

**\$2,274,113,136**

**Government National Mortgage Association**

**GINNIE MAE®**

**Guaranteed REMIC Pass-Through Securities  
and MX Securities**

**Ginnie Mae REMIC Trust 2021-117**

**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-10 which highlights some of these risks.

The Sponsor and the Co-Sponsor will offer the securities from time to time in negotiated transactions at varying prices. We expect the closing date to be July 30, 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>						
PC	\$ 35,000,000	2.00%	PAC/AD	FIX	38382WDR5	July 2051
PE	24,252,000	1.50	PAC/AD	FIX	38382WDS3	July 2051
PI	16,700,800	2.50	NTL(PAC/AD)	FIX/IO	38382WDT1	July 2051
Z	20,000,000	2.50	SUP	FIX/Z	38382WDU8	July 2051
<b>Security Group 2</b>						
A(1)	100,000,000	1.25	PT	FIX	38382WDV6	July 2051
AF(1)	50,000,000	(5)	PT	FLT	38382WDW4	July 2051
AI	21,428,571	3.50	NTL(PT)	FIX/IO	38382WDX2	July 2051
AS	50,000,000	(5)	NTL(PT)	INV/IO	38382WDY0	July 2051
BA(1)	90,121,182	1.25	PT	FIX	38382WDZ7	July 2051
BI	19,311,681	3.50	NTL(PT)	FIX/IO	38382WEA1	July 2051
FB(1)	45,060,590	(5)	PT	FLT	38382WEB9	July 2051
SB	45,060,590	(5)	NTL(PT)	INV/IO	38382WEC7	July 2051
<b>Security Group 3</b>						
EA(1)	244,260,326	1.25	PT	FIX	38382WED5	July 2051
EB(1)	222,274,795	1.25	PT	FIX	38382WEE3	July 2051
EF(1)	122,130,163	(5)	PT	FLT	38382WEF0	July 2051
ES	122,130,163	(5)	NTL(PT)	INV/IO	38382WEG8	July 2051
FE(1)	111,137,397	(5)	PT	FLT	38382WEH6	July 2051
SE	111,137,397	(5)	NTL(PT)	INV/IO	38382WEJ2	July 2051
<b>Security Group 4</b>						
FH	31,685,543	(5)	PT	FLT	38382WEK9	July 2051
HA	63,371,086	1.25	PT	FIX	38382WEL7	July 2051
HI	13,579,518	3.50	NTL(PT)	FIX/IO	38382WEM5	July 2051
SH	31,685,543	(5)	NTL(PT)	INV/IO	38382WEN3	July 2051
<b>Security Group 5</b>						
GB(1)	45,258,990	1.25	PT	FIX	38382WEP8	July 2051
GF(1)	22,629,494	(5)	PT	FLT	38382WEQ6	July 2051
GS	22,629,494	(5)	NTL(PT)	INV/IO	38382WER4	July 2051
HB(1)	106,043,742	1.25	PT	FIX	38382WES2	July 2051
HF(1)	53,021,870	(5)	PT	FLT	38382WET0	July 2051
HS	53,021,870	(5)	NTL(PT)	INV/IO	38382WEU7	July 2051
<b>Security Group 6</b>						
MD	146,517,942	1.25	SC/SEQ	FIX	38382WEV5	May 2042
ME	75,000,000	1.50	SC/PT	FIX	38382WEW3	May 2042
MI	138,762,702	3.50	NTL(SC/PT)	FIX/IO	38382WEX1	May 2042
MY	2,668,483	1.25	SC/SEQ	FIX	38382WEY9	May 2042
<b>Security Group 7</b>						
FQ(1)	54,393,270	(5)	PT	FLT	38382WEZ6	July 2051
QA(1)	49,448,429	1.25	PT	FIX	38382WFA0	July 2051
QB(1)	69,863,277	1.25	PT	FIX	38382WFB8	July 2051
QF(1)	34,931,638	(5)	PT	FLT	38382WFC6	July 2051
QS	34,931,638	(5)	NTL(PT)	INV/IO	38382WFD4	July 2051
SQ	54,393,270	(5)	NTL(PT)	INV/IO	38382WFE2	July 2051
<b>Security Group 8</b>						
NA	250,000,000	1.50	PT	FIX	38382WFF9	July 2051
NB	74,999,821	2.00	PT	FIX	38382WFG7	July 2051
NI	149,999,940	3.00	NTL(PT)	FIX/IO	38382WFH5	July 2051

(Cover continued on next page)

<i>Class of REMIC Securities</i>	<i>Original Principal Balance(2)</i>	<i>Interest Rate</i>	<i>Principal Type(3)</i>	<i>Interest Type(3)</i>	<i>CUSIP Number</i>	<i>Final Distribution Date(4)</i>
<b>Security Group 9</b>						
<i>FA</i> .....	\$ 50,000,000	(5)	<i>PT</i>	<i>FLT</i>	38382WFL1	<i>July 2051</i>
<i>SA</i> .....	50,000,000	(5)	<i>NTL(PT)</i>	<i>INV/IO</i>	38382WFK8	<i>July 2051</i>
<b>Security Group 10</b>						
<i>IY</i> .....	30,511,844	5.00%	<i>NTL(PT)</i>	<i>FIX/IO</i>	38382WFL6	<i>July 2051</i>
<i>YB</i> .....	38,139,805	1.00	<i>PT</i>	<i>FIX</i>	38382WFM4	<i>July 2051</i>
<b>Security Group 11</b>						
<i>IU</i> .....	14,715,793	4.00	<i>NTL(SC/PT)</i>	<i>FIX/IO</i>	38382WFEN2	<i>May 2051</i>
<b>Security Group 12</b>						
<i>IJ</i> .....	81,054,789	3.50	<i>NTL(SC/PT)</i>	<i>FIX/IO</i>	38382WFP7	<i>June 2051</i>
<b>Security Group 13</b>						
<i>ID</i> .....	37,582,055	3.50	<i>NTL(SC/PT)</i>	<i>FIX/IO</i>	38382WFO5	<i>June 2051</i>
<b>Security Group 14</b>						
<i>YA</i> .....	41,903,293	1.00	<i>PT</i>	<i>FIX</i>	38382WFR3	<i>July 2051</i>
<i>YI</i> .....	32,591,450	4.50	<i>NTL(PT)</i>	<i>FIX/IO</i>	38382WFS1	<i>July 2051</i>
<b>Residual</b>						
<i>RR</i> .....	0	0.00	<i>NPR</i>	<i>NPR</i>	38382WFT9	<i>July 2051</i>

(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”), and
- the Base Offering Circular and
- in the case of the Group 6, 11, 12 and 13 securities, each disclosure document relating to the Underlying Certificates (the “Underlying Certificate Disclosure Documents”).

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

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

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

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## TERMS SHEET

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

**Sponsor:** Morgan Stanley & Co. LLC

**Co-Sponsor:** Roberts & Ryan Investments, Inc.

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

**Tax Administrator:** The Trustee

**Closing Date:** July 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 August 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	2.50%	30
2A	Ginnie Mae II	3.50%	30
2B	Ginnie Mae II	3.50%	30
3A	Ginnie Mae II	3.00%	30
3B	Ginnie Mae II	3.00%	30
4	Ginnie Mae II	3.50%	30
5A	Ginnie Mae II	3.00%	30
5B	Ginnie Mae II	3.00%	30
6	Underlying Certificates	(1)	(1)
7A	Ginnie Mae II	4.00%	30
7B	Ginnie Mae II	3.00%	30
8A	Ginnie Mae II	3.00%	30
8B	Ginnie Mae II	3.00%	30
9	Ginnie Mae II	3.00%	30
10	Ginnie Mae II	5.00%	30
11	Underlying Certificates	(1)	(1)
12	Underlying Certificates	(1)	(1)
13	Underlying Certificates	(1)	(1)
14	Ginnie Mae II	4.50%	30

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

<sup>(2)</sup> The Group 2, 3, 5, 7 and 8 Trust Assets consist of the enumerated subgroups (each, a “Subgroup”).

