

**\$3,138,348,043**  
**Government National Mortgage Association**  
**GINNIE MAE®**  
**Guaranteed REMIC Pass-Through Securities**  
**and MX Securities**  
**Ginnie Mae REMIC Trust 2021-193**

**The Securities**

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

**The Ginnie Mae Guaranty**

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

**The Trust and its Assets**

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

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

**See “Risk Factors” beginning on page S-14 which highlights some of these risks.**

The Sponsor and the Co-Sponsor will offer the securities from time to time in negotiated transactions at varying prices. We expect the closing date to be November 30, 2021.

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

The securities are exempt from registration under the Securities Act of 1933 and are “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(1)	\$ 25,000,000	(5)	PT	FLT	38383DRR1	November 2051
DS	25,000,000	(5)	NTL(PT)	INV/IO	38383DRS9	November 2051
DT(1)	25,000,000	(5)	NTL(PT)	INV/IO	38383DRT7	November 2051
<b>Security Group 2</b>						
GF	70,738,244	(5)	PT	FLT	38383DRU4	November 2051
GS	70,738,244	(5)	NTL(PT)	INV/IO	38383DRV2	November 2051
<b>Security Group 3</b>						
CS(1)	500,000,000	(5)	NTL(PT)	INV/IO	38383DRW0	November 2051
EF	500,000,000	(5)	PT	FLT	38383DRX8	November 2051
ET	60,000,000	(5)	NTL(PT)	INV/IO	38383DRY6	November 2051
GT	300,000,000	2.00%	PT	FIX	38383DRZ3	November 2051
KF	100,000,000	(5)	PT	FLT	38383DSA7	November 2051
KT	100,000,000	(5)	NTL(PT)	INV/IO	38383DSB5	November 2051
SC(1)	200,000,000	(5)	NTL(PT)	INV/IO	38383DSC3	November 2051
YF	200,000,000	(5)	PT	FLT	38383DSD1	November 2051
YS	100,000,000	(5)	NTL(PT)	INV/IO	38383DSE9	November 2051
<b>Security Group 4</b>						
EA	22,767,825	1.00	SC/PAC/AD	FIX	38383DSF6	February 2048
EI	15,178,550	3.00	NTL(SC/PAC/AD)	FIX/IO	38383DSG4	February 2048
EZ	2,713,235	3.00	SC/SUP	FIX/Z	38383DSH2	February 2048
<b>Security Group 5</b>						
A(1)	72,250,000	3.00	PAC/AD	FIX	38383DSJ8	November 2049
B(1)	154,913,659	3.00	PAC/AD	FIX	38383DSK5	November 2049
C(1)	145,750,000	3.00	PAC/AD	FIX	38383DSL3	November 2049
ZW	66,622,659	3.00	CPT/PAC/AD/SUP	FIX/Z	38383DSM1	November 2049
<b>Security Group 6</b>						
QF(1)	74,747,961	(5)	PT	FLT	38383DSN9	November 2051
QT(1)	74,747,961	(5)	NTL(PT)	INV/IO	38383DSP4	November 2051
SG	74,747,961	(5)	NTL(PT)	INV/IO	38383DSQ2	November 2051
<b>Security Group 7</b>						
AJ	185,323,995	1.50	PT	FIX	38383DSR0	November 2051
AM	185,072,829	1.50	PT	FIX	38383DSR8	November 2051
IB(1)	92,536,414	3.00	NTL(PT)	FIX/IO	38383DST6	November 2051
IJ(1)	92,661,997	3.00	NTL(PT)	FIX/IO	38383DSU3	November 2051
<b>Security Group 8</b>						
G(1)	92,161,056	3.00	PAC/AD	FIX	38383DSV1	June 2051
P(1)	50,000,000	3.00	PAC/AD	FIX	38383DSW9	June 2051
WZ(1)	25,339,173	3.00	CPT/PAC/AD/SUP	FIX/Z	38383DSX7	June 2051
XG(1)	31,000,000	3.00	PAC/AD	FIX	38383DSY5	June 2051
<b>Security Group 9</b>						
FE	50,000,000	(5)	PT	FLT	38383DSZ2	November 2051
SE	50,000,000	(5)	NTL(PT)	INV/IO	38383DTA6	November 2051
<b>Security Group 10</b>						
IM(1)	10,741,513	5.50	NTL(PT)	FIX/IO	38383DTB4	March 2048
IW(1)	21,076,668	5.50	NTL(PT)	FIX/IO	38383DTC2	March 2048
ME	50,000,000	2.00	PT	FIX	38383DTD0	March 2048
<b>Security Group 11</b>						
K(1)	200,000,000	3.00	PAC/AD	FIX	38383DTE8	February 2050
W(1)	51,500,000	3.00	PAC/AD	FIX	38383DTF5	February 2050
ZX(1)	36,073,233	3.00	CPT/PAC/AD/SUP	FIX/Z	38383DTG3	February 2050
<b>Security Group 12</b>						
AN	75,000,000	2.00	SEQ/AD	FIX	38383DTH1	August 2048
IC	25,000,000	3.00	NTL(SEQ/AD)	FIX/IO	38383DTJ7	August 2048
ZE	6,850,704	3.00	SEQ	FIX/Z	38383DTK4	November 2051
<b>Security Group 13</b>						
AQ	100,000,000	1.75	PT	FIX	38383DTL2	November 2051
FW	150,000,000	(5)	PT	FLT	38383DTM0	November 2051
SW	150,000,000	(5)	NTL(PT)	INV/IO	38383DTN8	November 2051
<b>Security Group 14</b>						
HA	62,412,000	1.70	SEQ	FIX	38383DTP3	September 2050
HB	44,261,841	1.70	SEQ	FIX	38383DTQ1	September 2050
HI(1)	19,971,840	2.50	NTL(SEQ)	FIX/IO	38383DTR9	September 2050
HV(1)	1,154,687	2.50	SEQ/AD	FIX	38383DTS7	May 2033
HZ(1)	3,499,316	2.50	SEQ	FIX/Z	38383DTT5	November 2051
IH(1)	14,163,789	2.50	NTL(SEQ)	FIX/IO	38383DTU2	September 2050
VH(1)	792,855	2.50	SEQ/AD	FIX	38383DTV0	May 2033
VZ(1)	2,402,771	2.50	SEQ	FIX/Z	38383DTW8	November 2051

(Cover continued on next page)

**J.P. Morgan**

**Mischler Financial Group, Inc.**

The date of this Offering Circular Supplement is November 23, 2021.

Class of REMIC Securities	Original Principal Balance(2)	Interest Rate	Principal Type(3)	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
Residual RR .....	0	0.00	NPR	NPR	38383DTX6	November 2051

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

## AVAILABLE INFORMATION

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

- this Offering Circular Supplement (this “Supplement”),
- the Base Offering Circular and
- in the case of the Group 4 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:** November 30, 2021

**Distribution Date:** The 20th day of each month or, if the 20th day is not a Business Day, the first Business Day thereafter, commencing in December 2021.

**Trust Assets:**

<u>Trust Asset Group or Subgroup<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	3.00%	30
2	Ginnie Mae II	4.00%	30
3	Ginnie Mae II	2.50%	30
4	Underlying Certificates	(1)	(1)
5A	Ginnie Mae II	3.00%	30
5B	Ginnie Mae II	3.00%	30
5C	Ginnie Mae II	3.00%	30
6	Ginnie Mae II	4.50%	30
7A	Ginnie Mae II	3.00%	30
7B	Ginnie Mae II	3.00%	30
8A	Ginnie Mae II	3.00%	30
8B	Ginnie Mae II	3.00%	30
8C	Ginnie Mae II	3.00%	30
9	Ginnie Mae II	2.50%	30
10A	Ginnie Mae II	5.50%	15 <sup>(3)</sup>
10B	Ginnie Mae II	5.50%	30
11	Ginnie Mae II	3.00%	30
12	Ginnie Mae II	3.00%	30
13	Ginnie Mae II	2.50%	30
14A	Ginnie Mae II	2.50%	30
14B	Ginnie Mae II	2.50%	30

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

(2) The Group 5, 7, 8, 10 and 14 Trust Assets consist of the enumerated subgroups (each, a “Subgroup”).

(3) Pool Number 785672 included in the Subgroup 10A Trust Assets had a weighted average original loan term of 359 on its issuance date.

**Security Groups:** This series of Securities consists of multiple Security Groups (each, a “Group”), as shown on the front cover of this Supplement and on Schedule I to this Supplement. Except in the case of certain MX Classes in Groups 5, 8 and 11, payments on each Group will be based solely on payments on the Trust Asset Group with the same numerical designation.

**Assumed Characteristics of the Mortgage Loans Underlying the Group 1 through 3, 6, 7, 9 and 12 through 14 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>			
\$25,000,000	357	2	3.468%
<b>Group 2 Trust Assets</b>			
\$70,738,244 <sup>(3)</sup>	309	49	4.416%
<b>Group 3 Trust Assets</b>			
\$1,100,000,000	356	1	2.936%
<b>Group 6 Trust Assets</b>			
\$74,747,961 <sup>(3)</sup>	314	44	4.903%
<b>Subgroup 7A Trust Assets</b>			
\$185,323,995	327	29	3.559%
<b>Subgroup 7B Trust Assets</b>			
\$185,072,829	329	28	3.536%
<b>Group 9 Trust Assets</b>			
\$50,000,000	358	1	2.925%
<b>Group 12 Trust Assets</b>			
\$81,850,704	356	1	3.426%
<b>Group 13 Trust Assets</b>			
\$250,000,000	356	1	2.938%
<b>Subgroup 14A Trust Assets</b>			
\$67,066,003 <sup>(4)</sup>	358	1	2.906%
<b>Subgroup 14B Trust Assets</b>			
\$47,457,467 <sup>(4)</sup>	358	1	2.902%

<sup>(1)</sup> As of November 1, 2021.

<sup>(2)</sup> The Mortgage Loans underlying the Group 1 through 3, 6, 7, 9 and 12 through 14 Trust Assets may bear interest at rates ranging from 0.25% to 1.50% per annum above the related Certificate Rate.

<sup>(3)</sup> The Mortgage Loans underlying the Group 2 and 6 Trust Assets may be re-performing Mortgage Loans that were previously repurchased from one or more pools of Mortgage Loans underlying one or more Ginnie Mae MBS Certificates.

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

The actual remaining terms to maturity, loan ages and Mortgage Rates of many of the Mortgage Loans underlying the Group 1 through 3, 6, 7, 9 and 12 through 14 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 5, 8, 10 and 11 Trust Assets:** See Exhibit B to this Supplement for certain information regarding the characteristics of the Mortgage Loans underlying the Group 5, 8, 10 and 11 Trust Assets. The actual remaining terms to maturity, loan ages and Mortgage Rates of many of the Mortgage Loans underlying the Group 5, 8, 10 and 11 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 4 Trust Assets:** See Exhibit A to this Supplement for certain information regarding the characteristics of the related Underlying Certificates.

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

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

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

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

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

<u>Class</u>	<u>Interest Rate Formula(1)</u>	<u>Initial Interest Rate(2)</u>	<u>Minimum Rate</u>	<u>Maximum Rate</u>	<u>Delay (in days)</u>	<u>LIBOR or Compounded SOFR for Minimum Interest Rate</u>
<b>Security Group 1</b>						
DF . . . .	Compounded SOFR + 0.35%	0.40000%	0.35%	3.00%	0	0.00%
DS . . . .	2.60% – Compounded SOFR	2.55000%	0.00%	2.60%	0	2.60%
DT . . . .	2.65% – Compounded SOFR	0.05000%	0.00%	0.05%	0	2.65%
FD . . . .	Compounded SOFR + 0.40%	0.45000%	0.40%	3.00%	0	0.00%
<b>Security Group 2</b>						
GF . . . .	Compounded SOFR + 0.25%	0.29800%	0.25%	4.00%	0	0.00%
GS . . . .	3.75% – Compounded SOFR	3.70200%	0.00%	3.75%	0	3.75%
<b>Security Group 3</b>						
CS . . . .	1.70% – Compounded SOFR	1.65233%	0.00%	1.70%	0	1.70%
EF . . . .	Compounded SOFR + 0.80%	0.84767%	0.80%	2.50%	0	0.00%
ES . . . .	1.70% – Compounded SOFR	1.65223%	0.00%	1.70%	0	1.70%
ET . . . .	8.16666667% – (Compounded SOFR x 3.33333333)	2.50000%	0.00%	2.50%	0	2.45%
KF . . . .	Compounded SOFR + 0.50%	0.54800%	0.50%	3.00%	0	0.00%
KT . . . .	2.50% – Compounded SOFR	0.05000%	0.00%	0.05%	0	2.50%
SC . . . .	1.70% – Compounded SOFR	1.65200%	0.00%	1.70%	0	1.70%
YF . . . .	Compounded SOFR + 0.55%	0.59800%	0.55%	3.00%	0	0.00%
YS . . . .	2.45% – Compounded SOFR	2.40200%	0.00%	2.45%	0	2.45%
<b>Security Group 6</b>						
FG . . . .	Compounded SOFR + 0.25%	0.30000%	0.25%	4.50%	0	0.00%
QF . . . .	Compounded SOFR + 0.20%	0.25000%	0.20%	4.50%	0	0.00%
QT . . . .	4.30% – Compounded SOFR	0.05000%	0.00%	0.05%	0	4.30%
SG . . . .	4.25% – Compounded SOFR	4.20000%	0.00%	4.25%	0	4.25%
TF . . . .	Compounded SOFR + 0.20%	0.25000%	0.20%	4.50%	0	0.00%
<b>Security Group 9</b>						
FE . . . .	LIBOR + 0.80%	0.88750%	0.80%	2.50%	0	0.00%
SE . . . .	1.70% – LIBOR	1.61250%	0.00%	1.70%	0	1.70%
<b>Security Group 13</b>						
FW . . . .	Compounded SOFR + 0.45%	0.49767%	0.45%	3.00%	0	0.00%
SW . . . .	2.55% – Compounded SOFR	2.50233%	0.00%	2.55%	0	2.55%

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

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

**SECURITY GROUP 1**

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

**SECURITY GROUP 2**

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

**SECURITY GROUP 3**

The Group 3 Principal Distribution Amount will be allocated, concurrently, to EF, GT, KF and YF, pro rata, until retired

**SECURITY GROUP 4**

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

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

**SECURITY GROUP 5**

The Subgroup 5A Principal Distribution Amount, the Subgroup 5B Principal Distribution Amount, the Subgroup 5C Principal Distribution Amount, the ZW1 Accrual Amount, the ZW2 Accrual Amount, the ZW3 Accrual Amount, the ZW4 Accrual Amount, the ZW5 Accrual Amount and the ZW6 Accrual Amount will be allocated as follows:

- The ZW1 Accrual Amount, sequentially, to A and ZW1, in that order, until retired
- The ZW3 Accrual Amount, sequentially, to B and ZW3, in that order, until retired
- The ZW5 Accrual Amount, sequentially, to C and ZW5, in that order, until retired
- The Subgroup 5A Principal Distribution Amount and the ZW2 Accrual Amount in the following order of priority:
  1. Sequentially, to A and ZW1, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
  2. To ZW2, until retired
  3. Sequentially, to A and ZW1, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired
- The Subgroup 5B Principal Distribution Amount and the ZW4 Accrual Amount in the following order of priority:
  1. Sequentially, to B and ZW3, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date



2. To ZW4, until retired
  3. Sequentially, to B and ZW3, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired
- The Subgroup 5C Principal Distribution Amount and the ZW6 Accrual Amount in the following order of priority:
    1. Sequentially, to C and ZW5, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
    2. To ZW6, until retired
    3. Sequentially, to C and ZW5, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired

#### **SECURITY GROUP 6**

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

#### **SECURITY GROUP 7**

The Subgroup 7A Principal Distribution Amount and the Subgroup 7B Principal Distribution Amount will be allocated as follows:

- The Subgroup 7A Principal Distribution Amount to AJ, until retired
- The Subgroup 7B Principal Distribution Amount to AM, until retired

#### **SECURITY GROUP 8**

The Subgroup 8A Principal Distribution Amount, the Subgroup 8B Principal Distribution Amount, the Subgroup 8C Principal Distribution Amount, the WZ1 Accrual Amount, the WZ2 Accrual Amount, the WZ3 Accrual Amount, the WZ4 Accrual Amount, the WZ5 Accrual Amount and the WZ6 Accrual Amount will be allocated as follows:

- The WZ1 Accrual Amount, sequentially, to G and WZ1, in that order, until retired
- The WZ3 Accrual Amount, sequentially, to XG and WZ3, in that order, until retired
- The WZ5 Accrual Amount, sequentially, to P and WZ5, in that order, until retired
- The Subgroup 8A Principal Distribution Amount and the WZ2 Accrual Amount in the following order of priority:
  1. Sequentially, to G and WZ1, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
  2. To WZ2, until retired
  3. Sequentially, to G and WZ1, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired
- The Subgroup 8B Principal Distribution Amount and the WZ4 Accrual Amount in the following order of priority:
  1. Sequentially, to XG and WZ3, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date

2. To WZ4, until retired
  3. Sequentially, to XG and WZ3, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired
- The Subgroup 8C Principal Distribution Amount and the WZ6 Accrual Amount in the following order of priority:
    1. Sequentially, to P and WZ5, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
    2. To WZ6, until retired
    3. Sequentially, to P and WZ5, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired

#### **SECURITY GROUP 9**

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

#### **SECURITY GROUP 10**

The Group 10 Principal Distribution Amount will be allocated to ME, until retired

#### **SECURITY GROUP 11**

The Group 11 Principal Distribution Amount, the ZX1 Accrual Amount, the ZX2 Accrual Amount, the ZX3 Accrual Amount and the ZX4 Accrual Amount will be allocated as follows:

- The ZX1 Accrual Amount, sequentially, to K and ZX1, in that order, until retired
- The ZX3 Accrual Amount, sequentially, to W and ZX3, in that order, until retired
- 77.9354613995% of the Group 11 Principal Distribution Amount and the ZX2 Accrual Amount in the following order of priority:
  1. Sequentially, to K and ZX1, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
  2. To ZX2, until retired
  3. Sequentially, to K and ZX1, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired
- 22.0645386005% of the Group 11 Principal Distribution Amount and the ZX4 Accrual Amount in the following order of priority:
  1. Sequentially, to W and ZX3, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
  2. To ZX4, until retired
  3. Sequentially, to W and ZX3, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired

**SECURITY GROUP 12**

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

**SECURITY GROUP 13**

The Group 13 Principal Distribution Amount will be allocated, concurrently, to AQ and FW, pro rata, until retired

**SECURITY GROUP 14**

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

- The HZ Accrual Amount, sequentially, to HV and HZ, in that order, until retired
- The VZ Accrual Amount, sequentially, to VH and VZ, in that order, until retired
- The Subgroup 14A Principal Distribution Amount, sequentially, to HA, HV and HZ, in that order, until retired
- The Subgroup 14B Principal Distribution Amount, sequentially, to HB, VH and VZ, in that order, until retired

**Scheduled Principal Balances:** The Scheduled Principal Balances or Aggregate Scheduled Principal Balances for the Classes and Components 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>PAC Classes and Components</u>	<u>Structuring Ranges</u>
4	EA . . . . .	200% PSA through 286% PSA
5	A and ZW1 (in the aggregate) . . . . .	329% PSA through 405% PSA
5	B and ZW3 (in the aggregate) . . . . .	333% PSA through 405% PSA
5	C and ZW5 (in the aggregate) . . . . .	325% PSA through 405% PSA
8	G and WZ1 (in the aggregate) . . . . .	300% PSA through 375% PSA
8	P and WZ5 (in the aggregate) . . . . .	265% PSA through 385% PSA
8	XG and WZ3 (in the aggregate) . . . . .	300% PSA through 375% PSA
11	K and ZX1 (in the aggregate) . . . . .	329% PSA through 405% PSA
11	W and ZX3 (in the aggregate) . . . . .	325% PSA through 405% PSA

