	464	5	5.375
CS9358 .....	51,921.12	465	9	5.625
CS9578 .....	54,575.95	470	10	5.571
CT2371 .....	62,377.07	469	11	5.500
CT2762 .....	317,744.63	469	11	5.562
CT5303 .....	122,677.94	470	7	5.625
CT5312 .....	181,861.71	471	7	5.563
CT5314 .....	51,530.70	473	7	5.625
CT5353 .....	38,319.85	447	7	5.625
CT5408 .....	89,760.02	474	6	5.625
CT5434 .....	33,439.11	473	7	5.625
CT5585 .....	62,539.18	474	6	5.677
CT5609 .....	738,900.16	475	5	5.431
CT5638 .....	55,670.86	466	13	5.375
CT5683 .....	110,552.67	468	12	5.340
CT5689 .....	146,848.61	469	11	5.750
CT5969 .....	66,908.96	468	12	5.500
CT6532 .....	1,698,079.39	456	4	5.524
CT6690 .....	71,284.69	468	12	5.500
CT6929 .....	1,487,983.50	462	11	5.433
CT6930 .....	55,841.10	462	12	5.382
CT6937 .....	41,142.88	470	10	5.625
CT6990 .....	1,073,778.77	465	11	5.352
CT7251 .....	71,538.60	470	10	5.500
CT8350 .....	112,187.72	469	11	5.750
CT8458 .....	101,862.59	464	5	5.250
CT8470 .....	60,132.71	435	5	5.250
CT8723 .....	223,207.83	467	11	5.250
CU0968 .....	3,753,892.02	452	3	5.548
CU1338 .....	539,772.92	475	5	5.416
CU1346 .....	82,136.22	474	6	5.362
CU1377 .....	59,081.39	468	12	5.500
CU1389 .....	28,726.36	475	5	5.750
CU1438 .....	24,009.66	469	11	5.500
CU1454 .....	53,337.10	424	10	5.625
CU1495 .....	22,421.14	469	11	5.375

<b>Pool Number</b>	<b>Principal Balance</b>	<b>Weighted Average Remaining Term to Maturity (in months)</b>	<b>Weighted Average Loan Age (in months)</b>	<b>Weighted Average Mortgage Rate<sup>(2)</sup></b>
CU2293 .....	\$ 32,422.40	467	11	5.750%
CU2606 .....	18,349.91	185	11	5.500
CU2630 .....	80,420.53	469	11	5.324
CU4833 .....	154,681.23	467	13	5.441
CU5029 .....	36,876.88	459	13	5.625
CU5094 .....	54,785.94	454	11	5.500
CU6494 .....	171,978.22	466	3	5.542
CU7520 .....	558,331.79	471	6	5.572
CU7539 .....	185,246.47	477	3	5.718
CU7547 .....	1,211,181.04	476	4	5.481
CU7584 .....	848,039.64	476	4	5.571
CU7683 .....	76,986.81	475	5	5.625
CU7690 .....	41,044.01	466	14	5.375
CU8321 .....	43,897.61	470	10	5.625
CU8569 .....	93,867.93	468	11	5.250
CU9586 .....	129,217.41	469	11	5.250
CV0950 .....	90,210.03	466	5	5.750
CV1502 .....	96,581.11	468	12	5.586
CV1645 .....	479,335.53	466	9	5.503
CV1911 .....	46,390.65	473	7	5.250
CV4690 .....	36,574.54	479	1	5.250
CV5448 .....	1,115,146.25	476	3	5.611
CV5459 .....	24,013.25	469	11	5.500
CV5464 .....	51,512.86	469	11	5.750
CV5520 .....	626,051.23	477	3	5.574
CV5554 .....	658,556.96	476	4	5.429
CV5571 .....	1,060,530.95	476	3	5.545
CV5611 .....	81,406.30	477	3	5.720
CV5648 .....	574,263.96	478	2	5.540
CV9327 .....	57,123.23	468	12	5.500
CV9804 .....	390,394.65	464	4	5.377
CW2074 .....	3,150,391.57	477	2	5.568
CW2089 .....	3,934,241.06	477	3	5.580
CW2117 .....	348,393.26	471	9	5.670
CW2134 .....	360,351.69	478	2	5.575
CW2143 .....	32,766.95	464	14	5.375
	<u>\$ 54,829,327.23</u>			

(1) As of August 1, 2023.

(2) The Mortgage Loans underlying the Group 2 and 4 Trust Assets may bear interest at rates ranging from 0.25% to 1.50% per annum above the related Certificate Rate.

(3) The Mortgage Loans underlying the Group 2 and 4 Trust Assets are modified loans with terms greater than or equal to 361 but not more than 480 months from the pool issuance date.





**\$1,594,604,910**

**Government National  
Mortgage Association**

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***OFFERING CIRCULAR SUPPLEMENT***  
**August 24, 2023**

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**J.P. Morgan**  
**Mischler Financial Group, Inc.**