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

**Assumed Characteristics of the Mortgage Loans Underlying the Group 1, 2, 3, 4, 5, 7, 8, 9, 10 and 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>			
\$79,252,000 <sup>(3)</sup>	358	1	2.868%
<b>Subgroup 2A Trust Assets</b>			
\$150,000,000	336	20	3.955%
<b>Subgroup 2B Trust Assets</b>			
\$135,181,772	357	1	3.916%
<b>Subgroup 3A Trust Assets</b>			
\$366,390,489	356	1	3.384%
<b>Subgroup 3B Trust Assets</b>			
\$333,412,192	344	11	3.430%
<b>Group 4 Trust Assets</b>			
\$95,056,629 <sup>(4)</sup>	283	69	3.944%
<b>Subgroup 5A Trust Assets</b>			
\$159,065,612	341	6	3.346%
<b>Subgroup 5B Trust Assets</b>			
\$67,888,484	358	2	3.342%
<b>Subgroup 7A Trust Assets</b>			
\$103,841,699 <sup>(4)</sup>	307	50	4.393%
<b>Subgroup 7B Trust Assets</b>			
\$104,794,915 <sup>(4)</sup>	281	74	3.487%
<b>Subgroup 8A Trust Assets</b>			
\$250,000,000	357	1	3.371%
<b>Subgroup 8B Trust Assets</b>			
\$74,999,821	358	1	3.429%
<b>Group 9 Trust Assets</b>			
\$50,000,000	358	1	3.405%
<b>Group 10 Trust Assets</b>			
\$38,139,805 <sup>(4)</sup>	208	142	5.390%
<b>Group 14 Trust Assets</b>			
\$41,903,293 <sup>(4)</sup>	214	136	4.918%

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

- (2) The Mortgage Loans underlying the Group 1, 2, 3, 4, 5, 7, 8, 9, 10 and 14 Trust Assets may bear interest at rates ranging from 0.25% to 1.50% per annum above the related Certificate Rate.
- (3) More than 10% of the Mortgage Loans underlying the Group 1 Trust Assets may be higher balance Mortgage Loans. *See "Risk Factors" in this Supplement.*
- (4) The Mortgage Loans underlying the Group 4, 7, 10 and 14 Trust Assets may be re-performing Mortgage Loans that were previously repurchased from one or more pools of Mortgage Loans underlying one or more Ginnie Mae MBS Certificates.

The actual remaining terms to maturity, loan ages and Mortgage Rates of many of the Mortgage Loans underlying the Group 1, 2, 3, 4, 5, 7, 8, 9, 10 and 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 Group 6, 11, 12 and 13 Trust Assets:** See Exhibit A to this Supplement for certain information regarding the characteristics of the related Underlying Certificates.

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

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

**Increased Minimum Denomination Classes:** Each Class that constitutes 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 2</b>						
AF .....	LIBOR + 0.20%	0.29%	0.2%	6.5%	0	0.00%
AS .....	6.30% – LIBOR	6.21%	0.0%	6.3%	0	6.30%
BF .....	LIBOR + 0.20%	0.29%	0.2%	6.5%	0	0.00%
FB .....	LIBOR + 0.20%	0.29%	0.2%	6.5%	0	0.00%
SB .....	6.30% – LIBOR	6.21%	0.0%	6.3%	0	6.30%
<b>Security Group 3</b>						
EF .....	LIBOR + 0.20%	0.29%	0.2%	6.5%	0	0.00%
ES .....	6.30% – LIBOR	6.21%	0.0%	6.3%	0	6.30%
FE .....	LIBOR + 0.20%	0.29%	0.2%	6.5%	0	0.00%
FG .....	LIBOR + 0.20%	0.29%	0.2%	6.5%	0	0.00%
SE .....	6.30% – LIBOR	6.21%	0.0%	6.3%	0	6.30%
<b>Security Group 4</b>						
FH .....	LIBOR + 0.20%	0.29%	0.2%	6.5%	0	0.00%
SH .....	6.30% – LIBOR	6.21%	0.0%	6.3%	0	6.30%
<b>Security Group 5</b>						
DF .....	LIBOR + 0.20%	0.29%	0.2%	6.5%	0	0.00%
GF .....	LIBOR + 0.20%	0.29%	0.2%	6.5%	0	0.00%
GS .....	6.30% – LIBOR	6.21%	0.0%	6.3%	0	6.30%
HF .....	LIBOR + 0.20%	0.29%	0.2%	6.5%	0	0.00%
HS .....	6.30% – LIBOR	6.21%	0.0%	6.3%	0	6.30%
<b>Security Group 7</b>						
FQ .....	LIBOR + 0.20%	0.29%	0.2%	6.5%	0	0.00%
QF .....	LIBOR + 0.20%	0.29%	0.2%	6.5%	0	0.00%
QS .....	6.30% – LIBOR	6.21%	0.0%	6.3%	0	6.30%
SQ .....	6.30% – LIBOR	6.21%	0.0%	6.3%	0	6.30%
UF .....	LIBOR + 0.20%	0.29%	0.2%	6.5%	0	0.00%
<b>Security Group 9</b>						
FA .....	Compounded SOFR + 0.40%	0.45%	0.4%	3.0%	0	0.00%
SA .....	2.60% – Compounded SOFR	2.55%	0.0%	2.6%	0	2.60%

- (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 and the Accrual Amount will be allocated in the following order of priority:

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

2. To Z, until retired

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

#### **SECURITY GROUP 2**

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

- The Subgroup 2A Principal Distribution Amount, concurrently, to A and AF, pro rata, until retired
- The Subgroup 2B Principal Distribution Amount, concurrently, to BA and FB, pro rata, until retired

#### **SECURITY GROUP 3**

The Subgroup 3A Principal Distribution Amount and the Subgroup 3B Principal Distribution Amount will be allocated as follows:

- The Subgroup 3A Principal Distribution Amount, concurrently, to EA and EF, pro rata, until retired
- The Subgroup 3B Principal Distribution Amount, concurrently, to EB and FE, pro rata, until retired

#### **SECURITY GROUP 4**

The Group 4 Principal Distribution Amount will be allocated, concurrently, to FH and HA, pro rata, until retired

#### **SECURITY GROUP 5**

The Subgroup 5A Principal Distribution Amount and the Subgroup 5B Principal Distribution Amount will be allocated as follows:

- The Subgroup 5A Principal Distribution Amount, concurrently, to HB and HF, pro rata, until retired
- The Subgroup 5B Principal Distribution Amount, concurrently, to GB and GF, pro rata, until retired

#### **SECURITY GROUP 6**

The Group 6 Principal Distribution Amount will be allocated, concurrently, as follows:

1. 66.5456996337%, sequentially, to MD and MY, in that order, until retired
2. 33.4543003663% to ME, 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, concurrently, to FQ and QA, pro rata, until retired
- The Subgroup 7B Principal Distribution Amount, concurrently, to QB and QF, pro rata, until retired

**SECURITY GROUP 8**

The Subgroup 8A Principal Distribution Amount and the Subgroup 8B Principal Distribution Amount will be allocated as follows:

- The Subgroup 8A Principal Distribution Amount to NA, until retired
- The Subgroup 8B Principal Distribution Amount to NB, until retired

**SECURITY GROUP 9**

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

**SECURITY GROUP 10**

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

**SECURITY GROUP 14**

The Group 14 Principal Distribution Amount will be allocated to YA, until retired

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

<u>Security Group</u>	<u>Structuring Range</u>
<b>PAC Classes</b>	
1 PC and PE (in the aggregate) .....	150% PSA through 375% PSA

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

**Notional Classes:** The Notional Classes will not receive distributions of principal but have Class Notional Balances for convenience in describing their entitlements to interest. The Class Notional

Balance of each Notional Class represents the percentage indicated below of, and reduces to that extent with, the Class Principal Balances or the outstanding principal or notional balance of the related Trust Asset Group indicated:

<u>Class</u>	<u>Original Class Notional Balance</u>	<u>Represents Approximately</u>
<b>Security Group 1</b>		
PI .....	\$ 16,700,800	28.1860527915% of PC and PE (in the aggregate) (PAC/AD Classes)
<b>Security Group 2</b>		
AI .....	\$ 21,428,571	14.2857142857% of A and AF (in the aggregate) (PT Classes)
AS .....	50,000,000	100% of AF (PT Class)
BI .....	19,311,681	14.2857142857% of BA and FB (in the aggregate) (PT Classes)
SB .....	45,060,590	100% of FB (PT Class)
<b>Security Group 3</b>		
ES .....	\$122,130,163	100% of EF (PT Class)
SE .....	111,137,397	100% of FE (PT Class)
<b>Security Group 4</b>		
HI .....	\$ 13,579,518	14.2857142857% of FH and HA (in the aggregate) (PT Classes)
SH .....	31,685,543	100% of FH (PT Class)
<b>Security Group 5</b>		
GS .....	\$ 22,629,494	100% of GF (PT Class)
HS .....	53,021,870	100% of HF (PT Class)
<b>Security Group 6</b>		
MI .....	\$138,762,702	61.8961209458% of the Group 6 Trust Assets
<b>Security Group 7</b>		
QS .....	\$ 34,931,638	100% of QF (PT Class)
SQ .....	54,393,270	100% of FQ (PT Class)
<b>Security Group 8</b>		
NI .....	\$125,000,000	50% of NA (PT Class)
	<u>24,999,940</u>	33.3333333333% of NB (PT Class)
	<u>\$149,999,940</u>	
<b>Security Group 9</b>		
SA .....	\$ 50,000,000	100% of FA (PT Class)
<b>Security Group 10</b>		
IY .....	\$ 30,511,844	80% of YB (PT Class)
<b>Security Group 11</b>		
IU .....	\$ 14,715,793	100% of the Group 11 Trust Assets
<b>Security Group 12</b>		
IJ .....	\$ 81,054,789	100% of the Group 12 Trust Assets
<b>Security Group 13</b>		
ID .....	\$ 37,582,055	100% of the Group 13 Trust Assets
<b>Security Group 14</b>		
YI .....	\$ 32,591,450	77.777777778% of YA (PT Class)

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

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

## RISK FACTORS

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

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

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

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

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

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

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

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

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

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

***The levels of 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, the support class will not receive any principal distribution on that date. If prepayments result in principal distributions on any distribution date greater than the amount needed to produce scheduled payments on the PAC classes for that distribution date, this excess will be distributed to the support class.

***The rate of payments on the underlying certificates will directly affect the rate of payments on the group 6, 11, 12 and 13 securities.*** The underlying certificates will be sensitive in varying degrees to:

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

As described in the related underlying certificate disclosure documents, the principal entitlements

of certain of the underlying certificates included in trust asset group 6 on any payment date are calculated, directly or indirectly, on the basis of schedules; no assurance can be given that the underlying certificates will adhere to their schedules. Further, prepayments on the related mortgage loans may have occurred at rates faster or slower than those initially assumed.

This supplement contains no information as to whether the underlying certificates have adhered to any applicable principal balance schedules, whether any related supporting classes remain outstanding or whether the underlying certificates otherwise have performed as originally anticipated. Additional information as to the underlying certificates may be obtained by performing an analysis of current principal factors of the underlying certificates in light of applicable information contained in the related underlying certificate disclosure documents.

***Up to 10% of the mortgage loans underlying the group 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 and 14 trust assets and up to 100% of the mortgage loans underlying the group 1 trust assets may be higher balance mortgage loans.*** Subject to special pooling parameters set forth in the Ginnie Mae Mortgage-Backed Securities Guide, qualifying federally-insured or guaranteed mortgage loans that exceed certain balance thresholds established by Ginnie Mae (“higher balance mortgage loans”) may be included in Ginnie Mae guaranteed pools. There are no historical performance data regarding the prepayment rates for higher balance mortgage loans. If the higher balance mortgage loans prepay faster or slower than expected, the weighted average lives and yields of the related securities are likely to be affected, perhaps significantly. Furthermore, higher balance mortgage loans tend to be concentrated in certain geographic areas, which may experience relatively higher rates of defaults in the event of adverse economic conditions. No assurances can be given about the prepayment experience or performance of the higher balance mortgage loans.

***Changes to, the elimination of, and uncertainty with respect to, LIBOR could***

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

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

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

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

Term SOFR, which is the first alternative benchmark specified in the ARRC Endorsed Terms, is a prospective term rate based on SOFR that is under review by the ARRC, and there can be no assurance that its development will be completed at any time either before or after the benchmark replacement date. If term SOFR is unavailable as of the benchmark replacement date, the next alternative benchmark is compounded SOFR. As a benchmark replacement for LIBOR, compounded SOFR is a compounded average for which there are multiple methodologies that may also diverge from LIBOR. In addition, the methodology for calculating compounded SOFR as a LIBOR replacement may differ from the methodology for calculating Compounded SOFR for SOFR classes, as described under *“Description of the Securities — Interest Distributions — Floating Rate and*

*Inverse Floating Rate Classes”* in this supplement. There can be no assurance that compounded SOFR as a LIBOR replacement will be the same as, or similar to, Compounded SOFR for SOFR classes.

If a benchmark replacement other than term SOFR is chosen because term SOFR is not initially available, term SOFR will 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 9 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 9 securities may fluctuate more than debt securities linked to less volatile indices.

SOFR is a relatively new market index, and the group 9 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 9 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 9 securities will be based on Compounded SOFR unless and until Ginnie Mae determines, in its sole discretion, that term SOFR has become operationally, administratively and technically feasible. If Ginnie Mae makes that determination, Ginnie Mae will convert the interest rates of the group 9 securities from Compounded SOFR to term SOFR. In connection with that conversion, Ginnie Mae may, in its sole discretion and without the consent of any security holders, change the calculation methodology or spread, add or subtract a rate adjustment and make other conforming changes with respect to the group 9 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 9 securities will eventually 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 9 securities, the trading market for such securities and the value of such

securities. In addition, the implementation of term SOFR is dependent upon the review and recommendation of the ARRC, which is subject to a number of conditions published by the ARRC and which recommendation may not be given by the ARRC for use in securitizations or at all.

You should consult your own financial and legal advisors about the risks associated with an investment in the group 9 securities and the suitability of investing in the group 9 securities in light of your particular circumstances.

***Interest on the group 9 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 9 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 9 securities.

If SOFR is no longer published or cannot be used, the amount of interest payable on the group 9 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, 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 9 securities, which could adversely affect the return on, value of, and market for, the group 9 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 6, 11, 12 and 13 securities and, in particular, the support, interest only, accrual and residual classes, are not suitable investments for all investors.

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

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

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

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

You are encouraged to consult advisors regarding the financial, legal, tax and other aspects of an investment in the securities. You should not purchase the securities of any class unless you understand and are able to bear the prepayment, yield, liquidity and market risks associated with that class.

***The actual characteristics of the underlying mortgage loans will affect the weighted***



***average lives and yields of your securities.***

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

the constant prepayment rates set forth in the applicable table.

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

## **THE TRUST ASSETS**

### **General**

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

### **The Trust MBS (Groups 1, 2, 3, 4, 5, 7, 8, 9, 10 and 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 (Groups 6, 11, 12 and 13)**

The Group 6, 11, 12 and 13 Trust Assets are Underlying Certificate 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, 2, 3, 4, 5, 7, 8, 9, 10 and 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, 2, 3, 4, 5, 7, 8, 9, 10 and 14 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 the Accrual Class) on any Class for any Distribution Date will consist of 30 days’ interest on its Class Principal Balance (or Class Notional Balance) as of the related Record Date.
- Investors can calculate the amount of interest to be distributed (or accrued in the case of the Accrual Class) on each Class of Securities for any Distribution Date by using the Class Factors published in the preceding month. See “— Class Factors” below.