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

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

<u>Class</u>	<u>Original Class Notional Balance</u>	<u>Represents Approximately</u>
<b>Security Group 1</b>		
DS .....	\$ 25,000,000	100% of DF (PT Class)
DT .....	25,000,000	100% of DF (PT Class)
<b>Security Group 2</b>		
GS .....	\$ 70,738,244	100% of GF (PT Class)
<b>Security Group 3</b>		
CS .....	\$500,000,000	100% of EF (PT Class)
ES .....	700,000,000	100% of EF and YF (in the aggregate) (PT Classes)
ET .....	60,000,000	30% of YF (PT Class)
KT .....	100,000,000	100% of KF (PT Class)
SC .....	200,000,000	100% of YF (PT Class)
YS .....	100,000,000	100% of KF (PT Class)
<b>Security Group 4</b>		
EI .....	\$ 15,178,550	66.666666667% of EA (SC/PAC/AD Class)
<b>Security Group 5</b>		
AI .....	\$ 48,166,666	66.666666667% of A (PAC/AD Class)
BI .....	116,185,244	75% of B (PAC/AD Class)
CI .....	109,312,500	75% of C (PAC/AD Class)
IU .....	\$ 37,666,666	52.1337944932% of A (PAC/AD Class)
	91,387,134	58.9923024132% of B (PAC/AD Class)
	<u>85,500,000</u>	58.6620926244% of C (PAC/AD Class)
	<u>\$ 214,553,800</u>	
<b>Security Group 6</b>		
QT .....	\$ 74,747,961	100% of QF (PT Class)
SG .....	74,747,961	100% of QF (PT Class)
<b>Security Group 7</b>		
IA .....	\$ 92,536,414	50% of AM (PT Class)
	<u>92,661,997</u>	50% of AJ (PT Class)
	<u>\$185,198,411</u>	
IB .....	\$ 92,536,414	50% of AM (PT Class)
IJ .....	92,661,997	50% of AJ (PT Class)
<b>Security Group 8</b>		
GI .....	\$ 61,440,704	66.666666667% of G (PAC/AD Class)
I .....	\$ 38,400,440	41.666666667% of G (PAC/AD Class)
	13,833,333	44.6236562782% of XG (PAC/AD Class)
	<u>25,000,000</u>	50.000005000% of P (PAC/AD Class)
	<u>\$ 77,233,773</u>	
IG .....	\$ 20,666,666	66.666666667% of XG (PAC/AD Class)
PI .....	33,333,333	66.666666667% of P (PAC/AD Class)

<u>Class</u>	<u>Original Class Notional Balance</u>	<u>Represents Approximately</u>			
<b>Security Groups 5 and 8</b>					
IP .....	\$ 38,400,440	41.6666666667% of G (PAC/AD Class)			
	13,833,333	44.6236562782% of XG (PAC/AD Class)			
	25,000,000	50.0000005000% of P (PAC/AD Class)			
	37,666,666	52.1337944932% of A (PAC/AD Class)			
	91,387,134	58.9923024132% of B (PAC/AD Class)			
	85,500,000	58.6620926244% of C (PAC/AD Class)			
	<u>\$ 291,787,573</u>				
<b>Security Group 9</b>					
SE .....	\$ 50,000,000	100% of FE (PT Class)			
<b>Security Group 10</b>					
IM .....	\$ 10,741,513	63.6363636364% of the Subgroup 10B Trust Assets			
IW .....	21,076,668	63.6363636364% of the Subgroup 10A Trust Assets			
MI .....	31,818,181	63.6363636364% of the Group 10 Trust Assets			
<b>Security Group 11</b>					
KI .....	\$150,000,000	75% of K (PAC/AD Class)			
WI .....	38,625,000	75% of W (PAC/AD Class)			
<b>Security Group 12</b>					
IC .....	\$ 25,000,000	33.3333333333% of AN (SEQ/AD Class)			
<b>Security Group 13</b>					
SW .....	\$150,000,000	100% of FW (PT Class)			
<b>Security Group 14</b>					
HI .....	\$ 19,971,840	32% of HA (SEQ Class)			
IH .....	14,163,789	32% of HB (SEQ Class)			
JI .....	34,135,629	32% of HA and HB (in the aggregate) (SEQ Classes)			
<b>Component Classes:</b> For purposes of calculating distributions of principal and interest, Classes WZ, ZW and ZX are comprised of multiple components having the designations and characteristics as set forth below. Components are not separately transferable from the related Class of Securities.					
<u>Class</u>	<u>Components</u>	<u>Principal Type</u>	<u>Interest Type</u>	<u>Interest Rate</u>	<u>Original Principal Balance</u>
WZ .....	WZ1	PAC/AD	FIX/Z	3.0%	\$ 4,609
	WZ2	SUP	FIX/Z	3.0	11,030,217
	WZ3	PAC/AD	FIX/Z	3.0	1,550
	WZ4	SUP	FIX/Z	3.0	3,710,208
	WZ5	PAC/AD	FIX/Z	3.0	2,500
	WZ6	SUP	FIX/Z	3.0	10,590,089
ZW .....	ZW1	PAC/AD	FIX/Z	3.0	3,613
	ZW2	SUP	FIX/Z	3.0	8,395,687
	ZW3	PAC/AD	FIX/Z	3.0	7,747
	ZW4	SUP	FIX/Z	3.0	25,605,926
	ZW5	PAC/AD	FIX/Z	3.0	7,288
	ZW6	SUP	FIX/Z	3.0	32,602,398

<u>Class</u>	<u>Components</u>	<u>Principal Type</u>	<u>Interest Type</u>	<u>Interest Rate</u>	<u>Original Principal Balance</u>
ZX .....	ZX1	PAC/AD	FIX/Z	3.0%	\$ 10,000
	ZX2	SUP	FIX/Z	3.0	24,111,526
	ZX3	PAC/AD	FIX/Z	3.0	2,575
	ZX4	SUP	FIX/Z	3.0	11,949,132

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

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

## RISK FACTORS

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

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

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

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

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

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

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

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



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

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

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

generally, the earlier a change, the greater the effect on your yield. It is doubtful that LIBOR or Compounded SOFR will remain constant.

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

***Support securities will be more sensitive to rates of principal payments than other securities.*** If principal prepayments result in principal distributions on any distribution date equal to or less than the amount needed to produce scheduled payments on the PAC classes and components, the related support class or component 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 and components for that distribution date, this excess will be distributed to the related support class or component.

***The rate of payments on the underlying certificates will directly affect the rate of payments on the group 4 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.

The trust assets underlying one of the underlying certificates included in trust asset group 4 are



also previously issued certificates that represent beneficial ownership interests in separate trusts. The rate of payments on the previously issued certificates backing this underlying certificate will directly affect the timing and rate of payments on the group 4 securities. You should read the related underlying certificate disclosure documents, including the risk factors contained therein, to understand the payments on and related risks of the previously issued certificates backing this underlying certificate.

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

***Up to 10% of the mortgage loans underlying the group 1 through 3 and 5 through 13 trust assets and up to 100% of the mortgage loans underlying the group 4 and 14 trust assets may be higher balance mortgage loans.***

Subject to special pooling parameters set forth in the Ginnie Mae Mortgage-Backed Securities Guide, qualifying federally-insured or guaranteed mortgage loans that exceed certain balance thresholds established by Ginnie Mae (“higher balance mortgage loans”) may be included in Ginnie Mae guaranteed pools. There are no historical performance data regarding the prepayment rates for higher balance mortgage loans. If the higher balance mortgage loans prepay faster or slower than expected, the weighted average lives and yields of the related securities are likely to be affected, perhaps significantly. Furthermore, higher balance mortgage loans tend to be concentrated in certain geographic areas, which may experience relatively higher rates of defaults in the event of adverse economic conditions. No assurances can be given about the prepayment experience or performance of the higher balance mortgage loans.

***Changes to, the elimination of, and uncertainty with respect to, LIBOR could adversely affect your investment.*** As dis-

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

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

be no assurance whether or when those actions will be taken. Further, there can be no assurance that those actions or related events will align with similar events in the market generally or in other parts of the financial markets, such as the derivatives market.

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

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

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

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

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

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

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

***An investment in the group 1, 2, 3, 6 and 13 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 group 1, 2, 3, 6 and 13 floating rate and inverse floating rate securities may fluctuate more than debt securities linked to less volatile indices.

SOFR is a relatively new market index, and the group 1, 2, 3, 6 and 13 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. Investment in the group 1, 2, 3, 6 and 13 floating rate and inverse floating rate securities carries additional pricing volatility, illiquidity and market risk, as discussed in more detail under “Description of the Securities — Interest Rate Indices — Determination of SOFR — General” in the base offering circular.

The interest rates of the group 1, 2, 3, 6 and 13 floating rate and inverse floating rate securities will be based on Compounded SOFR. Ginnie Mae may, in its sole discretion and without the consent of security holders or any other party, convert the interest rates of the group 1, 2, 3, 6 and 13 floating rate and inverse floating rate securities from Compounded SOFR to term SOFR. In connection with that conversion, Ginnie Mae may, in its sole discretion and without the consent of security holders or any other party, change the calculation methodology or spread, add or subtract a rate adjustment and make other conforming changes with respect to the group 1, 2, 3, 6 and 13 floating rate and inverse floating rate securities, as described under “Description of the Securities — Interest Rate Indices — Replacement Rate Conforming Changes” in the base offering circular. There can be no assurance that the interest rates of the group 1, 2, 3, 6 and 13 floating rate and inverse floating rate securities will ever be based on term SOFR or, if based on term SOFR in the future, that the resulting interest rates will yield the

same or similar economic results over the lives of the affected securities relative to the results that would have occurred had the interest rates remained based on Compounded SOFR or that the market value will not decrease due to the move from Compounded SOFR to term SOFR.

All aspects of the conversion will be at the sole discretion of Ginnie Mae, which could lead to volatility in the interests rates of or adversely affect the return on the group 1, 2, 3, 6 and 13 floating rate and inverse floating rate securities, the trading market for such securities and the value of such securities.

You should consult your own financial and legal advisors about the risks associated with an investment in the group 1, 2, 3, 6 and 13 floating rate and inverse floating rate securities and the suitability of investing in the group 1, 2, 3, 6 and 13 floating rate and inverse floating rate securities in light of your particular circumstances.

***Interest on the group 1, 2, 3, 6 and 13 floating rate and inverse floating rate securities will be determined using a replacement rate if SOFR is no longer available, which could adversely affect the value of your investment in the group 1, 2, 3, 6 and 13 floating rate and inverse floating rate securities.***

Because SOFR is published by the Federal Reserve Bank of New York based on data received from other sources, neither Ginnie Mae nor the trustee has any control over its determination, calculation or publication. The Federal Reserve Bank of New York has noted that it may alter the methods of calculation, publication schedule, rate revision practices or availability of SOFR at any time without notice. There can be no assurance that SOFR will not be discontinued or fundamentally altered in a manner that is materially adverse to the interests of investors in the group 1, 2, 3, 6 and 13 floating rate and inverse floating rate securities.

If SOFR is no longer published or cannot be used, the amount of interest payable on the group 1, 2, 3, 6 and 13 floating rate and inverse floating rate securities will be determined using a replacement rate, as described under

“Description of the Securities — Interest Rate Indices — Determination of SOFR” in the base offering circular. Ginnie Mae will have the sole discretion to make conforming changes in connection with any replacement rate without the consent of security holders or any other party, as described under “Description of the Securities — Interest Rate Indices” in the base offering circular. This could reduce the amount of interest payable on the group 1, 2, 3, 6 and 13 floating rate and inverse floating rate securities, which could adversely affect the return on, value of, and market for, the group 1, 2, 3, 6 and 13 floating rate and inverse floating rate securities. Furthermore, there can be no assurance that the characteristics of any replacement rate will be similar to SOFR or that any replacement rate will produce the economic equivalent of SOFR.

***The securities may not be a suitable investment for you.*** The securities, especially the group 4 securities and, in particular, the support, interest only, component, 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 through 3 and 5 through 14)**

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 (Group 4)**

The Group 4 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 through 3, 6, 7, 9 and 12 through 14 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 through 3, 6, 7, 9 and 12 through 14 Trust Assets” and the general characteristics described in the Base Offering Circular. The Mortgage Loans underlying the Group 5, 8, 10 and 11 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 5, 8, 10 and 11 Trust Assets” and the general characteristics described in the Base Offering Circular. The Mortgage Loans will consist of first lien, single-family, fixed rate, residential mortgage loans that are insured or guaranteed by the Federal Housing Administration, the United States Department of Veterans Affairs, Rural Development (formerly the Rural Housing Service) or the United States Department of Housing and Urban Development (“HUD”). See “*The Ginnie Mae Certificates — General*” in the Base Offering Circular.

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

### **The Trustee Fee**

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

## **GINNIE MAE GUARANTY**

The Government National Mortgage Association (“Ginnie Mae”), a wholly-owned corporate instrumentality of the United States of America within HUD, guarantees the timely payment of principal and interest on the Securities. The General Counsel of HUD has provided an opinion to the effect that Ginnie Mae has the authority to guarantee multiclass securities and that Ginnie Mae guaranties will constitute general obligations of the United States, for which the full faith and credit of the United States is pledged. See “*Ginnie Mae Guaranty*” in the Base Offering Circular.

## DESCRIPTION OF THE SECURITIES

### General

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

### Form of Securities

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

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

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

### Distributions

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

### Interest Distributions

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

- Interest will be calculated on the basis of a 360-day year consisting of twelve 30-day months.
- Interest distributable (or accrued in the case of an Accrual Class) on any Class for any Distribution Date will consist of 30 days’ interest on its Class Principal Balance (or Class Notional Balance) as of the related Record Date.
- Investors can calculate the amount of interest to be distributed (or accrued in the case of an Accrual Class) on each Class of Securities for any Distribution Date by using the Class Factors published in the preceding month. See *“— Class Factors” below.*

### *Categories of Classes and Components*

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, and Components will be categorized as shown under “Terms Sheet — Component Classes” in this Supplement. The abbreviations used in this Supplement to describe the interest entitlements of the Classes are explained under “Class Types” in Appendix I to the Base Offering Circular.

### *Accrual Periods*

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

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

### *Fixed Rate Classes*

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

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

The Floating Rate and Inverse Floating Rate Classes will bear interest as shown under “Terms Sheet — Interest Rates” in this Supplement. The Interest Rates for the Floating Rate and Inverse Floating Rate Classes (other than the Group 1, 2, 3, 6 and 13 Floating Rate and Inverse Floating Rate Classes, which will be based initially on Compounded SOFR as described below) will be based on LIBOR. The Trustee or its agent will determine LIBOR on the basis of the ICE LIBOR method, as described under “Description of the Securities — Interest Rate Indices — Determination of LIBOR” in the Base Offering Circular.

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

The Interest Rate for the Group 1, 2, 3, 6 and 13 Floating Rate and Inverse Floating Rate Classes will be based initially on Compounded SOFR with a Corresponding Tenor of 30 days. The Trustee or its agent will determine Compounded SOFR as described under “Description of the Securities — Interest Rate Indices — Determination of SOFR” in the Base Offering Circular.

At any time, Ginnie Mae may, in its sole discretion and without the consent of security holders or any other party, designate Term SOFR and related positive or negative adjustments, spreads or methodology changes as a Replacement Rate for the Group 1, 2, 3, 6 and 13 Floating Rate and Inverse Floating Rate Classes and instruct the Trustee in writing to replace Compounded SOFR with such Replacement Rate for all purposes relating to such Classes in respect of such determination on such date and all



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

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

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

#### *Accrual Classes*

Each of Classes EZ, HZ, VZ, WZ, ZE, ZW and ZX 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 and Components*

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, and Components will be categorized as shown under “Terms Sheet — Component Classes” in 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.

#### *Component Classes*

Each of Class WZ, ZW and ZX is a Component Class and has Components with the designations and characteristics under “Terms Sheet — Component Classes” in this Supplement. Components will not be separately issued or transferable.

#### *Notional Classes*

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

## **Residual Securities**

The Class RR Securities will represent the beneficial ownership of the Residual Interest in the Issuing REMIC and the beneficial ownership of the Residual Interest in the Pooling REMIC, as described in “Certain United States Federal Income Tax Consequences” in the Base Offering Circular. The Class RR Securities have no Class Principal Balance and do not accrue interest. The Class RR 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. 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 3, 4, 5, 6, 10, 11, 12, 13, 14, 15, 17 and 18, 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 3, 4, 5, 10, 11, 12, 17 and 18, the related REMIC Securities may be exchanged for proportionate interests in various subcombinations of MX Classes. Similarly, all or a portion of these MX Classes may be exchanged for proportionate interests in the related REMIC Securities or in other subcombinations of the related MX Classes. Each subcombination may be effected only in proportions that result in the principal and interest entitlements of the Securities received being equal to the entitlements of the Securities surrendered. *See the example under “Description of the Securities — Modification and Exchange” in the Base Offering Circular.*

A Beneficial Owner proposing to effect an exchange must notify the Trustee through the Beneficial Owner’s Book-Entry Depository participant. This notice must be received by the Trustee not later than two Business Days before the proposed exchange date. The exchange date can be any Business Day other than the last Business Day of the month. The notice must contain the outstanding principal and notional balances of the Securities to be included in the exchange and the proposed exchange date. The notice is required to be delivered to the Trustee by email to USBGNMATEam@USBank.com or in writing at its Corporate Trust Office at U.S. Bank National Association, One Federal Street, 3rd Floor, Boston, MA 02110, Attention: Ginnie Mae REMIC Program Agency Group 2021-193. The Trustee may be contacted by telephone at (617) 603-6451 and by fax at (617) 603-6644.

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

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

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

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

### **General**

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

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

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

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

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

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

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

Investors in the Group 4 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 4 securities”* in this Supplement.

### **Accretion Directed Classes**

Classes A, AN, B, C, EA, G, HV, K, P, VH, W, WZ, XG, ZW and ZX are Accretion Directed Classes. The related Accrual Amounts will be applied to making principal distributions on those Classes as described in this Supplement. Each of Classes EI and IC is a Notional Class whose Class Notional Balance is determined by reference to the Class Principal Balance of the related Accretion Directed Class shown under *“Terms Sheet — Notional Classes”* in this Supplement.

Each of the Accretion Directed Classes 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 HV and VH will have principal payment stability only through the prepayment rate shown in the table below. The remaining Accretion Directed Classes are not listed in the table below because, although they are entitled to receive payments from the related Accrual Amounts, they do not have principal payment stability through any constant prepayment rate significantly higher than 0% PSA, except within any applicable Effective Ranges.

The Accretion Directed Classes are entitled to principal payments in an amount equal to interest accrued on the related Accrual Classes. 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 HV and VH 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**

<u>Security Group</u>	<u>Class</u>	<u>Maximum Weighted Average Life (in years)<sup>(1)</sup></u>	<u>Final Distribution Date</u>	<u>Prepayment Rate at or below</u>
14	HV	6.0	May 2033	339% PSA
14	VH	6.0	May 2033	343% 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 Classes HV or VH, 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 or Component 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 or Component 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 or Component exhibits an Effective Range of constant prepayment rates at which such Class or Component 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 and Components are as follows:

<u>Security Group</u>	<u>Initial Effective Ranges</u>
<b>PAC Classes and Components</b>	
4	EA ..... 200% PSA through 286% PSA
5	A and ZW1 (in the aggregate) ..... 329% PSA through 405% PSA
5	B and ZW3 (in the aggregate) ..... 333% PSA through 405% PSA
5	C and ZW5 (in the aggregate) ..... 325% PSA through 405% PSA
8	G and WZ1 (in the aggregate) ..... 300% PSA through 375% PSA
8	P and WZ5 (in the aggregate) ..... 265% PSA through 385% PSA
8	XG and WZ3 (in the aggregate) ..... 300% PSA through 375% PSA
11	K and ZX1 (in the aggregate) ..... 329% PSA through 405% PSA
11	W and ZX3 (in the aggregate) ..... 325% PSA through 405% PSA

- The principal payment stability of the PAC Classes and Components will be supported by the related Support Class or Component.