*Categories of Classes*

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

*Accrual Periods*

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

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

### *Fixed Rate Classes*

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

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

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

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

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

If at any time, Ginnie Mae determines, in its sole discretion, that Term SOFR has become operationally, administratively and technically feasible, Ginnie Mae may designate Term SOFR and related positive or negative adjustments, spreads or methodology changes as a Replacement Rate for Classes FA and SA and instruct the Trustee in writing to replace Compounded SOFR with such Replacement Rate for all purposes relating to such Classes in respect of such determination on such date and all determinations on subsequent dates. Ginnie Mae will not do so unless Ginnie Mae and the Trustee receive a Replacement Rate Tax Opinion. In connection with the implementation of Term SOFR as a Replacement Rate for SOFR Classes, Ginnie Mae will have the right to make other Conforming Changes from time to time without the consent of security holders or any other party, as described under “Description of the Securities — Interest Rate Indices” and “ — Interest Rate Indices — Determination of SOFR — Conversion of Simple SOFR and Compounded SOFR Classes to Term SOFR” in the Base Offering Circular.

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

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

### *Accrual Class*

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

## **Principal Distributions**

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

### *Categories of Classes*

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

### *Notional Classes*

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

## **Residual Securities**

The 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 the Accrual Class) or any reduction of Class Notional Balance on that Distribution Date (each, a “Class Factor”).

- The Class Factor for any Class of Securities for each month following the issuance of the Securities will reflect its remaining Class Principal Balance (or Class Notional Balance) after giving effect to any principal distribution (or addition to principal) to be made or any reduction of Class Notional Balance on the Distribution Date occurring in that month.
- The Class Factor for each Class for the month of issuance is 1.00000000.
- The Class Factors for the MX Classes and the Classes of REMIC Securities that are exchangeable for the MX Classes will be calculated assuming that the maximum possible amount of each Class is outstanding at all times, regardless of any exchanges that may occur.

- Based on the Class Factors published in the preceding and current months (and Interest Rates), investors in any Class (other than the Accrual Class) can calculate the amount of principal and interest to be distributed to that Class and investors in the Accrual Class can calculate the total amount of principal to be distributed to (or interest to be added to the Class Principal Balance of) that Class on the Distribution Date in the current month.
- Investors may obtain current Class Factors on [ginniemae.gov](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 shown on Schedule I to this Supplement. Similarly, all or a portion of the related MX Class may be exchanged for proportionate interests in the related Classes of REMIC Securities. 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.

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 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](mailto: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 2021-117. 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 of the Securities surrendered for exchange (but not less than \$2,000 or more than \$25,000). 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 6, 11, 12 and 13 Securities are urged to review the discussion under “Risk Factors — The rate of payments on the underlying certificates will directly affect the rate of payments on the group 6, 11, 12 and 13 securities” in this Supplement.

### **Accretion Directed Classes**

Classes PC and PE are Accretion Directed Classes. The Accrual Amount will be applied to making principal distributions on those Classes as described in this Supplement. Class PI is a Notional Class whose Class Notional Balance is determined by reference to the Class Principal Balance of the related Accretion Directed Classes 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. Although the Accretion Directed Classes are entitled to receive payments from the Accrual Amount, they do not have principal payment stability through any constant prepayment rate significantly higher than 0% PSA, except within their Effective Range.

**Securities that Receive Principal on the Basis of Schedules**

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

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

<u>Security Group</u>	<u>Initial Effective Range</u>
<b>PAC Classes</b>	
1 PC and PE (in the aggregate) . . . . .	150% PSA through 375% PSA

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

**If the Class supporting a given Class is retired before the Class being supported is retired, the outstanding Class will no longer have an Effective 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 Range. If the initial Effective Range were calculated using the actual characteristics of the related Mortgage Loans, the initial Effective Range could differ from that shown in the above table. Therefore, even if the Mortgage Loans were to prepay at a constant rate within the initial Effective Range shown for any Class in the above table, that Class could fail to receive Scheduled Payments.

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

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

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



## **Assumability**

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

## **Final Distribution Date**

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

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

## **Modeling Assumptions**

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

1. The Mortgage Loans underlying the Group 1, 2, 3, 4, 5, 7, 8, 9, 10 and 14 Trust Assets have the assumed characteristics shown under “Assumed Characteristics of the Mortgage Loans Underlying the Group 1, 2, 3, 4, 5, 7, 8, 9, 10 and 14 Trust Assets” in the Terms Sheet, except in the case of information set forth under the 0% PSA Prepayment Assumption Rate, for which each Mortgage Loan underlying a Group 1, 2, 3, 4, 5, 7, 8, 9, 10 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 August 2021.

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

5. The Closing Date for the Securities is July 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										
Distribution Date	Classes PC, PE and PI					Class Z				
	0%	150%	180%	375%	400%	0%	150%	180%	375%	400%
Initial Percent	100	100	100	100	100	100	100	100	100	100
July 2022	97	93	93	93	93	103	103	101	89	88
July 2023	93	82	82	82	82	105	105	99	61	57
July 2024	90	68	68	68	68	108	108	97	30	22
July 2025	86	56	56	56	56	111	111	95	11	1
July 2026	83	44	44	44	42	113	113	95	2	0
July 2027	79	34	34	34	31	116	116	96	0	0
July 2028	75	25	25	25	23	119	116	95	0	0
July 2029	71	19	19	19	17	122	112	90	0	0
July 2030	66	14	14	14	12	125	106	84	0	0
July 2031	62	11	11	11	9	128	98	77	0	0
July 2032	57	8	8	8	7	132	90	70	0	0
July 2033	53	6	6	6	5	135	82	62	0	0
July 2034	48	4	4	4	3	138	73	55	0	0
July 2035	43	3	3	3	3	142	65	48	0	0
July 2036	37	2	2	2	2	145	58	42	0	0
July 2037	32	2	2	2	1	149	50	36	0	0
July 2038	26	1	1	1	1	153	44	31	0	0
July 2039	20	1	1	1	1	157	38	26	0	0
July 2040	14	1	1	1	0	161	32	22	0	0
July 2041	7	0	0	0	0	165	27	18	0	0
July 2042	1	0	0	0	0	169	23	15	0	0
July 2043	0	0	0	0	0	155	19	12	0	0
July 2044	0	0	0	0	0	138	15	10	0	0
July 2045	0	0	0	0	0	121	12	7	0	0
July 2046	0	0	0	0	0	103	9	6	0	0
July 2047	0	0	0	0	0	84	7	4	0	0
July 2048	0	0	0	0	0	64	5	3	0	0
July 2049	0	0	0	0	0	44	3	2	0	0
July 2050	0	0	0	0	0	22	1	1	0	0
July 2051	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	11.9	5.3	5.3	5.3	5.1	25.8	15.8	14.3	2.4	2.2

Security Group 2 PSA Prepayment Assumption Rates																				
Distribution Date	Classes A, AF, AI and AS					Classes BA, BI, FB and SB					Class BD				Class BF					
	0%	200%	446%	650%	900%	0%	200%	446%	650%	900%	0%	200%	446%	650%	900%	0%	200%	446%	650%	900%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2022	99	88	75	64	51	99	95	92	89	85	99	91	83	76	67	99	91	83	76	67
July 2023	97	76	54	38	23	97	86	74	65	54	97	81	63	51	38	97	81	63	51	38
July 2024	95	65	38	23	10	95	75	54	39	25	95	70	46	31	17	95	70	46	31	17
July 2025	94	56	28	14	5	94	64	38	23	11	94	60	33	18	8	94	60	33	18	8
July 2026	92	48	20	8	2	92	55	28	14	5	92	51	23	11	3	92	51	23	11	3
July 2027	90	41	14	5	1	90	47	20	8	2	90	44	17	6	2	90	44	17	6	2
July 2028	88	35	10	3	0	88	41	14	5	1	88	38	12	4	1	88	38	12	4	1
July 2029	86	30	7	2	0	86	35	10	3	0	86	32	8	2	0	86	32	8	2	0
July 2030	84	25	5	1	0	84	30	7	2	0	84	27	6	1	0	84	27	6	1	0
July 2031	81	22	4	1	0	81	25	5	1	0	81	23	4	1	0	81	23	4	1	0
July 2032	79	18	2	0	0	79	21	4	1	0	79	20	3	0	0	79	20	3	0	0
July 2033	76	15	2	0	0	76	18	3	0	0	76	17	2	0	0	76	17	2	0	0
July 2034	74	13	1	0	0	74	15	2	0	0	74	14	1	0	0	74	14	1	0	0
July 2035	71	11	1	0	0	71	13	1	0	0	71	12	1	0	0	71	12	1	0	0
July 2036	68	9	1	0	0	68	11	1	0	0	68	10	1	0	0	68	10	1	0	0
July 2037	65	7	0	0	0	65	9	1	0	0	65	8	0	0	0	65	8	0	0	0
July 2038	61	6	0	0	0	61	8	0	0	0	61	7	0	0	0	61	7	0	0	0
July 2039	58	5	0	0	0	58	6	0	0	0	58	6	0	0	0	58	6	0	0	0
July 2040	54	4	0	0	0	54	5	0	0	0	54	5	0	0	0	54	5	0	0	0
July 2041	51	3	0	0	0	51	4	0	0	0	51	4	0	0	0	51	4	0	0	0
July 2042	47	3	0	0	0	47	3	0	0	0	47	3	0	0	0	47	3	0	0	0
July 2043	42	2	0	0	0	42	3	0	0	0	42	2	0	0	0	42	2	0	0	0
July 2044	38	1	0	0	0	38	2	0	0	0	38	2	0	0	0	38	2	0	0	0
July 2045	33	1	0	0	0	33	2	0	0	0	33	1	0	0	0	33	1	0	0	0
July 2046	28	1	0	0	0	28	1	0	0	0	28	1	0	0	0	28	1	0	0	0
July 2047	23	0	0	0	0	23	1	0	0	0	23	1	0	0	0	23	1	0	0	0
July 2048	18	0	0	0	0	18	1	0	0	0	18	0	0	0	0	18	0	0	0	0
July 2049	12	0	0	0	0	12	0	0	0	0	12	0	0	0	0	12	0	0	0	0
July 2050	6	0	0	0	0	6	0	0	0	0	6	0	0	0	0	6	0	0	0	0
July 2051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	18.6	6.4	3.1	2.1	1.4	18.6	7.3	4.0	3.0	2.3	18.6	6.8	3.6	2.5	1.9	18.6	6.8	3.6	2.5	1.9

**Security Group 3  
PSA Prepayment Assumption Rates**

Distribution Date	Classes EA, EF and ES					Classes EB, FE and SE					Class FG					Class GA				
	0%	200%	438%	650%	900%	0%	200%	438%	650%	900%	0%	200%	438%	650%	900%	0%	200%	438%	650%	900%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2022	98	95	92	88	85	98	91	83	76	67	98	93	87	82	76	98	93	87	82	76
July 2023	97	86	74	64	53	97	79	61	47	32	97	83	68	56	43	97	83	68	56	43
July 2024	95	74	54	39	25	95	68	44	28	14	95	71	49	34	20	95	71	49	34	20
July 2025	93	64	39	23	11	93	58	32	17	6	93	61	35	20	9	93	61	35	20	9
July 2026	91	55	28	14	5	91	50	23	10	3	91	52	25	12	4	91	52	25	12	4
July 2027	89	47	20	8	2	89	43	16	6	1	89	45	18	7	2	89	45	18	7	2
July 2028	87	40	14	5	1	87	36	12	3	1	87	38	13	4	1	87	38	13	4	1
July 2029	85	34	10	3	0	85	31	8	2	0	85	33	9	2	0	85	33	9	2	0
July 2030	83	29	7	2	0	83	26	6	1	0	83	28	7	1	0	83	28	7	1	0
July 2031	80	25	5	1	0	80	22	4	1	0	80	24	5	1	0	80	24	5	1	0
July 2032	78	21	4	1	0	78	19	3	0	0	78	20	3	1	0	78	20	3	1	0
July 2033	75	18	3	0	0	75	16	2	0	0	75	17	2	0	0	75	17	2	0	0
July 2034	72	15	2	0	0	72	13	1	0	0	72	14	2	0	0	72	14	2	0	0
July 2035	69	13	1	0	0	69	11	1	0	0	69	12	1	0	0	69	12	1	0	0
July 2036	66	11	1	0	0	66	9	1	0	0	66	10	1	0	0	66	10	1	0	0
July 2037	63	9	1	0	0	63	8	1	0	0	63	8	1	0	0	63	8	1	0	0
July 2038	60	7	0	0	0	60	6	0	0	0	60	7	0	0	0	60	7	0	0	0
July 2039	56	6	0	0	0	56	5	0	0	0	56	6	0	0	0	56	6	0	0	0
July 2040	53	5	0	0	0	53	4	0	0	0	53	5	0	0	0	53	5	0	0	0
July 2041	49	4	0	0	0	49	3	0	0	0	49	4	0	0	0	49	4	0	0	0
July 2042	45	3	0	0	0	45	3	0	0	0	45	3	0	0	0	45	3	0	0	0
July 2043	41	3	0	0	0	41	2	0	0	0	41	2	0	0	0	41	2	0	0	0
July 2044	36	2	0	0	0	36	2	0	0	0	36	2	0	0	0	36	2	0	0	0
July 2045	32	1	0	0	0	32	1	0	0	0	32	1	0	0	0	32	1	0	0	0
July 2046	27	1	0	0	0	27	1	0	0	0	27	1	0	0	0	27	1	0	0	0
July 2047	22	1	0	0	0	22	1	0	0	0	22	1	0	0	0	22	1	0	0	0
July 2048	17	1	0	0	0	17	0	0	0	0	17	0	0	0	0	17	0	0	0	0
July 2049	12	0	0	0	0	12	0	0	0	0	12	0	0	0	0	12	0	0	0	0
July 2050	6	0	0	0	0	6	0	0	0	0	6	0	0	0	0	6	0	0	0	0
July 2051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	18.3	7.2	4.1	3.0	2.3	18.3	6.6	3.5	2.4	1.7	18.3	6.9	3.8	2.7	2.1	18.3	6.9	3.8	2.7	2.1

**Security Group 4  
PSA Prepayment Assumption Rates**

Distribution Date	Classes FH, HA, HI and SH				
	0%	150%	297%	450%	600%
Initial Percent	100	100	100	100	100
July 2022	99	89	80	71	62
July 2023	97	78	64	50	39
July 2024	95	69	51	36	24
July 2025	94	61	41	25	15
July 2026	92	54	32	18	9
July 2027	90	47	25	12	6
July 2028	88	41	20	9	3
July 2029	86	36	16	6	2
July 2030	84	31	12	4	1
July 2031	81	27	10	3	1
July 2032	79	23	7	2	0
July 2033	76	20	6	1	0
July 2034	74	17	4	1	0
July 2035	71	14	3	1	0
July 2036	68	12	2	0	0
July 2037	65	9	2	0	0
July 2038	61	8	1	0	0
July 2039	58	6	1	0	0
July 2040	54	5	1	0	0
July 2041	51	3	0	0	0
July 2042	47	2	0	0	0
July 2043	42	1	0	0	0
July 2044	38	0	0	0	0
July 2045	33	0	0	0	0
July 2046	28	0	0	0	0
July 2047	23	0	0	0	0
July 2048	18	0	0	0	0
July 2049	12	0	0	0	0
July 2050	6	0	0	0	0
July 2051	0	0	0	0	0
Weighted Average Life (years)	18.6	7.0	4.3	2.9	2.1