**If the Class or Component supporting a given Class or Component is retired before the Class or Component being supported is retired, the outstanding Class or Component 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 or Component in the above table, that Class or Component 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 or Component not to receive Scheduled Payments, even if prepayment rates remain within the initial Effective Range for that Class or Component. Further, the Effective Range for any PAC Class or Component 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 or Component, the amount available to pay principal on the Securities may be insufficient to produce Scheduled Payments on such related PAC Class or Component, 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 or Component, its supporting Class or Component may be retired earlier than that PAC Class or Component, and its Weighted Average Life may be shortened, perhaps significantly.

**Assumability**

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



## Final Distribution Date

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

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

## Modeling Assumptions

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

1. The Mortgage Loans underlying the Group 1 through 3, 6, 7, 9 and 12 through 14 Trust Assets have the assumed characteristics shown under “Assumed Characteristics of the Mortgage Loans Underlying the Group 1 through 3, 6, 7, 9 and 12 through 14 Trust Assets” in the Terms Sheet and the Mortgage Loans underlying the Group 5, 8, 10 and 11 Trust Assets have the characteristics shown under “Characteristics of the Mortgage Loans Underlying the Group 5, 8, 10 and 11 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 through 3, 6, 7, 9, 12, 13 or 14 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 December 2021.

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

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

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

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

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

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

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

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

## Decrement Tables

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

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

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

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

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

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

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



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

Security Group 1 PSA Prepayment Assumption Rates					
Classes DF, DS, DT and FD					
Distribution Date	0%	100%	381%	600%	800%
Initial Percent	100	100	100	100	100
November 2022	98	96	92	88	85
November 2023	97	91	76	65	55
November 2024	95	83	57	41	29
November 2025	93	77	43	26	15
November 2026	91	70	33	16	7
November 2027	89	64	24	10	4
November 2028	87	59	18	6	2
November 2029	85	54	14	4	1
November 2030	83	49	10	2	0
November 2031	80	44	8	1	0
November 2032	78	40	6	1	0
November 2033	75	36	4	1	0
November 2034	72	33	3	0	0
November 2035	69	29	2	0	0
November 2036	66	26	2	0	0
November 2037	63	23	1	0	0
November 2038	60	21	1	0	0
November 2039	56	18	1	0	0
November 2040	53	16	0	0	0
November 2041	49	14	0	0	0
November 2042	45	12	0	0	0
November 2043	41	10	0	0	0
November 2044	36	8	0	0	0
November 2045	32	7	0	0	0
November 2046	27	5	0	0	0
November 2047	22	4	0	0	0
November 2048	17	3	0	0	0
November 2049	12	2	0	0	0
November 2050	6	1	0	0	0
November 2051	0	0	0	0	0
Weighted Average Life (years)	18.3	10.5	4.5	3.1	2.5

Security Group 2 PSA Prepayment Assumption Rates						
Classes GF and GS						
Distribution Date	0%	100%	300%	500%	750%	1,000%
Initial Percent	100	100	100	100	100	100
November 2022	99	92	80	69	54	39
November 2023	97	85	64	47	29	15
November 2024	96	77	51	32	16	6
November 2025	94	71	41	22	8	2
November 2026	92	65	33	15	4	1
November 2027	91	59	26	10	2	0
November 2028	89	54	21	7	1	0
November 2029	87	49	16	5	1	0
November 2030	85	44	13	3	0	0
November 2031	83	40	10	2	0	0
November 2032	80	36	8	1	0	0
November 2033	78	32	6	1	0	0
November 2034	75	28	5	1	0	0
November 2035	72	25	4	0	0	0
November 2036	69	22	3	0	0	0
November 2037	66	19	2	0	0	0
November 2038	63	16	2	0	0	0
November 2039	60	14	1	0	0	0
November 2040	56	12	1	0	0	0
November 2041	52	10	1	0	0	0
November 2042	48	8	0	0	0	0
November 2043	44	6	0	0	0	0
November 2044	40	4	0	0	0	0
November 2045	35	2	0	0	0	0
November 2046	30	1	0	0	0	0
November 2047	24	0	0	0	0	0
November 2048	19	0	0	0	0	0
November 2049	13	0	0	0	0	0
November 2050	7	0	0	0	0	0
November 2051	0	0	0	0	0	0
Weighted Average Life (years)	19.0	9.2	4.4	2.6	1.6	1.1

**Security Group 3  
PSA Prepayment Assumption Rates**

Distribution Date	Classes CS, EF, ES, ET, GT, KF, KT, SC, YF and YS				
	0%	100%	304%	500%	700%
Initial Percent . . . . .	100	100	100	100	100
November 2022 . . . . .	98	96	93	90	87
November 2023 . . . . .	96	91	80	71	62
November 2024 . . . . .	94	83	65	49	36
November 2025 . . . . .	93	76	51	34	20
November 2026 . . . . .	90	70	41	23	11
November 2027 . . . . .	88	64	33	16	6
November 2028 . . . . .	86	58	26	11	4
November 2029 . . . . .	84	53	20	7	2
November 2030 . . . . .	81	48	16	5	1
November 2031 . . . . .	79	44	13	3	1
November 2032 . . . . .	76	39	10	2	0
November 2033 . . . . .	73	36	8	1	0
November 2034 . . . . .	71	32	6	1	0
November 2035 . . . . .	68	29	5	1	0
November 2036 . . . . .	65	26	4	0	0
November 2037 . . . . .	61	23	3	0	0
November 2038 . . . . .	58	20	2	0	0
November 2039 . . . . .	55	18	2	0	0
November 2040 . . . . .	51	15	1	0	0
November 2041 . . . . .	47	13	1	0	0
November 2042 . . . . .	43	11	1	0	0
November 2043 . . . . .	39	10	1	0	0
November 2044 . . . . .	35	8	0	0	0
November 2045 . . . . .	31	6	0	0	0
November 2046 . . . . .	26	5	0	0	0
November 2047 . . . . .	21	4	0	0	0
November 2048 . . . . .	16	3	0	0	0
November 2049 . . . . .	11	2	0	0	0
November 2050 . . . . .	6	1	0	0	0
November 2051 . . . . .	0	0	0	0	0
Weighted Average Life (years) . . . . .	17.9	10.3	5.3	3.7	2.8

**Security Group 4  
PSA Prepayment Assumption Rates**

Distribution Date	Classes EA and EI					Class EZ				
	0%	200%	240%	286%	500%	0%	200%	240%	286%	500%
Initial Percent . . . . .	100	100	100	100	100	100	100	100	100	100
November 2022 . . . . .	97	85	85	85	78	103	103	82	59	0
November 2023 . . . . .	94	71	71	71	54	106	106	71	33	0
November 2024 . . . . .	90	60	60	60	37	109	109	63	10	0
November 2025 . . . . .	87	49	49	49	25	113	113	58	1	0
November 2026 . . . . .	83	39	39	39	17	116	116	58	0	0
November 2027 . . . . .	80	31	31	31	11	120	114	57	0	0
November 2028 . . . . .	76	25	25	25	8	123	110	54	0	0
November 2029 . . . . .	72	20	20	20	5	127	103	50	0	0
November 2030 . . . . .	68	16	16	16	3	131	94	45	0	0
November 2031 . . . . .	64	12	12	12	2	135	85	40	0	0
November 2032 . . . . .	59	10	10	10	2	139	76	35	0	0
November 2033 . . . . .	55	8	8	8	1	143	67	30	0	0
November 2034 . . . . .	50	6	6	6	1	148	58	26	0	0
November 2035 . . . . .	44	4	4	4	0	152	50	22	0	0
November 2036 . . . . .	39	3	3	3	0	157	42	18	0	0
November 2037 . . . . .	33	3	3	3	0	162	35	15	0	0
November 2038 . . . . .	27	2	2	2	0	166	29	12	0	0
November 2039 . . . . .	21	1	1	1	0	171	23	10	0	0
November 2040 . . . . .	15	1	1	1	0	177	18	7	0	0
November 2041 . . . . .	9	1	1	1	0	182	14	5	0	0
November 2042 . . . . .	2	0	0	0	0	188	10	4	0	0
November 2043 . . . . .	0	0	0	0	0	149	7	3	0	0
November 2044 . . . . .	0	0	0	0	0	96	4	1	0	0
November 2045 . . . . .	0	0	0	0	0	41	1	1	0	0
November 2046 . . . . .	0	0	0	0	0	5	0	0	0	0
November 2047 . . . . .	0	0	0	0	0	0	0	0	0	0
November 2048 . . . . .	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years) . . . . .	12.2	5.0	5.0	5.0	3.0	23.1	13.7	8.2	1.5	0.3

**Security Group 5  
PSA Prepayment Assumption Rates**

Distribution Date	Classes A, AB, AC, AD, AE, AG, AH and AI						Classes B, BA, BC, BD, BE, BG, BH and BI						Classes C, CA, CB, CD, CE, CG, CH and CI					
	0%	100%	325%	375%	405%	800%	0%	100%	325%	375%	405%	800%	0%	100%	325%	375%	405%	800%
Initial Percent . . . .	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2022 . . . .	97	91	77	77	77	59	97	90	76	75	75	61	97	90	74	74	74	65
November 2023 . . . .	94	82	57	57	57	30	94	81	55	54	54	31	93	80	53	53	53	33
November 2024 . . . .	91	74	42	42	42	15	91	72	39	38	38	16	90	71	36	36	36	17
November 2025 . . . .	88	66	30	30	30	8	87	64	26	25	25	8	86	62	22	22	22	8
November 2026 . . . .	85	59	21	21	21	4	84	56	16	16	16	4	82	54	12	12	12	4
November 2027 . . . .	82	52	14	14	14	2	80	49	9	9	9	2	78	46	4	4	4	2
November 2028 . . . .	78	46	9	9	9	1	76	42	3	3	3	1	74	38	0	0	0	1
November 2029 . . . .	75	40	5	5	5	0	72	36	0	0	0	1	70	32	0	0	0	1
November 2030 . . . .	71	34	2	2	2	0	68	30	0	0	0	0	65	25	0	0	0	0
November 2031 . . . .	67	29	0	0	0	0	64	24	0	0	0	0	61	19	0	0	0	0
November 2032 . . . .	63	24	0	0	0	0	60	19	0	0	0	0	56	13	0	0	0	0
November 2033 . . . .	59	20	0	0	0	0	56	14	0	0	0	0	51	8	0	0	0	0
November 2034 . . . .	55	15	0	0	0	0	51	9	0	0	0	0	46	2	0	0	0	0
November 2035 . . . .	51	11	0	0	0	0	46	5	0	0	0	0	41	0	0	0	0	0
November 2036 . . . .	46	7	0	0	0	0	41	1	0	0	0	0	36	0	0	0	0	0
November 2037 . . . .	42	4	0	0	0	0	36	0	0	0	0	0	30	0	0	0	0	0
November 2038 . . . .	37	0	0	0	0	0	31	0	0	0	0	0	24	0	0	0	0	0
November 2039 . . . .	32	0	0	0	0	0	26	0	0	0	0	0	18	0	0	0	0	0
November 2040 . . . .	27	0	0	0	0	0	20	0	0	0	0	0	12	0	0	0	0	0
November 2041 . . . .	21	0	0	0	0	0	14	0	0	0	0	0	6	0	0	0	0	0
November 2042 . . . .	16	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0
November 2043 . . . .	10	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
November 2044 . . . .	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2045 . . . .	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2046 . . . .	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2047 . . . .	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2048 . . . .	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2049 . . . .	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years) . . . .	13.4	7.1	3.1	3.0	3.0	1.7	12.6	6.5	2.7	2.7	2.7	1.8	11.7	5.9	2.5	2.5	2.5	1.8

**PSA Prepayment Assumption Rates**

Distribution Date	Class IU						Class ZW					
	0%	100%	325%	375%	405%	800%	0%	100%	325%	375%	405%	800%
Initial Percent . . . .	100	100	100	100	100	100	100	100	100	100	100	100
November 2022 . . . .	97	90	75	75	75	62	103	103	103	86	75	0
November 2023 . . . .	94	81	55	54	54	32	106	106	106	79	62	0
November 2024 . . . .	90	72	38	38	38	16	109	109	109	78	59	0
November 2025 . . . .	87	64	25	25	25	8	113	113	112	79	60	0
November 2026 . . . .	83	56	15	15	15	4	116	116	114	80	62	0
November 2027 . . . .	80	48	8	8	8	2	120	120	111	80	64	0
November 2028 . . . .	76	41	3	3	3	1	123	123	104	76	62	0
November 2029 . . . .	72	35	1	1	1	1	127	127	89	64	52	0
November 2030 . . . .	68	29	0	0	0	0	131	131	71	50	40	0
November 2031 . . . .	63	23	0	0	0	0	135	135	56	39	30	0
November 2032 . . . .	59	18	0	0	0	0	139	139	44	29	22	0
November 2033 . . . .	54	13	0	0	0	0	143	143	34	21	16	0
November 2034 . . . .	50	8	0	0	0	0	148	148	26	16	12	0
November 2035 . . . .	45	4	0	0	0	0	152	147	20	12	8	0
November 2036 . . . .	40	2	0	0	0	0	157	141	15	8	6	0
November 2037 . . . .	35	1	0	0	0	0	162	129	11	6	4	0
November 2038 . . . .	29	0	0	0	0	0	166	116	8	4	3	0
November 2039 . . . .	24	0	0	0	0	0	171	100	6	3	2	0
November 2040 . . . .	18	0	0	0	0	0	177	86	5	2	1	0
November 2041 . . . .	12	0	0	0	0	0	182	73	3	2	1	0
November 2042 . . . .	6	0	0	0	0	0	186	60	2	1	1	0
November 2043 . . . .	3	0	0	0	0	0	176	49	2	1	0	0
November 2044 . . . .	1	0	0	0	0	0	156	39	1	0	0	0
November 2045 . . . .	0	0	0	0	0	0	128	29	1	0	0	0
November 2046 . . . .	0	0	0	0	0	0	95	20	0	0	0	0
November 2047 . . . .	0	0	0	0	0	0	60	12	0	0	0	0
November 2048 . . . .	0	0	0	0	0	0	25	5	0	0	0	0
November 2049 . . . .	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years) . . . .	12.4	6.3	2.7	2.7	2.7	1.8	24.9	20.2	10.9	8.6	6.8	0.3

**Security Group 6  
PSA Prepayment Assumption Rates**

Distribution Date	Classes FG, QF, QT, SG and TF					
	0%	100%	300%	450%	700%	900%
Initial Percent	100	100	100	100	100	100
November 2022	99	92	80	72	57	45
November 2023	97	85	65	51	32	20
November 2024	96	78	52	37	18	9
November 2025	95	72	41	26	10	4
November 2026	93	66	33	19	6	2
November 2027	91	60	26	13	3	1
November 2028	90	55	21	9	2	0
November 2029	88	50	17	7	1	0
November 2030	86	45	13	5	1	0
November 2031	84	41	10	3	0	0
November 2032	81	37	8	2	0	0
November 2033	79	33	6	2	0	0
November 2034	77	29	5	1	0	0
November 2035	74	26	4	1	0	0
November 2036	71	23	3	1	0	0
November 2037	68	20	2	0	0	0
November 2038	65	17	2	0	0	0
November 2039	61	15	1	0	0	0
November 2040	58	13	1	0	0	0
November 2041	54	10	1	0	0	0
November 2042	50	8	0	0	0	0
November 2043	46	7	0	0	0	0
November 2044	41	5	0	0	0	0
November 2045	36	3	0	0	0	0
November 2046	31	2	0	0	0	0
November 2047	26	0	0	0	0	0
November 2048	20	0	0	0	0	0
November 2049	14	0	0	0	0	0
November 2050	7	0	0	0	0	0
November 2051	0	0	0	0	0	0
Weighted Average Life (years)	19.3	9.4	4.4	3.0	1.8	1.3

**Security Group 7  
PSA Prepayment Assumption Rates**

Distribution Date	Classes AJ and IJ					Classes AM and IB					Class IA				
	0%	100%	374%	600%	800%	0%	100%	374%	600%	800%	0%	100%	374%	600%	800%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2022	98	92	76	63	51	98	92	76	63	51	98	92	76	63	51
November 2023	97	84	57	39	26	97	84	58	39	26	97	84	57	39	26
November 2024	95	77	43	24	13	95	77	43	24	13	95	77	43	24	13
November 2025	93	71	33	15	7	93	71	33	15	7	93	71	33	15	7
November 2026	91	65	25	9	3	91	65	25	9	3	91	65	25	9	3
November 2027	89	59	19	6	2	89	59	19	6	2	89	59	19	6	2
November 2028	87	54	14	4	1	87	54	14	4	1	87	54	14	4	1
November 2029	85	49	10	2	0	85	49	10	2	0	85	49	10	2	0
November 2030	83	44	8	1	0	83	44	8	1	0	83	44	8	1	0
November 2031	80	40	6	1	0	80	40	6	1	0	80	40	6	1	0
November 2032	78	36	4	1	0	78	36	4	1	0	78	36	4	1	0
November 2033	75	32	3	0	0	75	32	3	0	0	75	32	3	0	0
November 2034	72	29	2	0	0	72	29	2	0	0	72	29	2	0	0
November 2035	69	25	2	0	0	69	26	2	0	0	69	26	2	0	0
November 2036	66	22	1	0	0	66	23	1	0	0	66	23	1	0	0
November 2037	63	20	1	0	0	63	20	1	0	0	63	20	1	0	0
November 2038	60	17	1	0	0	60	17	1	0	0	60	17	1	0	0
November 2039	56	15	0	0	0	56	15	0	0	0	56	15	0	0	0
November 2040	53	13	0	0	0	53	13	0	0	0	53	13	0	0	0
November 2041	49	11	0	0	0	49	11	0	0	0	49	11	0	0	0
November 2042	45	9	0	0	0	45	9	0	0	0	45	9	0	0	0
November 2043	41	7	0	0	0	41	7	0	0	0	41	7	0	0	0
November 2044	36	5	0	0	0	36	6	0	0	0	36	6	0	0	0
November 2045	32	4	0	0	0	32	4	0	0	0	32	4	0	0	0
November 2046	27	3	0	0	0	27	3	0	0	0	27	3	0	0	0
November 2047	22	1	0	0	0	22	2	0	0	0	22	1	0	0	0
November 2048	17	0	0	0	0	17	0	0	0	0	17	0	0	0	0
November 2049	12	0	0	0	0	12	0	0	0	0	12	0	0	0	0
November 2050	6	0	0	0	0	6	0	0	0	0	6	0	0	0	0
November 2051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	18.3	9.3	3.6	2.1	1.5	18.3	9.4	3.6	2.1	1.5	18.3	9.4	3.6	2.1	1.5