**Security Group 5  
PSA Prepayment Assumption Rates**

Distribution Date	Class DF					Class ED					Classes GB, GF and GS					Classes HB, HF and HS				
	0%	200%	422%	650%	900%	0%	200%	422%	650%	900%	0%	200%	422%	650%	900%	0%	200%	422%	650%	900%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2022	98	93	89	83	78	98	93	89	83	78	98	95	91	87	83	98	93	87	82	76
July 2023	97	83	70	57	44	97	83	70	57	44	97	85	74	62	51	97	82	68	54	41
July 2024	95	71	51	34	20	95	71	51	34	20	95	73	54	38	23	95	70	49	32	18
July 2025	93	61	37	20	9	93	61	37	20	9	93	63	39	22	10	93	60	36	19	8
July 2026	91	52	27	12	4	91	52	27	12	4	91	54	29	13	5	91	52	26	11	4
July 2027	89	45	20	7	2	89	45	20	7	2	89	46	21	8	2	89	44	19	7	2
July 2028	87	38	14	4	1	87	38	14	4	1	87	40	15	5	1	87	38	14	4	1
July 2029	85	33	10	2	0	85	33	10	2	0	85	34	11	3	0	85	32	10	2	0
July 2030	83	28	7	1	0	83	28	7	1	0	83	29	8	2	0	83	27	7	1	0
July 2031	80	24	5	1	0	80	24	5	1	0	80	25	6	1	0	80	23	5	1	0
July 2032	78	20	4	1	0	78	20	4	1	0	78	21	4	1	0	78	20	4	0	0
July 2033	75	17	3	0	0	75	17	3	0	0	75	18	3	0	0	75	16	3	0	0
July 2034	72	14	2	0	0	72	14	2	0	0	72	15	2	0	0	72	14	2	0	0
July 2035	69	12	1	0	0	69	12	1	0	0	69	12	2	0	0	69	12	1	0	0
July 2036	66	10	1	0	0	66	10	1	0	0	66	10	1	0	0	66	10	1	0	0
July 2037	63	8	1	0	0	63	8	1	0	0	63	9	1	0	0	63	8	1	0	0
July 2038	60	7	0	0	0	60	7	0	0	0	60	7	1	0	0	60	7	0	0	0
July 2039	56	6	0	0	0	56	6	0	0	0	56	6	0	0	0	56	5	0	0	0
July 2040	53	4	0	0	0	53	4	0	0	0	53	5	0	0	0	53	4	0	0	0
July 2041	49	4	0	0	0	49	4	0	0	0	49	4	0	0	0	49	3	0	0	0
July 2042	45	3	0	0	0	45	3	0	0	0	45	3	0	0	0	45	3	0	0	0
July 2043	41	2	0	0	0	41	2	0	0	0	41	3	0	0	0	41	2	0	0	0
July 2044	36	2	0	0	0	36	2	0	0	0	36	2	0	0	0	36	2	0	0	0
July 2045	32	1	0	0	0	32	1	0	0	0	32	1	0	0	0	32	1	0	0	0
July 2046	27	1	0	0	0	27	1	0	0	0	27	1	0	0	0	27	1	0	0	0
July 2047	22	1	0	0	0	22	1	0	0	0	22	1	0	0	0	22	1	0	0	0
July 2048	17	0	0	0	0	17	0	0	0	0	17	1	0	0	0	17	0	0	0	0
July 2049	12	0	0	0	0	12	0	0	0	0	12	0	0	0	0	12	0	0	0	0
July 2050	6	0	0	0	0	6	0	0	0	0	6	0	0	0	0	6	0	0	0	0
July 2051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average																				
Life (years)	18.3	6.9	3.9	2.7	2.1	18.3	6.9	3.9	2.7	2.1	18.3	7.1	4.1	2.9	2.3	18.3	6.8	3.8	2.7	2.0

**Security Group 6  
PSA Prepayment Assumption Rates**

Distribution Date	Class MD					Classes ME and MI					Class MY				
	0%	150%	307%	500%	700%	0%	150%	307%	500%	700%	0%	150%	307%	500%	700%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2022	96	88	78	67	55	96	88	79	68	56	100	100	100	100	100
July 2023	93	76	61	44	30	93	77	62	45	31	100	100	100	100	100
July 2024	89	66	47	29	16	89	67	48	31	17	100	100	100	100	100
July 2025	85	58	37	19	8	85	58	38	20	10	100	100	100	100	100
July 2026	81	50	28	12	4	81	50	29	14	5	100	100	100	100	100
July 2027	76	42	21	7	1	77	43	23	9	3	100	100	100	100	100
July 2028	72	36	16	4	0	72	37	17	6	2	100	100	100	100	89
July 2029	67	30	12	2	0	67	32	13	4	1	100	100	100	100	48
July 2030	62	25	8	1	0	63	27	10	3	0	100	100	100	100	26
July 2031	57	21	6	0	0	58	22	8	2	0	100	100	100	91	14
July 2032	52	17	4	0	0	52	19	6	1	0	100	100	100	58	7
July 2033	46	14	2	0	0	47	15	4	1	0	100	100	100	36	4
July 2034	40	11	1	0	0	41	12	3	0	0	100	100	100	22	2
July 2035	34	8	0	0	0	36	9	2	0	0	100	100	100	13	1
July 2036	28	5	0	0	0	29	7	1	0	0	100	100	78	8	0
July 2037	22	3	0	0	0	23	5	1	0	0	100	100	50	4	0
July 2038	15	2	0	0	0	17	3	1	0	0	100	100	29	2	0
July 2039	8	0	0	0	0	10	2	0	0	0	100	100	14	1	0
July 2040	1	0	0	0	0	3	0	0	0	0	100	26	3	0	0
July 2041	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
July 2042	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average															
Life (years)	10.7	6.0	3.7	2.3	1.6	10.9	6.3	3.9	2.5	1.7	19.3	18.7	16.3	11.9	8.4

**Security Group 7  
PSA Prepayment Assumption Rates**

Distribution Date	Classes FQ, QA and SQ					Classes QB, QF and QS					Class UA					Class UF				
	0%	200%	438%	650%	900%	0%	200%	438%	650%	900%	0%	200%	438%	650%	900%	0%	200%	438%	650%	900%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2022	99	86	72	60	45	98	86	72	59	45	98	86	72	59	45	99	86	72	60	45
July 2023	97	74	52	36	20	97	73	51	35	20	97	73	52	35	20	97	74	52	35	20
July 2024	96	64	37	21	9	95	62	37	21	9	95	63	37	21	9	95	63	37	21	9
July 2025	94	54	27	13	4	93	53	26	12	4	94	54	26	12	4	94	54	26	12	4
July 2026	92	47	19	7	2	91	45	18	7	2	92	46	19	7	2	92	46	19	7	2
July 2027	91	40	14	4	1	89	38	13	4	1	90	39	13	4	1	90	39	13	4	1
July 2028	89	34	10	3	0	87	32	9	2	0	88	33	9	3	0	88	33	10	3	0
July 2029	87	29	7	2	0	85	27	6	1	0	86	28	7	1	0	86	28	7	1	0
July 2030	85	24	5	1	0	83	22	5	1	0	83	23	5	1	0	84	24	5	1	0
July 2031	83	20	3	1	0	80	19	3	0	0	81	19	3	0	0	82	20	3	1	0
July 2032	80	17	2	0	0	78	15	2	0	0	79	16	2	0	0	79	16	2	0	0
July 2033	78	14	2	0	0	75	13	2	0	0	76	13	2	0	0	77	14	2	0	0
July 2034	75	12	1	0	0	72	10	1	0	0	73	11	1	0	0	74	11	1	0	0
July 2035	72	10	1	0	0	69	8	1	0	0	71	9	1	0	0	71	9	1	0	0
July 2036	69	8	1	0	0	66	7	0	0	0	68	7	1	0	0	68	8	1	0	0
July 2037	66	7	0	0	0	63	5	0	0	0	64	6	0	0	0	65	6	0	0	0
July 2038	63	5	0	0	0	60	4	0	0	0	61	5	0	0	0	62	5	0	0	0
July 2039	60	4	0	0	0	56	3	0	0	0	58	4	0	0	0	58	4	0	0	0
July 2040	56	3	0	0	0	53	2	0	0	0	54	3	0	0	0	55	3	0	0	0
July 2041	52	2	0	0	0	49	2	0	0	0	50	2	0	0	0	51	2	0	0	0
July 2042	48	2	0	0	0	45	1	0	0	0	46	1	0	0	0	47	2	0	0	0
July 2043	44	1	0	0	0	41	1	0	0	0	42	1	0	0	0	43	1	0	0	0
July 2044	40	1	0	0	0	36	0	0	0	0	38	0	0	0	0	38	1	0	0	0
July 2045	35	0	0	0	0	32	0	0	0	0	33	0	0	0	0	34	0	0	0	0
July 2046	30	0	0	0	0	27	0	0	0	0	28	0	0	0	0	29	0	0	0	0
July 2047	24	0	0	0	0	22	0	0	0	0	23	0	0	0	0	24	0	0	0	0
July 2048	19	0	0	0	0	17	0	0	0	0	18	0	0	0	0	18	0	0	0	0
July 2049	13	0	0	0	0	12	0	0	0	0	12	0	0	0	0	12	0	0	0	0
July 2050	7	0	0	0	0	6	0	0	0	0	6	0	0	0	0	6	0	0	0	0
July 2051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	19.0	6.1	3.0	1.9	1.3	18.3	5.8	3.0	1.9	1.3	18.6	5.9	3.0	1.9	1.3	18.7	6.0	3.0	1.9	1.3