**Security Group 8  
PSA Prepayment Assumption Rates**

Distribution Date	Classes G, GA, GB, GE, GH, GI, GX and GY					Classes GC, GM, GN, GP, GQ, IG and XG					Class GD				
	0%	265%	340%	385%	800%	0%	265%	340%	385%	800%	0%	265%	340%	385%	800%
	Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2022	97	90	89	89	88	97	90	89	89	88	97	90	89	89	88
November 2023	95	74	72	72	52	95	74	72	72	52	95	74	72	72	52
November 2024	92	58	55	55	26	92	58	55	55	26	92	58	55	55	26
November 2025	89	45	41	41	13	89	45	41	41	13	89	45	41	41	13
November 2026	86	34	30	30	7	86	34	30	30	7	86	34	30	30	7
November 2027	82	25	21	21	3	82	25	21	21	3	82	25	21	21	3
November 2028	79	17	14	15	2	79	17	14	15	2	79	17	14	15	2
November 2029	76	11	9	10	1	76	11	9	10	1	76	11	9	10	1
November 2030	72	6	6	6	0	72	6	6	6	0	72	6	6	6	0
November 2031	69	3	3	3	0	69	3	3	3	0	69	3	3	3	0
November 2032	65	0	0	1	0	65	0	0	1	0	65	0	0	1	0
November 2033	61	0	0	0	0	61	0	0	0	0	61	0	0	0	0
November 2034	57	0	0	0	0	57	0	0	0	0	57	0	0	0	0
November 2035	53	0	0	0	0	53	0	0	0	0	53	0	0	0	0
November 2036	49	0	0	0	0	49	0	0	0	0	49	0	0	0	0
November 2037	44	0	0	0	0	44	0	0	0	0	44	0	0	0	0
November 2038	40	0	0	0	0	40	0	0	0	0	40	0	0	0	0
November 2039	35	0	0	0	0	35	0	0	0	0	35	0	0	0	0
November 2040	30	0	0	0	0	30	0	0	0	0	30	0	0	0	0
November 2041	25	0	0	0	0	25	0	0	0	0	25	0	0	0	0
November 2042	20	0	0	0	0	20	0	0	0	0	20	0	0	0	0
November 2043	15	0	0	0	0	15	0	0	0	0	15	0	0	0	0
November 2044	9	0	0	0	0	9	0	0	0	0	9	0	0	0	0
November 2045	3	0	0	0	0	3	0	0	0	0	3	0	0	0	0
November 2046	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2047	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2048	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	13.9	4.2	3.9	3.9	2.4	13.9	4.2	3.9	3.9	2.4	13.9	4.2	3.9	3.9	2.4

**PSA Prepayment Assumption Rates**

Distribution Date	Class I					Classes P, PA, PB, PC, PD, PE, PG and PI					Class WZ				
	0%	265%	340%	385%	800%	0%	265%	340%	385%	800%	0%	265%	340%	385%	800%
	Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2022	97	90	89	89	88	97	89	89	89	89	103	103	93	85	11
November 2023	94	74	72	72	53	94	72	72	72	56	106	106	81	59	0
November 2024	91	57	55	55	27	90	54	54	54	28	109	109	72	40	0
November 2025	88	43	40	40	14	87	40	40	40	14	113	113	69	34	0
November 2026	85	32	29	29	7	83	28	28	28	7	116	116	70	34	0
November 2027	82	23	20	20	4	79	18	18	18	4	120	118	69	35	0
November 2028	78	15	13	14	2	76	11	11	11	2	123	118	68	36	0
November 2029	74	9	8	9	1	72	6	6	6	1	127	118	66	37	0
November 2030	71	4	4	5	0	68	2	2	2	0	131	118	65	38	0
November 2031	67	2	2	2	0	63	0	0	0	0	135	108	60	37	0
November 2032	63	0	0	1	0	59	0	0	0	0	139	96	54	33	0
November 2033	59	0	0	0	0	54	0	0	0	0	143	79	43	29	0
November 2034	55	0	0	0	0	50	0	0	0	0	148	63	32	21	0
November 2035	50	0	0	0	0	45	0	0	0	0	152	51	25	16	0
November 2036	46	0	0	0	0	40	0	0	0	0	157	40	19	11	0
November 2037	41	0	0	0	0	35	0	0	0	0	162	32	14	8	0
November 2038	36	0	0	0	0	29	0	0	0	0	166	25	10	6	0
November 2039	31	0	0	0	0	24	0	0	0	0	171	20	8	4	0
November 2040	26	0	0	0	0	18	0	0	0	0	177	15	6	3	0
November 2041	21	0	0	0	0	12	0	0	0	0	182	12	4	2	0
November 2042	15	0	0	0	0	6	0	0	0	0	188	9	3	1	0
November 2043	10	0	0	0	0	0	0	0	0	0	193	7	2	1	0
November 2044	6	0	0	0	0	0	0	0	0	0	186	5	1	1	0
November 2045	2	0	0	0	0	0	0	0	0	0	179	4	1	0	0
November 2046	0	0	0	0	0	0	0	0	0	0	158	2	1	0	0
November 2047	0	0	0	0	0	0	0	0	0	0	121	2	0	0	0
November 2048	0	0	0	0	0	0	0	0	0	0	82	1	0	0	0
November 2049	0	0	0	0	0	0	0	0	0	0	42	0	0	0	0
November 2050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	13.4	4.0	3.8	3.9	2.5	12.3	3.7	3.7	3.7	2.5	26.5	14.3	9.8	6.3	0.6

**Security Groups 5 and 8  
PSA Prepayment Assumption Rates**

Distribution Date	Class IP								
	0%	100%	265%	325%	340%	375%	385%	405%	800%
Initial Percent	100	100	100	100	100	100	100	100	100
November 2022	97	91	82	79	79	79	79	79	69
November 2023	94	82	65	59	59	59	59	59	37
November 2024	91	73	49	43	42	42	42	42	19
November 2025	87	65	36	29	29	29	29	29	10
November 2026	84	57	26	19	19	19	19	19	5
November 2027	80	50	17	11	11	11	11	11	2
November 2028	76	43	9	6	6	6	6	6	1
November 2029	72	37	4	3	3	3	3	3	1
November 2030	68	30	2	1	1	1	2	2	0
November 2031	64	25	0	0	0	0	1	1	0
November 2032	60	19	0	0	0	0	0	1	0
November 2033	56	14	0	0	0	0	0	0	0
November 2034	51	9	0	0	0	0	0	0	0
November 2035	46	6	0	0	0	0	0	0	0
November 2036	41	3	0	0	0	0	0	0	0
November 2037	36	1	0	0	0	0	0	0	0
November 2038	31	0	0	0	0	0	0	0	0
November 2039	26	0	0	0	0	0	0	0	0
November 2040	20	0	0	0	0	0	0	0	0
November 2041	14	0	0	0	0	0	0	0	0
November 2042	9	0	0	0	0	0	0	0	0
November 2043	4	0	0	0	0	0	0	0	0
November 2044	2	0	0	0	0	0	0	0	0
November 2045	1	0	0	0	0	0	0	0	0
November 2046	0	0	0	0	0	0	0	0	0
November 2047	0	0	0	0	0	0	0	0	0
November 2048	0	0	0	0	0	0	0	0	0
November 2049	0	0	0	0	0	0	0	0	0
November 2050	0	0	0	0	0	0	0	0	0
November 2051	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	12.6	6.6	3.4	3.0	3.0	3.0	3.0	3.0	2.0

**Security Group 9  
PSA Prepayment Assumption Rates**

Distribution Date	Classes FE and SE				
	0%	100%	270%	450%	600%
Initial Percent	100	100	100	100	100
November 2022	98	96	94	91	89
November 2023	96	91	82	73	67
November 2024	94	83	68	53	42
November 2025	93	76	55	38	26
November 2026	90	70	45	27	16
November 2027	88	64	37	19	10
November 2028	86	58	30	13	6
November 2029	84	53	24	10	4
November 2030	81	48	20	7	2
November 2031	79	44	16	5	2
November 2032	76	40	13	3	1
November 2033	73	36	10	2	1
November 2034	71	32	8	2	0
November 2035	68	29	7	1	0
November 2036	65	26	5	1	0
November 2037	61	23	4	1	0
November 2038	58	20	3	0	0
November 2039	55	18	3	0	0
November 2040	51	15	2	0	0
November 2041	47	13	2	0	0
November 2042	43	11	1	0	0
November 2043	39	10	1	0	0
November 2044	35	8	1	0	0
November 2045	31	7	0	0	0
November 2046	26	5	0	0	0
November 2047	21	4	0	0	0
November 2048	16	3	0	0	0
November 2049	11	2	0	0	0
November 2050	6	1	0	0	0
November 2051	0	0	0	0	0
Weighted Average Life (years)	17.9	10.4	5.8	4.0	3.2

**Security Group 10  
PSA Prepayment Assumption Rates**

Distribution Date	Class IM					Class IW					Classes ME and MI				
	0%	100%	150%	300%	400%	0%	100%	150%	300%	400%	0%	100%	150%	300%	400%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2022	96	90	87	78	73	94	88	85	77	71	94	89	86	77	72
November 2023	91	80	75	61	52	87	77	72	59	50	88	78	73	59	51
November 2024	86	71	65	47	38	80	67	60	44	35	82	68	62	45	36
November 2025	81	63	55	36	27	73	57	50	33	24	75	59	52	34	25
November 2026	75	55	47	28	19	65	47	40	24	16	68	50	43	25	17
November 2027	69	48	39	21	13	56	39	32	17	11	61	42	34	18	12
November 2028	63	41	32	16	9	47	31	24	12	7	53	34	27	13	8
November 2029	56	34	26	11	6	38	23	18	8	4	44	27	21	9	5
November 2030	49	28	21	8	4	28	16	12	5	2	35	20	15	6	3
November 2031	41	22	16	6	3	17	9	7	2	1	25	14	10	3	2
November 2032	33	17	12	4	2	6	3	2	1	0	15	8	5	2	1
November 2033	25	12	8	2	1	0	0	0	0	0	8	4	3	1	0
November 2034	17	8	5	1	0	0	0	0	0	0	6	3	2	0	0
November 2035	10	4	3	1	0	0	0	0	0	0	4	1	1	0	0
November 2036	3	1	1	0	0	0	0	0	0	0	1	0	0	0	0
November 2037	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2038	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2039	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2040	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2041	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2042	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2043	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2044	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2045	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2046	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2047	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2048	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	8.5	6.3	5.4	3.7	3.0	6.4	5.1	4.5	3.3	2.7	7.1	5.5	4.8	3.4	2.8

**Security Group 11  
PSA Prepayment Assumption Rates**

Distribution Date	Classes K, KA, KB, KC, KD, KE, KG, KH, KI, KJ, KL and KM						Classes W, WA, WB, WC, WD, WG, WH, WI, WJ, WK and WM						Class ZX					
	0%	100%	325%	375%	405%	800%	0%	100%	325%	375%	405%	800%	0%	100%	325%	375%	405%	800%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2022	97	91	77	77	77	61	97	90	75	75	75	67	103	103	103	83	70	0
November 2023	94	82	58	58	58	31	93	80	53	53	34	106	106	106	73	53	0	
November 2024	91	74	42	42	42	16	90	71	36	36	36	17	109	109	109	71	47	0
November 2025	88	66	30	30	30	8	86	62	22	22	22	9	113	113	113	72	48	0
November 2026	85	59	20	20	20	4	82	53	11	11	11	4	116	116	113	72	50	0
November 2027	82	52	14	14	14	2	78	46	4	4	4	2	120	120	109	71	51	0
November 2028	78	46	8	8	8	1	74	38	0	0	0	1	123	123	101	67	50	0
November 2029	75	40	5	5	5	1	70	31	0	0	0	1	127	127	89	59	45	0
November 2030	71	34	2	2	2	0	65	25	0	0	0	0	131	131	79	53	41	0
November 2031	67	29	0	0	0	0	61	18	0	0	0	0	135	135	69	47	38	0
November 2032	63	24	0	0	0	0	56	13	0	0	0	0	139	139	53	35	27	0
November 2033	59	19	0	0	0	0	51	7	0	0	0	0	143	143	41	26	20	0
November 2034	55	15	0	0	0	0	46	2	0	0	0	0	148	148	31	19	14	0
November 2035	51	11	0	0	0	0	41	0	0	0	0	0	152	148	24	14	10	0
November 2036	46	7	0	0	0	0	35	0	0	0	0	0	157	145	18	10	7	0
November 2037	41	3	0	0	0	0	30	0	0	0	0	0	162	144	14	8	5	0
November 2038	37	0	0	0	0	0	24	0	0	0	0	0	166	142	10	5	4	0
November 2039	32	0	0	0	0	0	18	0	0	0	0	0	171	123	8	4	3	0
November 2040	26	0	0	0	0	0	12	0	0	0	0	0	177	105	6	3	2	0
November 2041	21	0	0	0	0	0	5	0	0	0	0	0	182	89	4	2	1	0
November 2042	16	0	0	0	0	0	0	0	0	0	0	0	185	75	3	1	1	0
November 2043	10	0	0	0	0	0	0	0	0	0	0	0	181	61	2	1	1	0
November 2044	4	0	0	0	0	0	0	0	0	0	0	0	177	48	1	1	0	0
November 2045	0	0	0	0	0	0	0	0	0	0	0	0	161	37	1	0	0	0
November 2046	0	0	0	0	0	0	0	0	0	0	0	0	121	26	1	0	0	0
November 2047	0	0	0	0	0	0	0	0	0	0	0	0	79	16	0	0	0	0
November 2048	0	0	0	0	0	0	0	0	0	0	0	0	37	7	0	0	0	0
November 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	13.4	7.0	3.1	3.0	3.0	1.7	11.6	5.9	2.5	2.5	2.5	1.9	25.6	21.3	11.3	8.4	6.3	0.3

**Security Groups 8 and 11  
PSA Prepayment Assumption Rates**

Distribution Date	Class Z								
	0%	100%	265%	325%	340%	375%	385%	405%	800%
Initial Percent	100	100	100	100	100	100	100	100	100
November 2022	103	103	103	100	96	84	81	74	5
November 2023	106	106	106	99	91	69	63	51	0
November 2024	109	109	109	98	88	61	54	39	0
November 2025	113	113	113	100	88	59	51	36	0
November 2026	116	116	116	101	88	59	52	37	0
November 2027	120	120	119	98	86	59	52	38	0
November 2028	123	123	121	92	81	57	51	37	0
November 2029	127	127	120	84	74	53	47	35	0
November 2030	131	131	117	77	68	50	45	33	0
November 2031	135	135	107	69	61	46	41	31	0
November 2032	139	139	90	56	50	37	33	24	0
November 2033	143	143	73	44	39	28	26	18	0
November 2034	148	148	59	34	29	21	19	14	0
November 2035	152	149	47	26	22	15	14	11	0
November 2036	157	148	37	20	17	11	10	8	0
November 2037	162	145	29	15	12	8	7	6	0
November 2038	166	142	23	11	9	6	5	4	0
November 2039	171	127	18	8	7	4	4	3	0
November 2040	177	110	14	6	5	3	3	2	0
November 2041	182	94	11	5	4	2	2	1	0
November 2042	186	79	8	3	3	1	1	1	0
November 2043	186	65	6	2	2	1	1	1	0
November 2044	181	52	4	2	1	1	1	0	0
November 2045	168	41	3	1	1	0	0	0	0
November 2046	136	30	2	1	1	0	0	0	0
November 2047	96	20	1	0	0	0	0	0	0
November 2048	55	11	1	0	0	0	0	0	0
November 2049	17	3	0	0	0	0	0	0	0
November 2050	0	0	0	0	0	0	0	0	0
November 2051	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	26.0	21.6	13.8	11.8	10.7	7.9	7.1	5.6	0.4

**Security Group 12  
PSA Prepayment Assumption Rates**

Distribution Date	Classes AN and IC					Class ZE				
	0%	100%	381%	600%	800%	0%	100%	381%	600%	800%
Initial Percent	100	100	100	100	100	100	100	100	100	100
November 2022	98	96	91	88	85	103	103	103	103	103
November 2023	96	89	74	63	53	106	106	106	106	106
November 2024	94	81	54	36	23	109	109	109	109	109
November 2025	91	74	38	19	6	113	113	113	113	113
November 2026	89	66	26	7	0	116	116	116	116	93
November 2027	86	59	16	0	0	120	120	120	120	47
November 2028	84	53	9	0	0	123	123	123	77	24
November 2029	81	47	4	0	0	127	127	127	48	12
November 2030	78	41	0	0	0	131	131	125	29	6
November 2031	75	36	0	0	0	135	135	93	18	3
November 2032	72	31	0	0	0	139	139	69	11	2
November 2033	69	27	0	0	0	143	143	51	7	1
November 2034	65	22	0	0	0	148	148	38	4	0
November 2035	62	18	0	0	0	152	152	28	3	0
November 2036	58	14	0	0	0	157	157	20	2	0
November 2037	54	11	0	0	0	162	162	15	1	0
November 2038	50	7	0	0	0	166	166	11	1	0
November 2039	46	4	0	0	0	171	171	8	0	0
November 2040	41	1	0	0	0	177	177	6	0	0
November 2041	37	0	0	0	0	182	164	4	0	0
November 2042	32	0	0	0	0	188	141	3	0	0
November 2043	27	0	0	0	0	193	119	2	0	0
November 2044	22	0	0	0	0	199	99	1	0	0
November 2045	16	0	0	0	0	205	80	1	0	0
November 2046	10	0	0	0	0	212	63	1	0	0
November 2047	4	0	0	0	0	218	47	0	0	0
November 2048	0	0	0	0	0	204	33	0	0	0
November 2049	0	0	0	0	0	139	20	0	0	0
November 2050	0	0	0	0	0	71	8	0	0	0
November 2051	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	15.9	8.3	3.6	2.6	2.2	28.4	23.8	12.2	8.2	6.2



**Security Group 13  
PSA Prepayment Assumption Rates**

Distribution Date	Classes AQ, FW and SW				
	0%	100%	280%	450%	600%
Initial Percent	100	100	100	100	100
November 2022	98	96	94	91	89
November 2023	96	91	82	73	67
November 2024	94	83	67	53	42
November 2025	93	76	54	38	26
November 2026	90	70	44	27	16
November 2027	88	64	35	19	10
November 2028	86	58	29	13	6
November 2029	84	53	23	10	4
November 2030	81	48	19	7	2
November 2031	79	44	15	5	1
November 2032	76	39	12	3	1
November 2033	73	36	9	2	1
November 2034	71	32	8	2	0
November 2035	68	29	6	1	0
November 2036	65	26	5	1	0
November 2037	61	23	4	1	0
November 2038	58	20	3	0	0
November 2039	55	18	2	0	0
November 2040	51	15	2	0	0
November 2041	47	13	1	0	0
November 2042	43	11	1	0	0
November 2043	39	10	1	0	0
November 2044	35	8	1	0	0
November 2045	31	6	0	0	0
November 2046	26	5	0	0	0
November 2047	21	4	0	0	0
November 2048	16	3	0	0	0
November 2049	11	2	0	0	0
November 2050	6	1	0	0	0
November 2051	0	0	0	0	0
Weighted Average Life (years)	17.9	10.3	5.7	4.0	3.2

**Security Group 14  
PSA Prepayment Assumption Rates**

Distribution Date	Classes HA and HI						Classes HB and IH					Class HV					Class HZ							
	0%	100%	250%	400%	600%	800%	0%	100%	250%	400%	600%	800%	0%	100%	250%	400%	600%	800%	0%	100%	250%	400%	600%	800%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2022	98	96	94	91	88	85	98	96	94	91	88	85	92	92	92	92	92	92	103	103	103	103	103	103
November 2023	96	90	82	74	64	54	96	90	82	74	64	55	84	84	84	84	84	84	105	105	105	105	105	105
November 2024	94	82	67	54	38	25	94	82	67	54	38	25	76	76	76	76	76	76	108	108	108	108	108	108
November 2025	92	75	54	38	21	9	92	75	54	38	21	9	68	68	68	68	68	68	111	111	111	111	111	111
November 2026	90	68	44	26	10	1	90	68	44	26	10	1	60	60	60	60	60	60	113	113	113	113	113	113
November 2027	87	61	35	17	4	0	87	61	35	17	4	0	51	51	51	51	51	0	116	116	116	116	116	75
November 2028	85	55	27	11	0	0	85	55	27	11	0	0	42	42	42	42	7	0	119	119	119	119	119	38
November 2029	83	49	21	6	0	0	83	50	21	6	0	0	33	33	33	33	0	0	122	122	122	122	75	19
November 2030	80	44	16	2	0	0	80	44	16	3	0	0	24	24	24	24	0	0	125	125	125	125	47	10
November 2031	77	39	12	0	0	0	77	40	12	0	0	0	14	14	14	1	0	0	128	128	128	128	29	5
November 2032	74	35	8	0	0	0	74	35	9	0	0	0	4	4	4	0	0	0	132	132	132	94	18	2
November 2033	71	31	5	0	0	0	72	31	6	0	0	0	0	0	0	0	0	0	133	133	133	69	11	1
November 2034	68	27	3	0	0	0	68	27	3	0	0	0	0	0	0	0	0	0	133	133	133	50	7	1
November 2035	65	23	1	0	0	0	65	24	1	0	0	0	0	0	0	0	0	0	133	133	133	36	4	0
November 2036	62	20	0	0	0	0	62	20	0	0	0	0	0	0	0	0	0	0	133	133	122	26	2	0
November 2037	58	17	0	0	0	0	59	17	0	0	0	0	0	0	0	0	0	0	133	133	98	19	1	0
November 2038	55	14	0	0	0	0	55	14	0	0	0	0	0	0	0	0	0	0	133	133	78	13	1	0
November 2039	51	12	0	0	0	0	51	12	0	0	0	0	0	0	0	0	0	0	133	133	62	10	1	0
November 2040	47	9	0	0	0	0	47	9	0	0	0	0	0	0	0	0	0	0	133	133	49	7	0	0
November 2041	43	7	0	0	0	0	43	7	0	0	0	0	0	0	0	0	0	0	133	133	38	5	0	0
November 2042	39	5	0	0	0	0	39	5	0	0	0	0	0	0	0	0	0	0	133	133	30	3	0	0
November 2043	35	3	0	0	0	0	35	3	0	0	0	0	0	0	0	0	0	0	133	133	23	2	0	0
November 2044	30	1	0	0	0	0	30	1	0	0	0	0	0	0	0	0	0	0	133	133	17	1	0	0
November 2045	25	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0	0	0	133	125	13	1	0	0
November 2046	20	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	133	99	9	1	0	0
November 2047	15	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	133	75	6	0	0	0
November 2048	10	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	133	53	4	0	0	0
November 2049	4	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	133	33	2	0	0	0
November 2050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	107	14	1	0	0	0
November 2051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	17.1	9.1	5.2	3.7	2.8	2.2	17.1	9.2	5.2	3.7	2.8	2.3	6.0	6.0	6.0	5.9	5.0	4.2	29.4	26.5	18.7	13.1	9.1	6.8