**Security Group 8  
PSA Prepayment Assumption Rates**

Distribution Date	Class NA					Class NB					Class NI				
	0%	200%	455%	750%	1,000%	0%	200%	455%	750%	1,000%	0%	200%	455%	750%	1,000%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2022	98	95	91	87	83	98	95	91	87	83	98	95	91	87	83
July 2023	97	86	73	60	49	97	86	73	60	49	97	86	73	60	49
July 2024	95	74	53	33	20	95	74	53	33	20	95	74	53	33	20
July 2025	93	64	37	18	8	93	64	37	18	8	93	64	37	18	8
July 2026	91	55	27	9	3	91	55	27	10	3	91	55	27	10	3
July 2027	89	47	19	5	1	89	47	19	5	1	89	47	19	5	1
July 2028	87	40	13	3	0	87	40	13	3	0	87	40	13	3	0
July 2029	85	34	9	1	0	85	34	9	1	0	85	34	9	1	0
July 2030	83	29	7	1	0	83	29	7	1	0	83	29	7	1	0
July 2031	80	25	5	0	0	80	25	5	0	0	80	25	5	0	0
July 2032	78	21	3	0	0	78	21	3	0	0	78	21	3	0	0
July 2033	75	18	2	0	0	75	18	2	0	0	75	18	2	0	0
July 2034	72	15	2	0	0	72	15	2	0	0	72	15	2	0	0
July 2035	69	13	1	0	0	69	13	1	0	0	69	13	1	0	0
July 2036	66	11	1	0	0	66	11	1	0	0	66	11	1	0	0
July 2037	63	9	1	0	0	63	9	1	0	0	63	9	1	0	0
July 2038	60	7	0	0	0	60	7	0	0	0	60	7	0	0	0
July 2039	56	6	0	0	0	56	6	0	0	0	56	6	0	0	0
July 2040	53	5	0	0	0	53	5	0	0	0	53	5	0	0	0
July 2041	49	4	0	0	0	49	4	0	0	0	49	4	0	0	0
July 2042	45	3	0	0	0	45	3	0	0	0	45	3	0	0	0
July 2043	41	3	0	0	0	41	3	0	0	0	41	3	0	0	0
July 2044	36	2	0	0	0	36	2	0	0	0	36	2	0	0	0
July 2045	32	1	0	0	0	32	2	0	0	0	32	2	0	0	0
July 2046	27	1	0	0	0	27	1	0	0	0	27	1	0	0	0
July 2047	22	1	0	0	0	22	1	0	0	0	22	1	0	0	0
July 2048	17	1	0	0	0	17	1	0	0	0	17	1	0	0	0
July 2049	12	0	0	0	0	12	0	0	0	0	12	0	0	0	0
July 2050	6	0	0	0	0	6	0	0	0	0	6	0	0	0	0
July 2051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	18.3	7.2	4.0	2.7	2.2	18.3	7.2	4.0	2.7	2.2	18.3	7.2	4.0	2.7	2.2

**Security Group 9  
PSA Prepayment Assumption Rates**

Distribution Date	Classes FA and SA				
	0%	200%	438%	650%	900%
Initial Percent	100	100	100	100	100
July 2022	98	95	92	88	85
July 2023	97	86	74	64	54
July 2024	95	74	54	39	25
July 2025	93	64	39	23	11
July 2026	91	55	28	14	5
July 2027	89	47	20	8	2
July 2028	87	40	14	5	1
July 2029	85	34	10	3	0
July 2030	83	29	7	2	0
July 2031	80	25	5	1	0
July 2032	78	21	4	1	0
July 2033	75	18	3	0	0
July 2034	72	15	2	0	0
July 2035	69	13	1	0	0
July 2036	66	11	1	0	0
July 2037	63	9	1	0	0
July 2038	60	7	0	0	0
July 2039	56	6	0	0	0
July 2040	53	5	0	0	0
July 2041	49	4	0	0	0
July 2042	45	3	0	0	0
July 2043	41	3	0	0	0
July 2044	36	2	0	0	0
July 2045	32	2	0	0	0
July 2046	27	1	0	0	0
July 2047	22	1	0	0	0
July 2048	17	1	0	0	0
July 2049	12	0	0	0	0
July 2050	6	0	0	0	0
July 2051	0	0	0	0	0
Weighted Average Life (years)	18.3	7.2	4.1	3.0	2.3

**Security Group 10  
PSA Prepayment Assumption Rates**

Distribution Date	Classes IY and YB				
	0%	200%	432%	650%	900%
Initial Percent	100	100	100	100	100
July 2022	99	85	71	59	44
July 2023	98	72	51	34	20
July 2024	96	60	36	20	9
July 2025	95	51	25	12	4
July 2026	94	42	18	7	2
July 2027	92	35	12	4	1
July 2028	90	29	9	2	0
July 2029	89	23	6	1	0
July 2030	87	19	4	1	0
July 2031	85	15	3	0	0
July 2032	83	12	2	0	0
July 2033	80	9	1	0	0
July 2034	78	7	1	0	0
July 2035	75	5	0	0	0
July 2036	73	3	0	0	0
July 2037	70	1	0	0	0
July 2038	66	0	0	0	0
July 2039	63	0	0	0	0
July 2040	59	0	0	0	0
July 2041	56	0	0	0	0
July 2042	52	0	0	0	0
July 2043	47	0	0	0	0
July 2044	43	0	0	0	0
July 2045	38	0	0	0	0
July 2046	32	0	0	0	0
July 2047	27	0	0	0	0
July 2048	21	0	0	0	0
July 2049	14	0	0	0	0
July 2050	7	0	0	0	0
July 2051	0	0	0	0	0
Weighted Average Life (years)	19.6	5.2	2.9	1.9	1.2

**Security Group 11  
PSA Prepayment Assumption Rates**

Distribution Date	Class IU				
	0%	200%	377%	600%	800%
Initial Percent	100	100	100	100	100
July 2022	98	86	75	62	51
July 2023	95	74	57	39	26
July 2024	92	63	43	24	13
July 2025	89	54	32	15	7
July 2026	87	46	24	9	3
July 2027	83	39	18	6	2
July 2028	80	33	13	4	1
July 2029	77	28	10	2	0
July 2030	73	23	7	1	0
July 2031	70	19	5	1	0
July 2032	66	16	4	0	0
July 2033	62	13	3	0	0
July 2034	58	11	2	0	0
July 2035	53	9	1	0	0
July 2036	49	7	1	0	0
July 2037	44	6	1	0	0
July 2038	39	4	0	0	0
July 2039	34	3	0	0	0
July 2040	29	3	0	0	0
July 2041	24	2	0	0	0
July 2042	19	1	0	0	0
July 2043	14	1	0	0	0
July 2044	10	1	0	0	0
July 2045	6	0	0	0	0
July 2046	2	0	0	0	0
July 2047	1	0	0	0	0
July 2048	0	0	0	0	0
July 2049	0	0	0	0	0
July 2050	0	0	0	0	0
July 2051	0	0	0	0	0
Weighted Average Life (years)	14.0	5.9	3.5	2.1	1.5