**Security Group 14  
PSA Prepayment Assumption Rates**

Distribution Date	Class JI						Class JL						Class JV					
	0%	100%	250%	400%	600%	800%	0%	100%	250%	400%	600%	800%	0%	100%	250%	400%	600%	800%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2022	98	96	94	91	88	85	100	100	100	100	100	100	92	92	92	92	92	92
November 2023	96	90	82	74	64	54	100	100	100	100	100	100	84	84	84	84	84	84
November 2024	94	82	67	54	38	25	100	100	100	100	100	100	76	76	76	76	76	76
November 2025	92	75	54	38	21	9	100	100	100	100	100	100	68	68	68	68	68	68
November 2026	90	68	44	26	10	1	100	100	100	100	100	100	60	60	60	60	60	60
November 2027	87	61	35	17	4	0	100	100	100	100	100	57	51	51	51	51	51	0
November 2028	85	55	27	11	0	0	100	100	100	100	92	29	42	42	42	42	12	0
November 2029	83	50	21	6	0	0	100	100	100	100	57	14	33	33	33	33	0	0
November 2030	80	44	16	2	0	0	100	100	100	100	35	7	24	24	24	24	0	0
November 2031	77	40	12	0	0	0	100	100	100	98	22	4	14	14	14	6	0	0
November 2032	74	35	8	0	0	0	100	100	100	72	13	2	4	4	4	0	0	0
November 2033	71	31	6	0	0	0	100	100	100	52	8	1	0	0	0	0	0	0
November 2034	68	27	3	0	0	0	100	100	100	38	5	0	0	0	0	0	0	0
November 2035	65	23	1	0	0	0	100	100	100	28	3	0	0	0	0	0	0	0
November 2036	62	20	0	0	0	0	100	100	93	20	2	0	0	0	0	0	0	0
November 2037	58	17	0	0	0	0	100	100	75	14	1	0	0	0	0	0	0	0
November 2038	55	14	0	0	0	0	100	100	60	10	1	0	0	0	0	0	0	0
November 2039	51	12	0	0	0	0	100	100	47	7	0	0	0	0	0	0	0	0
November 2040	47	9	0	0	0	0	100	100	37	5	0	0	0	0	0	0	0	0
November 2041	43	7	0	0	0	0	100	100	29	4	0	0	0	0	0	0	0	0
November 2042	39	5	0	0	0	0	100	100	23	2	0	0	0	0	0	0	0	0
November 2043	35	3	0	0	0	0	100	100	17	2	0	0	0	0	0	0	0	0
November 2044	30	1	0	0	0	0	100	100	13	1	0	0	0	0	0	0	0	0
November 2045	25	0	0	0	0	0	100	95	10	1	0	0	0	0	0	0	0	0
November 2046	20	0	0	0	0	0	100	75	7	0	0	0	0	0	0	0	0	0
November 2047	15	0	0	0	0	0	100	57	5	0	0	0	0	0	0	0	0	0
November 2048	10	0	0	0	0	0	100	40	3	0	0	0	0	0	0	0	0	0
November 2049	4	0	0	0	0	0	100	25	2	0	0	0	0	0	0	0	0	0
November 2050	0	0	0	0	0	0	82	11	1	0	0	0	0	0	0	0	0	0
November 2051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average																		
Life (years)	17.1	9.2	5.2	3.7	2.8	2.3	29.4	26.5	18.7	13.0	8.9	6.6	6.0	6.0	6.0	5.9	5.0	4.2

**PSA Prepayment Assumption Rates**

Distribution Date	Class JZ						Class VH						Class VZ						
	0%	100%	250%	400%	600%	800%	0%	100%	250%	400%	600%	800%	0%	100%	250%	400%	600%	800%	
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2022	103	103	103	103	103	103	92	92	92	92	92	92	103	103	103	103	103	103	103
November 2023	105	105	105	105	105	105	84	84	84	84	84	84	105	105	105	105	105	105	105
November 2024	108	108	108	108	108	108	76	76	76	76	76	76	108	108	108	108	108	108	108
November 2025	111	111	111	111	111	111	68	68	68	68	68	68	111	111	111	111	111	111	111
November 2026	113	113	113	113	113	113	60	60	60	60	60	60	113	113	113	113	113	113	113
November 2027	116	116	116	116	116	75	51	51	51	51	51	0	116	116	116	116	116	116	77
November 2028	119	119	119	119	119	38	42	42	42	42	19	0	119	119	119	119	119	119	39
November 2029	122	122	122	122	76	19	33	33	33	33	0	0	122	122	122	122	122	78	20
November 2030	125	125	125	125	47	10	24	24	24	24	0	0	125	125	125	125	125	48	10
November 2031	128	128	128	128	29	5	14	14	14	13	0	0	128	128	128	128	128	30	5
November 2032	132	132	132	95	18	2	4	4	4	0	0	0	132	132	132	97	18	2	2
November 2033	133	133	133	70	11	1	0	0	0	0	0	0	133	133	133	71	11	1	1
November 2034	133	133	133	51	7	1	0	0	0	0	0	0	133	133	133	51	7	1	1
November 2035	133	133	133	37	4	0	0	0	0	0	0	0	133	133	133	37	4	0	0
November 2036	133	133	124	26	2	0	0	0	0	0	0	0	133	133	126	27	3	0	0
November 2037	133	133	99	19	2	0	0	0	0	0	0	0	133	133	101	19	2	0	0
November 2038	133	133	79	14	1	0	0	0	0	0	0	0	133	133	81	14	1	0	0
November 2039	133	133	63	10	1	0	0	0	0	0	0	0	133	133	64	10	1	0	0
November 2040	133	133	50	7	0	0	0	0	0	0	0	0	133	133	51	7	0	0	0
November 2041	133	133	39	5	0	0	0	0	0	0	0	0	133	133	40	5	0	0	0
November 2042	133	133	30	3	0	0	0	0	0	0	0	0	133	133	31	3	0	0	0
November 2043	133	133	23	2	0	0	0	0	0	0	0	0	133	133	23	2	0	0	0
November 2044	133	133	17	2	0	0	0	0	0	0	0	0	133	133	18	2	0	0	0
November 2045	133	127	13	1	0	0	0	0	0	0	0	0	133	129	13	1	0	0	0
November 2046	133	100	9	1	0	0	0	0	0	0	0	0	133	102	9	1	0	0	0
November 2047	133	76	6	0	0	0	0	0	0	0	0	0	133	77	6	0	0	0	0
November 2048	133	53	4	0	0	0	0	0	0	0	0	0	133	54	4	0	0	0	0
November 2049	133	33	2	0	0	0	0	0	0	0	0	0	133	34	2	0	0	0	0
November 2050	109	14	1	0	0	0	0	0	0	0	0	0	111	15	1	0	0	0	0
November 2051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average																			
Life (years)	29.4	26.5	18.7	13.2	9.2	6.9	6.0	6.0	6.0	5.9	5.0	4.2	29.4	26.6	18.8	13.2	9.2	6.9	

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

**No representation is made regarding Mortgage Loan prepayment rates, Underlying Certificate payment rates, LIBOR levels, Compounded SOFR levels or the yield of any Class.**

### *Prepayments: Effect on Yields*

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

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

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

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

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

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

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

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

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

Low levels of LIBOR and Compounded SOFR, as applicable, can reduce the yield of the Floating Rate Classes. High levels of LIBOR and Compounded SOFR, as applicable, can 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 LIBOR or Compounded SOFR, as applicable, and certain Inverse Floating Rate Classes may not benefit from particularly low levels of Compounded 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 LIBOR and Compounded SOFR, as applicable.

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

The yields were calculated by

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

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

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

**SECURITY GROUP 1**

**Sensitivity of Class DS to Prepayments  
Assumed Price 7.1875%\***

<u>Compounded SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>381%</u>	<u>600%</u>	<u>800%</u>
0.01000% .....	31.2%	16.9%	5.3%	(5.7)%
0.05000% .....	30.6%	16.2%	4.5%	(6.5)%
1.32500% .....	10.2%	(5.5)%	(18.4)%	(30.9)%
2.60000% and above .....	**	**	**	**

**Sensitivity of Class DT to Prepayments  
Assumed Price 0.15625%\***

<u>Compounded SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>381%</u>	<u>600%</u>	<u>800%</u>
2.60000% .....	26.5%	11.9%	0.0%	(11.2)%
2.62500% .....	8.1%	(7.7)%	(20.8)%	(33.5)%
2.65000% and above .....	**	**	**	**

**SECURITY GROUP 2**

**Sensitivity of Class GS to Prepayments  
Assumed Price 7.23828125%\***

<u>Compounded SOFR</u>	<u>PSA Prepayment Assumption Rates</u>				
	<u>100%</u>	<u>300%</u>	<u>500%</u>	<u>750%</u>	<u>1,000%</u>
0.01000% .....	47.0%	31.1%	14.0%	(9.6)%	(36.9)%
0.04800% .....	46.4%	30.6%	13.5%	(10.1)%	(37.3)%
1.89900% .....	17.4%	3.3%	(11.9)%	(33.0)%	(57.3)%
3.75000% and above .....	**	**	**	**	**

**SECURITY GROUP 3**

**Sensitivity of Class CS to Prepayments  
Assumed Price 3.03125%\***

<u>Compounded SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>304%</u>	<u>500%</u>	<u>700%</u>
0.01000% .....	55.2%	46.1%	37.1%	27.8%
0.04767% .....	53.7%	44.5%	35.5%	26.1%
0.87384% .....	21.3%	10.9%	0.5%	(10.5)%
1.70000% and above .....	**	**	**	**

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

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

**Sensitivity of Class ES to Prepayments**  
**Assumed Price 3.03125%\***

<u>Compounded SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>304%</u>	<u>500%</u>	<u>700%</u>
0.01000% .....	55.2%	46.1%	37.1%	27.8%
0.04777% .....	53.7%	44.5%	35.5%	26.1%
0.87389% .....	21.3%	10.9%	0.5%	(10.5)%
1.70000% and above .....	**	**	**	**

**Sensitivity of Class ET to Prepayments**  
**Assumed Price 7.46875%\***

<u>Compounded SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>304%</u>	<u>500%</u>	<u>700%</u>
1.70000% .....	28.1%	18.0%	7.9%	(2.6)%
2.07500% .....	8.8%	(2.3)%	(13.4)%	(25.4)%
2.45000% and above .....	**	**	**	**

**Sensitivity of Class KT to Prepayments**  
**Assumed Price 0.15625%\***

<u>Compounded SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>304%</u>	<u>500%</u>	<u>700%</u>
2.45000% .....	26.4%	16.2%	6.0%	(4.6)%
2.47500% .....	7.9%	(3.2)%	(14.4)%	(26.5)%
2.50000% and above .....	**	**	**	**

**Sensitivity of Class SC to Prepayments**  
**Assumed Price 3.03125%\***

<u>Compounded SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>304%</u>	<u>500%</u>	<u>700%</u>
0.01000% .....	55.2%	46.1%	37.1%	27.8%
0.04800% .....	53.7%	44.5%	35.5%	26.1%
0.87400% .....	21.3%	10.9%	0.5%	(10.5)%
1.70000% and above .....	**	**	**	**

**Sensitivity of Class YS to Prepayments**  
**Assumed Price 5.15625%\***

<u>Compounded SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>304%</u>	<u>500%</u>	<u>700%</u>
0.01000% .....	44.7%	35.2%	25.9%	16.2%
0.04800% .....	43.8%	34.3%	25.0%	15.2%
1.24900% .....	16.6%	5.9%	(4.8)%	(16.1)%
2.45000% and above .....	**	**	**	**

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

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

**SECURITY GROUP 4**

**Sensitivity of Class EI to Prepayments  
Assumed Price 9.34375%\***

<b>PSA Prepayment Assumption Rates</b>				
<u>200%</u>	<u>240%</u>	<u>286%</u>	<u>468%</u>	<u>500%</u>
12.9%	12.9%	12.9%	0.0%	(2.5)%

**SECURITY GROUP 5**

**Sensitivity of Class AI to Prepayments  
Assumed Price 8.96875%\***

<b>PSA Prepayment Assumption Rates</b>					
<u>100%</u>	<u>325%</u>	<u>375%</u>	<u>405%</u>	<u>480%</u>	<u>800%</u>
22.8%	0.3%	0.1%	0.1%	0.0%	(27.6)%

**Sensitivity of Class BI to Prepayments  
Assumed Price 8.859375%\***

<b>PSA Prepayment Assumption Rates</b>					
<u>100%</u>	<u>288%</u>	<u>325%</u>	<u>375%</u>	<u>405%</u>	<u>800%</u>
22.1%	0.1%	(4.3)%	(4.8)%	(4.8)%	(25.9)%

**Sensitivity of Class CI to Prepayments  
Assumed Price 8.40625%\***

<b>PSA Prepayment Assumption Rates</b>					
<u>100%</u>	<u>275%</u>	<u>325%</u>	<u>375%</u>	<u>405%</u>	<u>800%</u>
22.7%	0.1%	(6.5)%	(6.5)%	(6.5)%	(22.6)%

**Sensitivity of Class IU to Prepayments  
Assumed Price 8.698%\***

<b>PSA Prepayment Assumption Rates</b>					
<u>100%</u>	<u>289%</u>	<u>325%</u>	<u>375%</u>	<u>405%</u>	<u>800%</u>
22.4%	0.0%	(4.0)%	(4.3)%	(4.3)%	(25.0)%

**SECURITY GROUP 6**

**Sensitivity of Class QT to Prepayments  
Assumed Price 0.109375%\***

<b>Compounded SOFR</b>	<b>PSA Prepayment Assumption Rates</b>				
	<u>100%</u>	<u>300%</u>	<u>450%</u>	<u>700%</u>	<u>900%</u>
4.25000% and below . . . . .	40.2%	24.7%	12.4%	(10.1)%	(30.4)%
4.27500% . . . . .	14.6%	0.6%	(10.6)%	(30.9)%	(49.4)%
4.30000% and above . . . . .	**	**	**	**	**

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

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



**Sensitivity of Class SG to Prepayments**  
**Assumed Price 7.984375%\***

<u>Compounded SOFR</u>	<u>PSA Prepayment Assumption Rates</u>				
	<u>100%</u>	<u>300%</u>	<u>450%</u>	<u>700%</u>	<u>900%</u>
0.01000% . . . . .	49.0%	33.0%	20.2%	(3.0)%	(24.0)%
0.05000% . . . . .	48.4%	32.5%	19.7%	(3.5)%	(24.4)%
2.15000% . . . . .	18.5%	4.3%	(7.0)%	(27.7)%	(46.3)%
4.25000% and above . . .	**	**	**	**	**

**SECURITY GROUP 7**

**Sensitivity of Class IA to Prepayments**  
**Assumed Price 8.0%\***

	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>374%</u>	<u>484%</u>	<u>600%</u>
29.6%	9.0%	0.1%	(9.8)%	(28.1)%

**Sensitivity of Class IB to Prepayments**  
**Assumed Price 8.0%\***

	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>374%</u>	<u>485%</u>	<u>600%</u>
29.6%	9.0%	0.0%	(9.7)%	(28.1)%

**Sensitivity of Class IJ to Prepayments**  
**Assumed Price 8.0%\***

	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>374%</u>	<u>484%</u>	<u>600%</u>
29.6%	9.0%	0.0%	(9.8)%	(28.2)%

**SECURITY GROUP 8**

**Sensitivity of Class GI to Prepayments**  
**Assumed Price 9.625%\***

	<u>PSA Prepayment Assumption Rates</u>			
	<u>265%</u>	<u>340%</u>	<u>385%</u>	<u>566%</u>
8.9%	6.7%	6.9%	0.0%	(14.6)%

**Sensitivity of Class I to Prepayments**  
**Assumed Price 9.574375%\***

	<u>PSA Prepayment Assumption Rates</u>			
	<u>265%</u>	<u>340%</u>	<u>385%</u>	<u>579%</u>
8.0%	6.4%	6.6%	0.0%	(13.6)%

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

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

**Sensitivity of Class IG to Prepayments  
Assumed Price 9.625%\***

<b>PSA Prepayment Assumption Rates</b>				
<u>265%</u>	<u>340%</u>	<u>385%</u>	<u>566%</u>	<u>800%</u>
8.9%	6.7%	6.9%	0.0%	(14.6)%

**Sensitivity of Class PI to Prepayments  
Assumed Price 9.46875%\***

<b>PSA Prepayment Assumption Rates</b>				
<u>265%</u>	<u>340%</u>	<u>385%</u>	<u>606%</u>	<u>800%</u>
5.7%	5.7%	5.7%	0.1%	(11.6)%

**SECURITY GROUPS 5 and 8**

**Sensitivity of Class IP to Prepayments  
Assumed Price 9.3125%\***

<b>PSA Prepayment Assumption Rates</b>								
<u>100%</u>	<u>265%</u>	<u>294%</u>	<u>325%</u>	<u>340%</u>	<u>375%</u>	<u>385%</u>	<u>405%</u>	<u>800%</u>
20.6%	2.9%	0.0%	(2.1)%	(2.3)%	(2.3)%	(2.2)%	(1.9)%	(23.0)%

**SECURITY GROUP 9**

**Sensitivity of Class SE to Prepayments  
Assumed Price 3.609375%\***

<b>LIBOR</b>	<b>PSA Prepayment Assumption Rates</b>			
	<u>100%</u>	<u>270%</u>	<u>450%</u>	<u>600%</u>
0.050% .....	42.8%	34.8%	26.2%	18.9%
0.086% .....	41.6%	33.6%	25.0%	17.6%
0.893% .....	15.5%	6.6%	(3.2)%	(11.6)%
1.700% and above .....	**	**	**	**

**SECURITY GROUP 10**

**Sensitivity of Class IM to Prepayments  
Assumed Price 17.25%\***

<b>PSA Prepayment Assumption Rates</b>				
<u>100%</u>	<u>150%</u>	<u>300%</u>	<u>365%</u>	<u>400%</u>
19.1%	15.6%	4.9%	0.1%	(2.6)%

\* 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 IW to Prepayments  
Assumed Price 17.25%\***

PSA Prepayment Assumption Rates				
<u>100%</u>	<u>150%</u>	<u>300%</u>	<u>317%</u>	<u>400%</u>
15.2%	11.8%	1.2%	0.0%	(6.1)%

**Sensitivity of Class MI to Prepayments  
Assumed Price 17.25%\***

PSA Prepayment Assumption Rates				
<u>100%</u>	<u>150%</u>	<u>300%</u>	<u>335%</u>	<u>400%</u>
16.6%	13.2%	2.6%	0.0%	(4.8)%

**SECURITY GROUP 11**

**Sensitivity of Class KI to Prepayments  
Assumed Price 8.5625%\***

PSA Prepayment Assumption Rates					
<u>100%</u>	<u>325%</u>	<u>375%</u>	<u>405%</u>	<u>509%</u>	<u>800%</u>
24.6%	2.2%	2.0%	2.0%	0.1%	(25.0)%

**Sensitivity of Class WI to Prepayments  
Assumed Price 8.375%\***

PSA Prepayment Assumption Rates					
<u>100%</u>	<u>276%</u>	<u>325%</u>	<u>375%</u>	<u>405%</u>	<u>800%</u>
22.8%	0.1%	(6.4)%	(6.4)%	(6.4)%	(21.3)%

**SECURITY GROUP 12**

**Sensitivity of Class IC to Prepayments  
Assumed Price 11.3125%\***

PSA Prepayment Assumption Rates				
<u>100%</u>	<u>353%</u>	<u>381%</u>	<u>600%</u>	<u>800%</u>
18.0%	0.1%	(2.0)%	(18.4)%	(32.5)%

**SECURITY GROUP 13**

**Sensitivity of Class SW to Prepayments  
Assumed Price 6.6115625%\***

<u>Compounded SOFR</u>	PSA Prepayment Assumption Rates			
	<u>100%</u>	<u>280%</u>	<u>450%</u>	<u>600%</u>
0.01000% .....	34.0%	25.2%	16.8%	9.2%
0.04767% .....	33.3%	24.6%	16.1%	8.5%
1.29884% .....	11.4%	1.8%	(7.7)%	(16.3)%
2.55000% and above .....	**	**	**	**

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

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

## SECURITY GROUP 14

### Sensitivity of Class HI to Prepayments Assumed Price 8.75%\*

PSA Prepayment Assumption Rates					
<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>422%</u>	<u>600%</u>	<u>800%</u>
21.0%	11.8%	1.6%	0.1%	(12.5)%	(26.2)%

### Sensitivity of Class IH to Prepayments Assumed Price 8.625%\*

PSA Prepayment Assumption Rates					
<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>433%</u>	<u>600%</u>	<u>800%</u>
21.5%	12.4%	2.3%	0.0%	(11.6)%	(25.3)%

### Sensitivity of Class JI to Prepayments Assumed Price 8.698125%\*

PSA Prepayment Assumption Rates					
<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>427%</u>	<u>600%</u>	<u>800%</u>
21.3%	12.0%	1.9%	0.0%	(12.1)%	(25.8)%

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

## CERTAIN UNITED STATES FEDERAL INCOME TAX CONSEQUENCES

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

### REMIC Elections

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

### Regular Securities

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

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

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

<u>Group(s)</u>	<u>PSA</u>
1 and 12	381%
2	500%
3	304%
4	240%
5 and 11	375%
6	450%
7	374%
8	340%
9	270%
10	150%
13	280%
14	400%

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

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

### **Residual Securities**

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

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

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

### **MX Securities**

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

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

### **ERISA MATTERS**

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

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

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

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

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

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

### **LEGAL INVESTMENT CONSIDERATIONS**

Institutions whose investment activities are subject to legal investment laws and regulations or to review by certain regulatory authorities may be subject to restrictions on investment in the Securities. **No**

**representation is made about the proper characterization of any Class for legal investment or other purposes, or about the permissibility of the purchase by particular investors of any Class under applicable legal investment restrictions.**

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

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

#### **PLAN OF DISTRIBUTION**

Subject to the terms and conditions of the Sponsor Agreement, the Sponsor has agreed to purchase all of the Securities if any are sold and purchased. The Sponsor proposes to offer the Regular and MX Classes to the public from time to time for sale in negotiated transactions at varying prices to be determined at the time of sale, plus accrued interest from (1) November 1, 2021 on the Fixed Rate Classes and (2) November 20, 2021 on the Floating Rate and Inverse Floating Rate and 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), (2) the Original Component Principal Balance of each Component of each related Class and (3) the Scheduled Principal Balances or Aggregate Scheduled Principal Balances of each Class or Component receiving principal distributions or interest distributions based upon a notional balance from the same Trust Asset Group will increase by the same proportion. The Trust Agreement, the Final Data Statement, the Final Schedules and the Supplemental Statement, if any, will reflect any increase in the size of the transaction.

#### **LEGAL MATTERS**

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



Available Combinations(1)

Class	REMIC Securities		MX Securities						
	Original Class Principal Balance or Class Notional Balance	Related MX Class	Maximum Original Class Principal Balance or Class Notional Balance(2)	Principal Type(3)	Interest Rate	Interest Type(3)	CUSIP Number	Final Distribution Date(4)	
<b>Security Group 1</b>									
Combination 1									
DF	\$ 25,000,000	FD	\$ 25,000,000	PT	(5)	FLT	38383DTY4	November 2051	
DT	25,000,000								
<b>Security Group 3</b>									
Combination 2									
CS	\$500,000,000	ES	\$700,000,000	NTL(PT)	(5)	INV/IO	38383DTZ1	November 2051	
SC	200,000,000								
<b>Security Group 5</b>									
Combination 3(6)									
B	\$154,913,659	BA	\$154,913,659	PAC/AD	0.750%	FIX	38383DUA4	November 2049	
		BC	154,913,659	PAC/AD	1.000	FIX	38383DUB2	November 2049	
		BD	154,913,659	PAC/AD	1.250	FIX	38383DUC0	November 2049	
		BE	154,913,659	PAC/AD	1.500	FIX	38383DUD8	November 2049	
		BG	154,913,659	PAC/AD	1.750	FIX	38383DUE6	November 2049	
		BH	154,913,659	PAC/AD	2.000	FIX	38383DUF3	November 2049	
		BI	116,185,244	NTL(PAC/AD)	3.000	FIX/IO	38383DUG1	November 2049	
Combination 4(6)									
A	\$ 72,250,000	AB	\$ 72,250,000	PAC/AD	1.000%	FIX	38383DUH9	November 2049	
		AC	72,250,000	PAC/AD	1.250	FIX	38383DUJ5	November 2049	
		AD	72,250,000	PAC/AD	1.500	FIX	38383DUK2	November 2049	
		AE	72,250,000	PAC/AD	1.750	FIX	38383DUL0	November 2049	
		AG	72,250,000	PAC/AD	2.000	FIX	38383DUM8	November 2049	
		AH	72,250,000	PAC/AD	2.250	FIX	38383DUN6	November 2049	
		AI	48,166,666	NTL(PAC/AD)	3.000	FIX/IO	38383DUP1	November 2049	

REMIC Securities

MX Securities

Class	Original Class Principal Balance or Class Notional Balance		Related MX Class	Maximum Original Class Principal Balance or Class Notional Balance(2)		Principal Type(3)	Interest Rate	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
	Principal Balance	Notional Balance		Principal Balance	Notional Balance					
Combination 5(6)										
C	\$145,750,000		CA	\$145,750,000		PAC/AD	0.750%	FIX	38383DUQ9	November 2049
			CB	145,750,000		PAC/AD	0.875	FIX	38383DUR7	November 2049
			CD	145,750,000		PAC/AD	1.000	FIX	38383DUS5	November 2049
			CE	145,750,000		PAC/AD	1.125	FIX	38383DUT3	November 2049
			CG	145,750,000		PAC/AD	1.250	FIX	38383DUU0	November 2049
			CH	145,750,000		PAC/AD	1.375	FIX	38383DUV8	November 2049
			CI	109,312,500		NTL(PAC/AD)	3.000	FIX/IO	38383DUW6	November 2049
Combination 6			IU	\$214,553,800		NTL(PAC/AD)	3.000%	FIX/IO	38383DUX4	November 2049
AI(7)	\$ 37,666,666									
BI(7)	91,387,134									
CI(7)	85,500,000									
<b>Security Group 6</b>										
Combination 7			FG	\$ 74,747,961		PT	(5)	FLT	38383DUY2	November 2051
QF	\$ 74,747,961									
QT	74,747,961									
Combination 8			TF	\$ 74,747,961		PT	(5)	FLT	38383DUZ9	November 2051
QF	\$ 74,747,961									
<b>Security Group 7</b>										
Combination 9			IA	\$185,198,411		NTL(PT)	3.000%	FIX/IO	38383DVA3	November 2051
IB	\$ 92,536,414									
IJ	92,661,997									
<b>Security Group 8</b>										
Combination 10(6)			GA	\$ 92,161,056		PAC/AD	1.000%	FIX	38383DVB1	June 2051
G	\$ 92,161,056		GB	92,161,056		PAC/AD	1.250	FIX	38383DVC9	June 2051
			GE	92,161,056		PAC/AD	2.000	FIX	38383DVD7	June 2051
			GH	92,161,056		PAC/AD	1.750	FIX	38383DVE5	June 2051
			GI	61,440,704		NTL(PAC/AD)	3.000	FIX/IO	38383DVF2	June 2051
			GX	92,161,056		PAC/AD	1.750	FIX	38383DVG0	June 2051
			GY	92,161,056		PAC/AD	1.500	FIX	38383DVH8	June 2051

REMIC Securities		MX Securities						
Class	Original Class Principal Balance or Class Notional Balance	Related MX Class	Maximum Original Class Principal Balance or Class Notional Balance(2)	Principal Type(3)	Interest Rate	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
Combination 11(6)								
XG	\$31,000,000	GC	\$ 31,000,000	PAC/AD	1.500%	FIX	38383DVJ4	June 2051
		GM	31,000,000	PAC/AD	1.000	FIX	38383DVK1	June 2051
		GN	31,000,000	PAC/AD	1.250	FIX	38383DVL9	June 2051
		GP	31,000,000	PAC/AD	1.750	FIX	38383DVM7	June 2051
		GQ	31,000,000	PAC/AD	2.000	FIX	38383DVN5	June 2051
		IG	20,666,666	NTL(PAC/AD)	3.000	FIX/IO	38383DVP0	June 2051
Combination 12(6)								
P	\$50,000,000	PA	\$ 50,000,000	PAC/AD	1.000%	FIX	38383DVQ8	June 2051
		PB	50,000,000	PAC/AD	1.250	FIX	38383DVR6	June 2051
		PC	50,000,000	PAC/AD	1.500	FIX	38383DVS4	June 2051
		PD	50,000,000	PAC/AD	1.750	FIX	38383DVT2	June 2051
		PE	50,000,000	PAC/AD	2.000	FIX	38383DVU9	June 2051
		PG	50,000,000	PAC/AD	2.250	FIX	38383DVV7	June 2051
		PI	33,333,333	NTL(PAC/AD)	3.000	FIX/IO	38383DWW5	June 2051
Combination 13								
GP(7)	\$20,000,000	GD	\$ 70,000,000	PAC/AD	1.750%	FIX	38383DVX3	June 2051
GX(7)	50,000,000							
Combination 14								
GI(7)	\$38,400,440	I	\$ 77,233,773	NTL(PAC/AD)	3.000%	FIX/IO	38383DYY1	June 2051
IG(7)	13,833,333							
PI(7)	25,000,000							
<b>Security Groups 5 and 8</b>								
Combination 15(8)								
AI(7)	\$37,666,666	IP	\$291,787,573	NTL(PAC/AD)	3.000%	FIX/IO	38383DVZ8	June 2051
BI(7)	91,387,134							
CI(7)	85,500,000							
GI(7)	38,400,440							
IG(7)	13,833,333							
PI(7)	25,000,000							

REMIC Securities

MX Securities

Class	Original Class Principal Balance or Class Notional Balance		Related MX Class	Maximum Original Class Principal Balance or Class Notional Balance(2)		Principal Type(3)	Interest Rate	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
	Principal Balance	Notional Balance		Principal Balance	Notional Balance					
<b>Security Group 10</b>										
Combination 16										
IM	\$ 10,741,513		MI	\$ 31,818,181	NTL(PT)	5.500%	FIX/IO	38383DWA2	March 2048	
IW	21,076,668									
<b>Security Group 11</b>										
Combination 17(6)										
K	\$200,000,000		KA	\$200,000,000	PAC/AD	1.000%	FIX	38383DWB0	February 2050	
			KB	200,000,000	PAC/AD	1.250	FIX	38383DWC8	February 2050	
			KC	200,000,000	PAC/AD	1.500	FIX	38383DWD6	February 2050	
			KD	200,000,000	PAC/AD	1.750	FIX	38383DWE4	February 2050	
			KE	200,000,000	PAC/AD	2.000	FIX	38383DWF1	February 2050	
			KG	200,000,000	PAC/AD	2.250	FIX	38383DWG9	February 2050	
			KH	200,000,000	PAC/AD	2.500	FIX	38383DWH7	February 2050	
			KI	150,000,000	NTL(PAC/AD)	3.000	FIX/IO	38383DWJ3	February 2050	
			KJ	200,000,000	PAC/AD	2.750	FIX	38383DWK0	February 2050	
			KL	200,000,000	PAC/AD	3.000	FIX	38383DWL8	February 2050	
			KM	200,000,000	PAC/AD	0.750	FIX	38383DQZ4	February 2050	
Combination 18(6)										
W	\$ 51,500,000		WA	\$ 51,500,000	PAC/AD	0.750%	FIX	38383DRA8	February 2050	
			WB	51,500,000	PAC/AD	0.875	FIX	38383DRB6	February 2050	
			WC	51,500,000	PAC/AD	1.000	FIX	38383DRC4	February 2050	
			WD	51,500,000	PAC/AD	1.125	FIX	38383DRD2	February 2050	
			WG	51,500,000	PAC/AD	1.250	FIX	38383DRE0	February 2050	
			WH	51,500,000	PAC/AD	1.375	FIX	38383DRF7	February 2050	
			WI	38,625,000	NTL(PAC/AD)	3.000	FIX/IO	38383DRG5	February 2050	
			WJ	51,500,000	PAC/AD	1.500	FIX	38383DRH3	February 2050	
			WK	51,500,000	PAC/AD	1.750	FIX	38383DRJ9	February 2050	
			WM	51,500,000	PAC/AD	2.000	FIX	38383DRK6	February 2050	
<b>Security Groups 8 and 11</b>										
Combination 19(8)										
WZ	\$ 25,339,173		Z	\$ 61,412,406	CPT/PAC/AD/SUP	3.000%	FIX/Z	38383DRL4	June 2051	
ZX	36,073,233									

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)
<b>Security Group 14</b>								
Combination 20								
HI	\$19,971,840	JI	\$34,135,629	NTL(SEQ)	2.500%	FIX/IO	38383DRM2	September 2050
IH	14,163,789							
Combination 21								
HV	\$ 1,154,687	JV	\$ 1,947,542	SEQ/AD	2.500%	FIX	38383DRN0	May 2033
VH	792,855							
Combination 22								
HZ	\$ 3,499,316	JZ	\$ 5,902,087	SEQ	2.500%	FIX/Z	38383DRP5	November 2051
VZ	2,402,771							
Combination 23								
HV	\$ 1,154,687	JL	\$ 7,849,629	SEQ	2.500%	FIX	38383DRQ3	November 2051
HZ	3,499,316							
VH	792,855							
VZ	2,402,771							

(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 3, 4, 5, 10, 11, 12, 17 and 18, various subcombinations are permitted. See "Description of the Securities — Modification and Exchange" in the Base Offering Circular for a discussion of subcombinations.

(7) MX Class.

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

**Schedule II**

**SCHEDULED PRINCIPAL BALANCES**

<u>Distribution Date</u>	<u>Class EA</u>	<u>Class A and Component ZW1 (in the aggregate)</u>	<u>Class B and Component ZW3 (in the aggregate)</u>
Initial Balance .....	\$22,767,825.00	\$72,253,613.00	\$154,921,406.00
December 2021 .....	22,456,417.35	70,891,485.69	151,819,903.54
January 2022 .....	22,148,617.55	69,499,579.61	148,651,250.78
February 2022 .....	21,844,384.03	68,079,815.59	145,419,849.11
March 2022 .....	21,543,675.73	66,634,151.65	142,130,184.39
April 2022 .....	21,246,452.01	65,164,578.29	138,786,816.01
May 2022 .....	20,952,672.71	63,673,113.68	135,394,365.64
June 2022 .....	20,662,298.12	62,210,320.24	132,067,598.31
July 2022 .....	20,375,288.95	60,775,645.24	128,805,230.26
August 2022 .....	20,091,606.36	59,368,546.44	125,606,002.47
September 2022 .....	19,811,211.96	57,988,491.94	122,468,680.18
October 2022 .....	19,534,067.76	56,634,959.92	119,392,052.42
November 2022 .....	19,260,136.23	55,307,438.53	116,374,931.54
December 2022 .....	18,989,380.22	54,005,425.63	113,416,152.82
January 2023 .....	18,721,763.03	52,728,428.62	110,514,573.95
February 2023 .....	18,457,248.34	51,475,964.32	107,669,074.70
March 2023 .....	18,195,800.26	50,247,558.69	104,878,556.39
April 2023 .....	17,937,383.30	49,042,746.77	102,141,941.56
May 2023 .....	17,681,962.35	47,861,072.41	99,458,173.55
June 2023 .....	17,429,502.71	46,702,088.18	96,826,216.06
July 2023 .....	17,179,970.06	45,565,355.14	94,245,052.79
August 2023 .....	16,933,330.46	44,450,442.74	91,713,687.09
September 2023 .....	16,689,550.37	43,356,928.61	89,231,141.51
October 2023 .....	16,448,596.59	42,284,398.45	86,796,457.50
November 2023 .....	16,210,436.33	41,232,445.85	84,408,695.01
December 2023 .....	15,975,037.15	40,200,672.13	82,066,932.14
January 2024 .....	15,742,366.97	39,188,686.24	79,770,264.82
February 2024 .....	15,512,394.06	38,196,104.57	77,517,806.43
March 2024 .....	15,285,087.09	37,222,550.83	75,308,687.49
April 2024 .....	15,060,415.02	36,267,655.90	73,142,055.33
May 2024 .....	14,838,347.20	35,331,057.73	71,017,073.76
June 2024 .....	14,618,853.32	34,412,401.15	68,932,922.75
July 2024 .....	14,401,903.39	33,511,337.78	66,888,798.14
August 2024 .....	14,187,467.77	32,627,525.90	64,883,911.33
September 2024 .....	13,975,517.16	31,760,630.29	62,917,488.95
October 2024 .....	13,766,022.57	30,910,322.16	60,988,772.62
November 2024 .....	13,558,955.35	30,076,278.98	59,097,018.62
December 2024 .....	13,354,287.16	29,258,184.41	57,241,497.63
January 2025 .....	13,151,989.99	28,455,728.11	55,421,494.46
February 2025 .....	12,952,036.14	27,668,605.70	53,636,307.75
March 2025 .....	12,736,431.17	26,896,518.63	51,885,249.74
April 2025 .....	12,520,859.37	26,140,961.72	50,173,191.58
May 2025 .....	12,307,796.01	25,403,818.50	48,502,299.08
June 2025 .....	12,097,211.75	24,684,640.63	46,871,568.50

<u>Distribution Date</u>	<u>Class EA</u>	<u>Class A and Component ZW1 (in the aggregate)</u>	<u>Class B and Component ZW3 (in the aggregate)</u>
July 2025	\$11,889,077.59	\$23,982,990.55	\$ 45,280,020.28
August 2025	11,683,364.85	23,298,441.23	43,726,698.43
September 2025	11,480,045.16	22,630,575.95	42,210,670.00
October 2025	11,279,090.48	21,978,988.00	40,731,024.50
November 2025	11,080,473.09	21,343,280.51	39,286,873.38
December 2025	10,884,165.57	20,723,066.12	37,877,349.50
January 2026	10,690,140.82	20,117,966.86	36,501,606.63
February 2026	10,498,372.04	19,527,613.85	35,158,818.91
March 2026	10,308,832.73	18,951,647.09	33,848,180.42
April 2026	10,121,496.69	18,389,715.29	32,568,904.67
May 2026	9,936,338.02	17,841,475.62	31,320,224.13
June 2026	9,753,578.03	17,306,593.52	30,101,389.79
July 2026	9,574,021.88	16,784,742.53	28,911,670.72
August 2026	9,397,615.09	16,275,604.03	27,750,353.62
September 2026	9,224,304.12	15,778,867.12	26,616,742.41
October 2026	9,054,036.31	15,294,228.40	25,510,157.82
November 2026	8,886,759.88	14,821,391.80	24,429,936.99
December 2026	8,722,423.89	14,360,068.41	23,375,433.06
January 2027	8,560,978.29	13,909,976.28	22,346,014.79
February 2027	8,402,373.83	13,470,840.29	21,341,066.22
March 2027	8,246,562.09	13,042,391.97	20,359,986.24
April 2027	8,093,495.47	12,624,369.34	19,402,188.30
May 2027	7,943,127.14	12,216,516.76	18,467,100.01
June 2027	7,795,411.07	11,818,584.76	17,554,162.85
July 2027	7,650,302.00	11,430,329.92	16,662,831.79
August 2027	7,507,755.41	11,051,514.71	15,792,574.97
September 2027	7,367,727.52	10,681,907.33	14,942,873.44
October 2027	7,230,175.32	10,321,281.62	14,113,220.78
November 2027	7,095,056.47	9,969,416.88	13,303,122.83
December 2027	6,962,329.36	9,626,097.76	12,512,097.41
January 2028	6,831,953.07	9,291,114.13	11,739,674.01
February 2028	6,703,887.39	8,964,260.93	10,985,393.52
March 2028	6,578,092.73	8,645,338.11	10,248,807.95
April 2028	6,454,530.21	8,334,150.43	9,529,480.17
May 2028	6,333,161.58	8,030,507.42	8,826,983.63
June 2028	6,213,949.24	7,734,223.19	8,140,902.16
July 2028	6,096,856.19	7,445,116.39	7,470,829.63
August 2028	5,981,846.10	7,163,010.07	6,816,369.81
September 2028	5,868,883.20	6,887,731.55	6,177,136.05
October 2028	5,757,932.34	6,619,112.36	5,552,751.09
November 2028	5,648,958.97	6,356,988.13	4,942,846.83
December 2028	5,541,929.11	6,101,198.45	4,347,064.11
January 2029	5,436,809.33	5,851,586.85	3,765,052.47
February 2029	5,333,566.80	5,608,000.61	3,196,470.00
March 2029	5,232,169.20	5,370,290.78	2,640,983.05
April 2029	5,132,584.79	5,138,311.97	2,098,266.12
May 2029	5,034,782.33	4,911,922.38	1,568,001.58



<u>Distribution Date</u>	<u>Class EA</u>	<u>Class A and Component ZW1 (in the aggregate)</u>	<u>Class B and Component ZW3 (in the aggregate)</u>
June 2029	\$ 4,938,731.13	\$ 4,690,983.63	\$ 1,049,879.55
July 2029	4,844,401.00	4,475,360.70	543,597.68
August 2029	4,751,762.26	4,264,921.88	48,860.97
September 2029	4,660,785.74	4,059,538.63	0.00
October 2029	4,571,442.74	3,859,085.59	0.00
November 2029	4,483,705.07	3,663,440.40	0.00
December 2029	4,397,544.98	3,472,483.72	0.00
January 2030	4,312,935.22	3,286,099.09	0.00
February 2030	4,229,848.99	3,104,172.90	0.00
March 2030	4,148,259.91	2,926,594.31	0.00
April 2030	4,068,142.10	2,753,255.18	0.00
May 2030	3,989,470.07	2,584,050.01	0.00
June 2030	3,912,218.77	2,418,875.87	0.00
July 2030	3,836,363.60	2,257,632.34	0.00
August 2030	3,761,880.33	2,100,221.45	0.00
September 2030	3,688,745.18	1,946,547.63	0.00
October 2030	3,616,934.75	1,796,517.64	0.00
November 2030	3,546,426.03	1,650,040.51	0.00
December 2030	3,477,196.42	1,507,027.50	0.00
January 2031	3,409,223.68	1,367,392.03	0.00
February 2031	3,342,485.95	1,231,049.65	0.00
March 2031	3,276,961.76	1,097,917.96	0.00
April 2031	3,212,629.97	967,916.59	0.00
May 2031	3,149,469.83	840,967.12	0.00
June 2031	3,087,460.92	716,993.07	0.00
July 2031	3,026,583.17	595,919.80	0.00
August 2031	2,966,816.85	477,674.52	0.00
September 2031	2,908,142.58	362,186.23	0.00
October 2031	2,850,541.28	249,385.65	0.00
November 2031	2,793,994.21	139,205.21	0.00
December 2031	2,738,482.95	31,578.98	0.00
January 2032	2,683,989.39	0.00	0.00
February 2032	2,630,495.72	0.00	0.00
March 2032	2,577,984.44	0.00	0.00
April 2032	2,526,438.34	0.00	0.00
May 2032	2,475,840.52	0.00	0.00
June 2032	2,426,174.34	0.00	0.00
July 2032	2,377,423.46	0.00	0.00
August 2032	2,329,571.83	0.00	0.00
September 2032	2,282,603.64	0.00	0.00
October 2032	2,236,503.38	0.00	0.00
November 2032	2,191,255.78	0.00	0.00
December 2032	2,146,845.85	0.00	0.00
January 2033	2,103,258.84	0.00	0.00
February 2033	2,060,480.26	0.00	0.00
March 2033	2,018,495.88	0.00	0.00
April 2033	1,977,291.67	0.00	0.00

<u>Distribution Date</u>	<u>Class EA</u>	<u>Class A and Component ZW1 (in the aggregate)</u>	<u>Class B and Component ZW3 (in the aggregate)</u>
May 2033	\$ 1,936,853.89	\$ 0.00	\$ 0.00
June 2033	1,897,169.00	0.00	0.00
July 2033	1,858,223.72	0.00	0.00
August 2033	1,820,004.95	0.00	0.00
September 2033	1,782,499.87	0.00	0.00
October 2033	1,745,695.85	0.00	0.00
November 2033	1,709,580.46	0.00	0.00
December 2033	1,674,141.52	0.00	0.00
January 2034	1,639,367.03	0.00	0.00
February 2034	1,605,245.22	0.00	0.00
March 2034	1,571,764.49	0.00	0.00
April 2034	1,538,913.46	0.00	0.00
May 2034	1,506,680.95	0.00	0.00
June 2034	1,475,055.95	0.00	0.00
July 2034	1,444,027.67	0.00	0.00
August 2034	1,413,585.46	0.00	0.00
September 2034	1,383,718.90	0.00	0.00
October 2034	1,354,417.73	0.00	0.00
November 2034	1,325,671.85	0.00	0.00
December 2034	1,297,471.36	0.00	0.00
January 2035	1,269,806.52	0.00	0.00
February 2035	1,242,667.75	0.00	0.00
March 2035	1,216,045.64	0.00	0.00
April 2035	1,189,930.95	0.00	0.00
May 2035	1,164,314.60	0.00	0.00
June 2035	1,139,187.64	0.00	0.00
July 2035	1,114,541.30	0.00	0.00
August 2035	1,090,366.97	0.00	0.00
September 2035	1,066,656.15	0.00	0.00
October 2035	1,043,400.53	0.00	0.00
November 2035	1,020,591.91	0.00	0.00
December 2035	998,222.26	0.00	0.00
January 2036	976,283.66	0.00	0.00
February 2036	954,768.35	0.00	0.00
March 2036	933,668.70	0.00	0.00
April 2036	912,977.19	0.00	0.00
May 2036	892,686.47	0.00	0.00
June 2036	872,789.28	0.00	0.00
July 2036	853,278.50	0.00	0.00
August 2036	834,147.15	0.00	0.00
September 2036	815,388.35	0.00	0.00
October 2036	796,995.34	0.00	0.00
November 2036	778,961.49	0.00	0.00
December 2036	761,280.27	0.00	0.00
January 2037	743,945.28	0.00	0.00
February 2037	726,950.22	0.00	0.00
March 2037	710,288.90	0.00	0.00

<u>Distribution Date</u>	<u>Class EA</u>	<u>Class A and Component ZW1 (in the aggregate)</u>	<u>Class B and Component ZW3 (in the aggregate)</u>
April 2037	\$ 693,955.25	\$ 0.00	\$ 0.00
May 2037	677,943.29	0.00	0.00
June 2037	662,247.15	0.00	0.00
July 2037	646,861.06	0.00	0.00
August 2037	631,779.36	0.00	0.00
September 2037	616,996.48	0.00	0.00
October 2037	602,506.95	0.00	0.00
November 2037	588,305.39	0.00	0.00
December 2037	574,386.54	0.00	0.00
January 2038	560,745.18	0.00	0.00
February 2038	547,376.24	0.00	0.00
March 2038	534,274.71	0.00	0.00
April 2038	521,435.65	0.00	0.00
May 2038	508,854.24	0.00	0.00
June 2038	496,525.73	0.00	0.00
July 2038	484,445.45	0.00	0.00
August 2038	472,608.82	0.00	0.00
September 2038	461,011.34	0.00	0.00
October 2038	449,648.58	0.00	0.00
November 2038	438,516.20	0.00	0.00
December 2038	427,609.92	0.00	0.00
January 2039	416,925.55	0.00	0.00
February 2039	406,458.97	0.00	0.00
March 2039	396,206.14	0.00	0.00
April 2039	386,163.07	0.00	0.00
May 2039	376,325.86	0.00	0.00
June 2039	366,690.68	0.00	0.00
July 2039	357,253.74	0.00	0.00
August 2039	348,011.36	0.00	0.00
September 2039	338,959.89	0.00	0.00
October 2039	330,095.76	0.00	0.00
November 2039	321,415.45	0.00	0.00
December 2039	312,915.53	0.00	0.00
January 2040	304,592.61	0.00	0.00
February 2040	296,443.36	0.00	0.00
March 2040	288,464.51	0.00	0.00
April 2040	280,652.85	0.00	0.00
May 2040	273,005.24	0.00	0.00
June 2040	265,518.57	0.00	0.00
July 2040	258,189.80	0.00	0.00
August 2040	251,015.96	0.00	0.00
September 2040	243,994.10	0.00	0.00
October 2040	237,121.34	0.00	0.00
November 2040	230,394.86	0.00	0.00
December 2040	223,811.87	0.00	0.00
January 2041	217,369.65	0.00	0.00
February 2041	211,065.52	0.00	0.00

<u>Distribution Date</u>	<u>Class EA</u>	<u>Class A and Component ZW1 (in the aggregate)</u>	<u>Class B and Component ZW3 (in the aggregate)</u>
March 2041	\$ 204,896.84	\$ 0.00	\$ 0.00
April 2041	198,861.02	0.00	0.00
May 2041	192,955.54	0.00	0.00
June 2041	187,177.89	0.00	0.00
July 2041	181,525.62	0.00	0.00
August 2041	175,996.34	0.00	0.00
September 2041	170,587.67	0.00	0.00
October 2041	165,297.31	0.00	0.00
November 2041	160,122.97	0.00	0.00
December 2041	155,062.42	0.00	0.00
January 2042	150,113.46	0.00	0.00
February 2042	145,273.93	0.00	0.00
March 2042	140,541.72	0.00	0.00
April 2042	135,914.75	0.00	0.00
May 2042	131,390.97	0.00	0.00
June 2042	126,968.38	0.00	0.00
July 2042	122,645.02	0.00	0.00
August 2042	118,418.95	0.00	0.00
September 2042	114,288.27	0.00	0.00
October 2042	110,251.12	0.00	0.00
November 2042	106,305.67	0.00	0.00
December 2042	102,450.12	0.00	0.00
January 2043	98,682.71	0.00	0.00
February 2043	95,001.71	0.00	0.00
March 2043	91,405.42	0.00	0.00
April 2043	87,892.17	0.00	0.00
May 2043	84,460.32	0.00	0.00
June 2043	81,108.27	0.00	0.00
July 2043	77,834.43	0.00	0.00
August 2043	74,637.25	0.00	0.00
September 2043	71,515.21	0.00	0.00
October 2043	68,466.82	0.00	0.00
November 2043	65,490.62	0.00	0.00
December 2043	62,585.15	0.00	0.00
January 2044	59,749.02	0.00	0.00
February 2044	56,980.82	0.00	0.00
March 2044	54,279.21	0.00	0.00
April 2044	51,642.83	0.00	0.00
May 2044	49,070.39	0.00	0.00
June 2044	46,560.60	0.00	0.00
July 2044	44,112.18	0.00	0.00
August 2044	41,723.90	0.00	0.00
September 2044	39,394.55	0.00	0.00
October 2044	37,122.92	0.00	0.00
November 2044	34,907.84	0.00	0.00
December 2044	32,748.17	0.00	0.00
January 2045	30,642.77	0.00	0.00

<u>Distribution Date</u>	<u>Class EA</u>	<u>Class A and Component ZW1 (in the aggregate)</u>	<u>Class B and Component ZW3 (in the aggregate)</u>
February 2045 .....	\$ 28,590.53	\$ 0.00	\$ 0.00
March 2045 .....	26,590.37	0.00	0.00
April 2045 .....	24,641.21	0.00	0.00
May 2045 .....	22,742.02	0.00	0.00
June 2045 .....	20,891.76	0.00	0.00
July 2045 .....	19,089.41	0.00	0.00
August 2045 .....	17,334.01	0.00	0.00
September 2045 .....	15,624.56	0.00	0.00
October 2045 .....	13,960.12	0.00	0.00
November 2045 .....	12,339.75	0.00	0.00
December 2045 .....	10,762.53	0.00	0.00
January 2046 .....	9,227.56	0.00	0.00
February 2046 .....	7,733.96	0.00	0.00
March 2046 .....	6,280.87	0.00	0.00
April 2046 .....	4,929.95	0.00	0.00
May 2046 .....	3,753.77	0.00	0.00
June 2046 .....	2,610.00	0.00	0.00
July 2046 .....	2,340.86	0.00	0.00
August 2046 .....	2,078.82	0.00	0.00
September 2046 .....	1,823.73	0.00	0.00
October 2046 .....	1,575.43	0.00	0.00
November 2046 .....	1,333.80	0.00	0.00
December 2046 .....	1,098.68	0.00	0.00
January 2047 .....	883.26	0.00	0.00
February 2047 .....	673.71	0.00	0.00
March 2047 .....	469.91	0.00	0.00
April 2047 .....	271.74	0.00	0.00
May 2047 .....	79.08	0.00	0.00
June 2047 .....	60.00	0.00	0.00
July 2047 .....	41.44	0.00	0.00
August 2047 .....	23.40	0.00	0.00
September 2047 .....	5.85	0.00	0.00
October 2047 .....	3.66	0.00	0.00
November 2047 .....	1.54	0.00	0.00
December 2047 and thereafter .....	0.00	0.00	0.00

<b>Distribution Date</b>	<b>Class C and Component ZW5 (in the aggregate)</b>	<b>Class G and Component WZ1 (in the aggregate)</b>	<b>Class P and Component WZ5 (in the aggregate)</b>
Initial Balance . . . . .	\$145,757,288.00	\$92,165,665.00	\$50,002,500.00
December 2021 . . . . .	142,744,742.04	91,595,216.33	49,682,901.69
January 2022 . . . . .	139,666,705.65	90,973,322.41	49,336,600.38
February 2022 . . . . .	136,527,327.16	90,300,569.32	48,963,880.26
March 2022 . . . . .	133,330,836.01	89,577,622.69	48,565,061.88
April 2022 . . . . .	130,081,532.69	88,805,226.84	48,140,501.79
May 2022 . . . . .	126,783,778.43	87,984,203.74	47,690,592.00
June 2022 . . . . .	123,547,833.82	87,115,451.66	47,215,759.50
July 2022 . . . . .	120,372,520.91	86,199,943.74	46,716,465.56
August 2022 . . . . .	117,256,683.82	85,238,726.24	46,193,205.05
September 2022 . . . . .	114,199,188.34	84,232,916.70	45,646,505.61
October 2022 . . . . .	111,198,921.56	83,183,701.83	45,076,926.81
November 2022 . . . . .	108,254,791.44	82,092,335.22	44,485,059.15
December 2022 . . . . .	105,365,726.43	80,960,134.92	43,871,523.05
January 2023 . . . . .	102,530,675.12	79,788,480.75	43,236,967.75
February 2023 . . . . .	99,748,605.81	78,578,811.53	42,582,070.14
March 2023 . . . . .	97,018,506.18	77,332,622.04	41,907,533.50
April 2023 . . . . .	94,339,382.91	76,051,459.97	41,214,086.21
May 2023 . . . . .	91,710,261.36	74,736,922.57	40,502,480.38
June 2023 . . . . .	89,130,185.19	73,390,653.24	39,773,490.43
July 2023 . . . . .	86,598,216.01	72,014,338.00	39,027,911.59
August 2023 . . . . .	84,113,433.09	70,609,701.80	38,266,558.41
September 2023 . . . . .	81,674,932.99	69,178,504.78	37,490,263.16
October 2023 . . . . .	79,281,829.25	67,722,538.33	36,699,874.21
November 2023 . . . . .	76,933,252.09	66,243,621.19	35,896,254.41
December 2023 . . . . .	74,628,348.07	64,790,417.98	35,104,705.67
January 2024 . . . . .	72,366,279.81	63,362,478.14	34,325,041.99
February 2024 . . . . .	70,146,225.69	61,959,358.93	33,557,080.14
March 2024 . . . . .	67,967,379.53	60,580,625.18	32,800,639.68
April 2024 . . . . .	65,828,950.33	59,225,849.26	32,055,542.84
May 2024 . . . . .	63,730,161.98	57,894,610.89	31,321,614.58
June 2024 . . . . .	61,670,252.96	56,586,497.04	30,598,682.45
July 2024 . . . . .	59,648,476.11	55,301,101.78	29,886,576.62
August 2024 . . . . .	57,664,098.33	54,038,026.21	29,185,129.82
September 2024 . . . . .	55,716,400.33	52,796,878.28	28,494,177.30
October 2024 . . . . .	53,804,676.36	51,577,272.73	27,813,556.78
November 2024 . . . . .	51,928,233.96	50,378,830.91	27,143,108.44
December 2024 . . . . .	50,086,393.75	49,201,180.75	26,482,674.85
January 2025 . . . . .	48,278,489.12	48,043,956.55	25,832,100.98
February 2025 . . . . .	46,503,866.05	46,906,798.95	25,191,234.13
March 2025 . . . . .	44,761,882.82	45,789,354.79	24,559,923.87
April 2025 . . . . .	43,054,130.95	44,691,277.00	23,938,022.10
May 2025 . . . . .	41,387,009.82	43,612,224.52	23,325,382.89
June 2025 . . . . .	39,759,527.64	42,551,862.15	22,721,862.56
July 2025 . . . . .	38,170,716.51	41,509,860.52	22,127,319.57
August 2025 . . . . .	36,619,631.83	40,485,895.91	21,541,614.53
September 2025 . . . . .	35,105,351.73	39,479,650.21	20,964,610.16

<u>Distribution Date</u>	<u>Class C and Component ZW5 (in the aggregate)</u>	<u>Class G and Component WZ1 (in the aggregate)</u>	<u>Class P and Component WZ5 (in the aggregate)</u>
October 2025	\$ 33,626,976.58	\$38,490,810.83	\$20,396,171.23
November 2025	32,183,628.36	37,519,070.54	19,836,164.57
December 2025	30,774,450.27	36,564,127.46	19,284,459.02
January 2026	29,398,606.12	35,625,684.92	18,740,925.39
February 2026	28,055,279.86	34,703,451.36	18,205,436.45
March 2026	26,743,675.16	33,797,140.29	17,677,866.90
April 2026	25,463,014.86	32,906,470.16	17,158,093.32
May 2026	24,212,540.53	32,034,417.75	16,645,994.16
June 2026	22,991,512.07	31,181,891.55	16,142,161.04
July 2026	21,799,207.21	30,348,454.05	15,649,829.72
August 2026	20,634,921.10	29,533,677.41	15,168,734.66
September 2026	19,497,965.94	28,737,143.25	14,698,616.38
October 2026	18,387,670.49	27,958,442.47	14,239,221.30
November 2026	17,303,379.75	27,197,175.01	13,790,301.62
December 2026	16,244,454.51	26,452,949.66	13,351,615.21
January 2027	15,210,271.02	25,725,383.88	12,922,925.42
February 2027	14,200,220.59	25,014,103.62	12,504,001.02
March 2027	13,213,709.24	24,318,743.07	12,094,616.05
April 2027	12,250,157.34	23,638,944.57	11,694,549.70
May 2027	11,308,999.28	22,974,358.35	11,303,586.20
June 2027	10,389,683.13	22,324,642.43	10,921,514.70
July 2027	9,491,670.29	21,689,462.37	10,548,129.16
August 2027	8,614,435.19	21,068,491.17	10,183,228.25
September 2027	7,757,464.99	20,461,409.07	9,826,615.23
October 2027	6,920,259.25	19,867,903.43	9,478,097.85
November 2027	6,102,329.64	19,287,668.50	9,137,488.26
December 2027	5,303,199.66	18,720,405.35	8,804,602.89
January 2028	4,522,404.32	18,165,821.68	8,479,262.37
February 2028	3,759,489.93	17,623,631.67	8,161,291.44
March 2028	3,014,013.77	17,093,555.85	7,850,518.82
April 2028	2,285,543.83	16,575,320.96	7,546,777.18
May 2028	1,573,658.60	16,068,659.79	7,249,902.98
June 2028	877,946.77	15,573,311.11	6,959,736.44
July 2028	198,007.00	15,089,019.45	6,676,121.44
August 2028	0.00	14,615,535.04	6,398,905.41
September 2028	0.00	14,152,613.66	6,127,939.31
October 2028	0.00	13,700,016.54	5,863,077.47
November 2028	0.00	13,257,510.18	5,604,177.58
December 2028	0.00	12,824,866.30	5,351,100.57
January 2029	0.00	12,401,861.71	5,103,710.59
February 2029	0.00	11,988,278.16	4,861,874.86
March 2029	0.00	11,583,902.28	4,625,463.67
April 2029	0.00	11,188,525.45	4,394,350.27
May 2029	0.00	10,801,943.68	4,168,410.83
June 2029	0.00	10,423,957.53	3,947,524.34
July 2029	0.00	10,054,372.02	3,731,572.58
August 2029	0.00	9,692,996.49	3,520,440.04



<b>Distribution Date</b>	<b>Class C and Component ZW5 (in the aggregate)</b>	<b>Class G and Component WZ1 (in the aggregate)</b>	<b>Class P and Component WZ5 (in the aggregate)</b>
September 2029	\$ 0.00	\$ 9,339,644.56	\$ 3,314,013.86
October 2029	0.00	8,994,133.98	3,112,183.76
November 2029	0.00	8,656,286.57	2,914,842.00
December 2029	0.00	8,325,928.14	2,721,883.31
January 2030	0.00	8,002,888.36	2,533,204.85
February 2030	0.00	7,687,000.73	2,348,706.13
March 2030	0.00	7,378,102.45	2,168,288.97
April 2030	0.00	7,076,034.35	1,991,857.44
May 2030	0.00	6,780,640.82	1,819,317.83
June 2030	0.00	6,491,769.74	1,650,578.58
July 2030	0.00	6,209,272.38	1,485,550.22
August 2030	0.00	5,933,003.31	1,324,145.36
September 2030	0.00	5,662,820.39	1,166,278.61
October 2030	0.00	5,398,584.64	1,011,866.55
November 2030	0.00	5,140,160.18	860,827.66
December 2030	0.00	4,887,414.18	713,082.33
January 2031	0.00	4,640,216.78	568,552.75
February 2031	0.00	4,398,441.02	427,162.93
March 2031	0.00	4,161,962.81	288,838.61
April 2031	0.00	3,930,660.79	153,507.26
May 2031	0.00	3,704,416.36	21,098.00
June 2031	0.00	3,483,113.56	0.00
July 2031	0.00	3,266,639.03	0.00
August 2031	0.00	3,054,881.96	0.00
September 2031	0.00	2,847,733.99	0.00
October 2031	0.00	2,645,089.24	0.00
November 2031	0.00	2,446,844.17	0.00
December 2031	0.00	2,252,897.58	0.00
January 2032	0.00	2,063,150.53	0.00
February 2032	0.00	1,877,506.30	0.00
March 2032	0.00	1,695,870.35	0.00
April 2032	0.00	1,518,150.27	0.00
May 2032	0.00	1,344,255.71	0.00
June 2032	0.00	1,174,098.35	0.00
July 2032	0.00	1,007,591.87	0.00
August 2032	0.00	844,651.87	0.00
September 2032	0.00	685,195.88	0.00
October 2032	0.00	529,143.25	0.00
November 2032	0.00	376,415.17	0.00
December 2032	0.00	226,934.58	0.00
January 2033	0.00	80,626.18	0.00
February 2033 and thereafter	0.00	0.00	0.00

<u>Distribution Date</u>	<u>Class XG and Component WZ3 (in the aggregate)</u>	<u>Class K and Component ZX1 (in the aggregate)</u>	<u>Class W and Component ZX3 (in the aggregate)</u>
Initial Balance . . . . .	\$31,001,550.00	\$200,010,000.00	\$51,502,575.00
December 2021 . . . . .	30,809,669.51	196,513,030.97	50,511,007.91
January 2022 . . . . .	30,600,484.50	192,925,893.65	49,494,095.03
February 2022 . . . . .	30,374,192.11	189,253,523.47	48,453,200.97
March 2022 . . . . .	30,131,016.23	185,500,980.53	47,389,725.01
April 2022 . . . . .	29,871,207.24	181,673,437.48	46,305,097.79
May 2022 . . . . .	29,595,041.61	177,776,167.16	45,200,777.88
June 2022 . . . . .	29,302,821.50	173,814,529.79	44,078,248.36
July 2022 . . . . .	28,994,874.23	169,793,960.03	42,939,013.22
August 2022 . . . . .	28,671,551.74	165,850,601.14	41,821,092.56
September 2022 . . . . .	28,333,229.93	161,982,964.22	40,724,080.01
October 2022 . . . . .	27,980,307.96	158,189,588.64	39,647,576.81
November 2022 . . . . .	27,613,207.52	154,469,041.58	38,591,191.71
December 2022 . . . . .	27,232,371.94	150,819,917.45	37,554,540.76
January 2023 . . . . .	26,838,265.36	147,240,837.40	36,537,247.26
February 2023 . . . . .	26,431,371.74	143,730,448.84	35,538,941.55
March 2023 . . . . .	26,012,193.88	140,287,424.88	34,559,260.91
April 2023 . . . . .	25,581,252.38	136,910,463.91	33,597,849.44
May 2023 . . . . .	25,139,084.50	133,598,289.09	32,654,357.92
June 2023 . . . . .	24,686,243.02	130,349,647.90	31,728,443.69
July 2023 . . . . .	24,223,295.06	127,163,311.65	30,819,770.52
August 2023 . . . . .	23,750,820.86	124,038,075.07	29,928,008.51
September 2023 . . . . .	23,269,412.45	120,972,755.83	29,052,833.94
October 2023 . . . . .	22,779,672.40	117,966,194.16	28,193,929.19
November 2023 . . . . .	22,282,212.49	115,017,252.35	27,350,982.61
December 2023 . . . . .	21,793,401.91	112,124,814.39	26,523,688.39
January 2024 . . . . .	21,313,089.11	109,287,785.56	25,711,746.49
February 2024 . . . . .	20,841,125.17	106,505,091.98	24,914,862.50
March 2024 . . . . .	20,377,363.71	103,775,680.27	24,132,747.56
April 2024 . . . . .	19,921,660.89	101,098,517.14	23,365,118.24
May 2024 . . . . .	19,473,875.34	98,472,588.99	22,611,696.43
June 2024 . . . . .	19,033,868.13	95,896,901.58	21,872,209.26
July 2024 . . . . .	18,601,502.72	93,370,479.64	21,146,389.01
August 2024 . . . . .	18,176,644.93	90,892,366.50	20,433,972.99
September 2024 . . . . .	17,759,162.89	88,461,623.76	19,734,703.45
October 2024 . . . . .	17,348,927.01	86,077,330.94	19,048,327.50
November 2024 . . . . .	16,945,809.93	83,738,585.13	18,374,597.00
December 2024 . . . . .	16,549,686.49	81,444,500.67	17,713,268.52
January 2025 . . . . .	16,160,433.68	79,194,208.82	17,064,103.18
February 2025 . . . . .	15,777,930.63	76,986,857.44	16,426,866.61
March 2025 . . . . .	15,402,058.54	74,821,610.66	15,801,328.86
April 2025 . . . . .	15,032,700.67	72,697,648.60	15,187,264.33
May 2025 . . . . .	14,669,742.30	70,624,181.99	14,586,753.12
June 2025 . . . . .	14,313,070.68	68,601,167.19	14,000,491.75
July 2025 . . . . .	13,962,575.01	66,627,375.73	13,428,132.35
August 2025 . . . . .	13,618,146.42	64,701,608.76	12,869,335.42
September 2025 . . . . .	13,279,677.90	62,822,696.26	12,323,769.63

<u>Distribution Date</u>	<u>Class XG and Component WZ3 (in the aggregate)</u>	<u>Class K and Component ZX1 (in the aggregate)</u>	<u>Class W and Component ZX3 (in the aggregate)</u>
October 2025	\$12,947,064.30	\$ 60,989,496.40	\$11,791,111.62
November 2025	12,620,202.28	59,200,894.85	11,271,045.84
December 2025	12,298,990.30	57,455,804.14	10,763,264.32
January 2026	11,983,328.57	55,753,163.00	10,267,466.50
February 2026	11,673,119.02	54,091,935.74	9,783,359.10
March 2026	11,368,265.27	52,471,111.62	9,310,655.87
April 2026	11,068,672.64	50,889,704.29	8,849,077.48
May 2026	10,775,342.40	49,346,751.20	8,398,351.33
June 2026	10,488,580.15	47,841,312.98	7,958,211.39
July 2026	10,208,238.71	46,372,472.96	7,528,398.04
August 2026	9,934,174.19	44,939,336.57	7,108,657.93
September 2026	9,666,245.85	43,541,030.84	6,698,743.84
October 2026	9,404,316.08	42,176,703.87	6,298,414.48
November 2026	9,148,250.32	40,845,524.32	5,907,434.42
December 2026	8,897,916.97	39,546,680.96	5,525,573.88
January 2027	8,653,187.37	38,279,382.12	5,152,608.65
February 2027	8,413,935.68	37,042,855.28	4,788,319.93
March 2027	8,180,038.87	35,836,346.57	4,432,494.20
April 2027	7,951,376.63	34,659,120.36	4,084,923.11
May 2027	7,727,831.32	33,510,458.79	3,745,403.34
June 2027	7,509,287.88	32,389,661.38	3,413,736.47
July 2027	7,295,633.85	31,296,044.56	3,089,728.89
August 2027	7,086,759.21	30,228,941.32	2,773,191.67
September 2027	6,882,556.42	29,187,700.79	2,463,940.45
October 2027	6,682,920.31	28,171,687.83	2,161,795.33
November 2027	6,487,748.04	27,180,282.70	1,866,580.76
December 2027	6,296,939.05	26,212,880.65	1,578,125.43
January 2028	6,110,395.04	25,268,891.58	1,296,262.20
February 2028	5,928,019.84	24,347,739.68	1,020,827.94
March 2028	5,749,719.47	23,448,863.10	751,663.51
April 2028	5,575,402.01	22,571,713.60	488,613.59
May 2028	5,404,977.57	21,715,756.22	231,526.64
June 2028	5,238,358.29	20,880,468.99	0.00
July 2028	5,075,458.23	20,065,342.57	0.00
August 2028	4,916,193.38	19,269,879.99	0.00
September 2028	4,760,481.60	18,493,596.35	0.00
October 2028	4,608,242.56	17,736,018.49	0.00
November 2028	4,459,397.72	16,996,684.75	0.00
December 2028	4,313,870.31	16,275,144.66	0.00
January 2029	4,171,585.24	15,570,958.72	0.00
February 2029	4,032,469.11	14,883,698.08	0.00
March 2029	3,896,450.14	14,212,944.32	0.00
April 2029	3,763,458.15	13,558,289.16	0.00
May 2029	3,633,424.54	12,919,334.29	0.00
June 2029	3,506,282.22	12,295,691.05	0.00
July 2029	3,381,965.60	11,686,980.23	0.00
August 2029	3,260,410.56	11,092,831.86	0.00

<u>Distribution Date</u>	<u>Class XG and Component WZ3 (in the aggregate)</u>	<u>Class K and Component ZX1 (in the aggregate)</u>	<u>Class W and Component ZX3 (in the aggregate)</u>
September 2029	\$ 3,141,554.39	\$ 10,512,884.96	\$ 0.00
October 2029	3,025,335.80	9,946,787.33	0.00
November 2029	2,911,694.86	9,394,195.37	0.00
December 2029	2,800,572.96	8,854,773.80	0.00
January 2030	2,691,912.82	8,328,195.53	0.00
February 2030	2,585,658.44	7,814,141.45	0.00
March 2030	2,481,755.04	7,312,300.20	0.00
April 2030	2,380,149.09	6,822,368.02	0.00
May 2030	2,280,788.26	6,344,048.54	0.00
June 2030	2,183,621.37	5,877,052.64	0.00
July 2030	2,088,598.39	5,421,098.23	0.00
August 2030	1,995,670.41	4,975,910.11	0.00
September 2030	1,904,789.61	4,541,219.80	0.00
October 2030	1,815,909.24	4,116,765.35	0.00
November 2030	1,728,983.61	3,702,291.23	0.00
December 2030	1,643,968.02	3,297,548.14	0.00
January 2031	1,560,818.81	2,902,292.87	0.00
February 2031	1,479,493.26	2,516,288.14	0.00
March 2031	1,399,949.64	2,139,302.48	0.00
April 2031	1,322,147.12	1,771,110.08	0.00
May 2031	1,246,045.81	1,411,490.65	0.00
June 2031	1,171,606.70	1,060,229.27	0.00
July 2031	1,098,791.66	717,116.31	0.00
August 2031	1,027,563.43	381,947.23	0.00
September 2031	957,885.55	54,522.52	0.00
October 2031	889,722.41	0.00	0.00
November 2031	823,039.18	0.00	0.00
December 2031	757,801.81	0.00	0.00
January 2032	693,977.04	0.00	0.00
February 2032	631,532.32	0.00	0.00
March 2032	570,435.86	0.00	0.00
April 2032	510,656.57	0.00	0.00
May 2032	452,164.06	0.00	0.00
June 2032	394,928.63	0.00	0.00
July 2032	338,921.23	0.00	0.00
August 2032	284,113.48	0.00	0.00
September 2032	230,477.64	0.00	0.00
October 2032	177,986.58	0.00	0.00
November 2032	126,613.79	0.00	0.00
December 2032	76,333.36	0.00	0.00
January 2033	27,119.94	0.00	0.00
February 2033 and thereafter	0.00	0.00	0.00

Underlying Certificates

Trust Asset Group	Issuer	Series	Class	Issue Date	CUSIP Number	Interest Rate	Interest Type(D)	Final Distribution Date	Principal Type(D)	Original Principal Balance of Class	Underlying Certificate Factor(C)	Principal Balance in Trust	Percentage of Class in Trust	Ginnie Mae I or II
4	Ginnie Mae	2016-134	CK(3)	October 28, 2016	38380BGH5	3.0%	FIX	October 2016	SEQ	\$60,000,000	0.31954403	\$7,988,600	41.666666666667%	II
4	Ginnie Mae	2016-136	BC(3)	October 28, 2016	38380BPX7	3.0	FIX	October 2016	SEQ	60,000,000	0.30233888	7,538,472	41.666666666667	II
4	Ginnie Mae	2017-116	H(3)(G)(5)	July 28, 2017	38380TWR3	3.0	FIX	February 2047	SC/PT	28,478,170	0.7482695	3,741,234	17.5573079310	II
4	Ginnie Mae	2018-024	HL(3)(4)	February 28, 2018	38380VBE0	3.0	FIX	February 2048	SEQ	39,178,128	0.43418972	6,192,754	36.4049629936	II

- (1) As defined under “Class Types” in Appendix I to the Base Offering Circular.
- (2) Underlying Certificate Factors are as of November 2021.
- (3) More than 10% of the Mortgage Loans underlying this Underlying Certificate may be higher balance Mortgage Loans. See “Risk Factors” in *this Supplement*.
- (4) MX Class.
- (5) Class H is backed by previously issued Ginnie Mae MX and REMIC certificates, as outlined below:
  - REMIC Class ML from 2017-005.
  - MX Class PM from 2017-005.
  - REMIC Class PL from 2017-032.

**Exhibit B**

**Characteristics of the Mortgage Loans Underlying the Group 5, 8, 10 and 11 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>Subgroup 5A Trust Assets</b>				
MA6283 .....	\$ 80,649,300.25	332	24	3.497%
<b>Subgroup 5B Trust Assets</b>				
MA6283 .....	\$180,527,332.14	332	24	3.497%
<b>Subgroup 5C Trust Assets</b>				
MA6283 .....	\$178,359,686.43	332	24	3.497%
<b>Subgroup 8A Trust Assets</b>				
MA7419 .....	\$103,195,882.46	348	6	3.373%
<b>Subgroup 8B Trust Assets</b>				
MA7419 .....	\$ 34,711,758.66	348	6	3.373%
<b>Subgroup 8C Trust Assets</b>				
MA7419 .....	\$ 60,592,589.18	348	6	3.373%
<b>Group 10A Trust Assets</b>				
785672 .....	\$ 33,120,479.24	138	213	5.945%
<b>Group 10B Trust Assets</b>				
319900 .....	\$ 1,178.49	109	238	6.273%
336000 .....	752.41	122	225	6.280
340300 .....	9,747.17	125	222	6.257
378600 .....	19,457.00	153	193	5.924
379600 .....	22,646.94	156	192	6.022
385100 .....	42,369.23	160	187	6.050
400500 .....	17,826.94	175	173	5.996
411400 .....	2,384.79	187	163	5.910
414400 .....	7,829.03	187	163	5.943
457900 .....	114,581.07	201	146	5.842
477300 .....	146,026.90	189	154	5.904
781764 .....	10,815.93	135	211	5.893
785673 .....	12,550,255.43	183	168	5.951
CI0173 .....	2,708,009.06	148	206	5.945
CI0189 .....	799,778.17	148	204	5.900
MA1842 .....	34,360.33	166	184	5.987
MA5081 .....	391,501.97	257	97	5.930
	<u>\$ 16,879,520.86</u>			
<b>Group 11 Trust Assets</b>				
MA6474 .....	\$287,573,233.81	334	22	3.487%

(1) As of November 1, 2021.

(2) The Mortgage Loans underlying the Group 5, 8, 10 and 11 Trust Assets may bear interest at rates ranging from 0.25% to 1.50% per annum above the related Certificate Rate.



**\$3,138,348,043**

**Government National  
Mortgage Association**

**GINNIE MAE®**

**Guaranteed REMIC  
Pass-Through Securities  
and MX Securities  
Ginnie Mae REMIC Trust 2021-193**

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***OFFERING CIRCULAR SUPPLEMENT***  
**November 23, 2021**

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