**Security Group 12  
PSA Prepayment Assumption Rates**

Distribution Date	Class IJ				
	0%	150%	297%	450%	600%
Initial Percent	100	100	100	100	100
July 2022	97	88	79	71	62
July 2023	93	77	63	50	38
July 2024	90	68	50	35	23
July 2025	86	59	39	24	14
July 2026	82	51	31	17	9
July 2027	78	44	24	12	5
July 2028	74	38	19	8	3
July 2029	69	33	14	6	2
July 2030	65	28	11	4	1
July 2031	60	23	8	3	1
July 2032	55	20	6	2	0
July 2033	50	16	5	1	0
July 2034	45	13	3	1	0
July 2035	39	10	3	0	0
July 2036	33	8	2	0	0
July 2037	28	6	1	0	0
July 2038	21	4	1	0	0
July 2039	15	3	0	0	0
July 2040	8	1	0	0	0
July 2041	2	0	0	0	0
July 2042	0	0	0	0	0
July 2043	0	0	0	0	0
July 2044	0	0	0	0	0
July 2045	0	0	0	0	0
July 2046	0	0	0	0	0
July 2047	0	0	0	0	0
July 2048	0	0	0	0	0
July 2049	0	0	0	0	0
July 2050	0	0	0	0	0
July 2051	0	0	0	0	0
Weighted Average Life (years)	11.4	6.4	4.1	2.8	2.1



**Security Group 13  
PSA Prepayment Assumption Rates**

Distribution Date	Class ID				
	0%	150%	297%	450%	600%
Initial Percent	100	100	100	100	100
July 2022	97	89	80	71	62
July 2023	95	78	64	50	39
July 2024	92	69	51	36	24
July 2025	89	61	40	25	15
July 2026	86	53	32	18	9
July 2027	82	47	25	12	6
July 2028	79	41	20	9	3
July 2029	76	36	16	6	2
July 2030	72	31	12	4	1
July 2031	68	27	10	3	1
July 2032	64	23	7	2	0
July 2033	60	19	6	1	0
July 2034	56	16	4	1	0
July 2035	51	14	3	1	0
July 2036	47	11	2	0	0
July 2037	42	9	2	0	0
July 2038	37	7	1	0	0
July 2039	32	6	1	0	0
July 2040	27	4	1	0	0
July 2041	21	3	0	0	0
July 2042	17	2	0	0	0
July 2043	12	2	0	0	0
July 2044	8	1	0	0	0
July 2045	3	0	0	0	0
July 2046	1	0	0	0	0
July 2047	1	0	0	0	0
July 2048	0	0	0	0	0
July 2049	0	0	0	0	0
July 2050	0	0	0	0	0
July 2051	0	0	0	0	0
Weighted Average Life (years)	13.7	7.0	4.3	2.9	2.1

**Security Group 14  
PSA Prepayment Assumption Rates**

Distribution Date	Classes YA and YI				
	0%	200%	436%	650%	900%
Initial Percent	100	100	100	100	100
July 2022	99	85	71	59	44
July 2023	97	72	51	34	20
July 2024	96	60	36	20	9
July 2025	95	51	25	12	4
July 2026	93	42	18	7	2
July 2027	91	35	12	4	1
July 2028	90	29	8	2	0
July 2029	88	24	6	1	0
July 2030	86	19	4	1	0
July 2031	84	15	3	0	0
July 2032	81	12	2	0	0
July 2033	79	9	1	0	0
July 2034	77	7	1	0	0
July 2035	74	5	0	0	0
July 2036	71	3	0	0	0
July 2037	68	2	0	0	0
July 2038	65	1	0	0	0
July 2039	61	0	0	0	0
July 2040	58	0	0	0	0
July 2041	54	0	0	0	0
July 2042	50	0	0	0	0
July 2043	46	0	0	0	0
July 2044	41	0	0	0	0
July 2045	36	0	0	0	0
July 2046	31	0	0	0	0
July 2047	26	0	0	0	0
July 2048	20	0	0	0	0
July 2049	14	0	0	0	0
July 2050	7	0	0	0	0
July 2051	0	0	0	0	0
Weighted Average Life (years)	19.3	5.2	2.9	1.9	1.2

## Yield Considerations

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

- the anticipated yield of that Class resulting from its purchase price,
- the investor's own projection of Mortgage Loan prepayment rates under a variety of scenarios,
- in the case of the Group 6, 11, 12 and 13 Securities, the investor's own projection of payment rates on the Underlying Certificates under a variety of scenarios, and
- in the case of a Floating Rate or an Inverse Floating Rate Class, the investor's own projection of levels of LIBOR or Compounded SOFR, as applicable, under a variety of scenarios.

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

### *Prepayments: Effect on Yields*

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

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

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

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

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

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

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

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

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

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

Low levels of LIBOR and Compounded SOFR, as applicable, can reduce the yield of the Floating Rate Classes. High levels of LIBOR and Compounded SOFR, as applicable, can reduce the yield of the Inverse Floating Rate Classes. In addition, the certain Floating Rate Classes will not necessarily benefit from a higher yield at high levels of LIBOR or Compounded SOFR, as applicable, because the rate on such Classes is capped at a maximum rate described under “Terms Sheet — Interest Rates.”

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

The effective yield on any Fixed Rate Class will be less than the yield otherwise produced by its Interest Rate and purchase price because, on each Distribution Date, 30 days’ interest will be payable on 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 PI to Prepayments  
Assumed Price 8.9688%\***

<b>PSA Prepayment Assumption Rates</b>				
<u>150%</u>	<u>180%</u>	<u>375%</u>	<u>400%</u>	<u>626%</u>
11.0%	11.0%	11.0%	10.2%	0.0%

**SECURITY GROUP 2**

**Sensitivity of Class AI to Prepayments  
Assumed Price 7.8125%\***

<b>PSA Prepayment Assumption Rates</b>				
<u>200%</u>	<u>446%</u>	<u>598%</u>	<u>650%</u>	<u>900%</u>
31.1%	12.5%	0.0%	(4.4)%	(27.5)%

**Sensitivity of Class AS to Prepayments  
Assumed Price 11.75%\***

<u>LIBOR</u>	<b>PSA Prepayment Assumption Rates</b>			
	<u>200%</u>	<u>446%</u>	<u>650%</u>	<u>900%</u>
0.050% .....	42.1%	22.9%	5.5%	(18.3)%
0.090% .....	41.7%	22.5%	5.1%	(18.6)%
3.195% .....	12.2%	(5.5)%	(21.5)%	(43.3)%
6.300% and above .....	**	**	**	**

**Sensitivity of Class BI to Prepayments  
Assumed Price 15.1875%\***

<b>PSA Prepayment Assumption Rates</b>				
<u>200%</u>	<u>400%</u>	<u>446%</u>	<u>650%</u>	<u>900%</u>
10.8%	0.0%	(2.5)%	(14.0)%	(28.7)%

**Sensitivity of Class SB to Prepayments  
Assumed Price 22.25%\***

<u>LIBOR</u>	<b>PSA Prepayment Assumption Rates</b>			
	<u>200%</u>	<u>446%</u>	<u>650%</u>	<u>900%</u>
0.050% .....	17.1%	4.2%	(6.8)%	(20.9)%
0.090% .....	16.9%	4.0%	(7.1)%	(21.1)%
3.195% .....	0.4%	(13.6)%	(26.0)%	(42.0)%
6.300% 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 3**

**Sensitivity of Class ES to Prepayments  
Assumed Price 22.3438%\***

<u>LIBOR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>200%</u>	<u>438%</u>	<u>650%</u>	<u>900%</u>
0.050% .....	16.8%	4.3%	(7.2)%	(21.2)%
0.090% .....	16.6%	4.1%	(7.4)%	(21.5)%
3.195% .....	0.1%	(13.4)%	(26.2)%	(42.3)%
6.300% and above .....	**	**	**	**

**Sensitivity of Class SE to Prepayments  
Assumed Price 13.3125%\***

<u>LIBOR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>200%</u>	<u>438%</u>	<u>650%</u>	<u>900%</u>
0.050% .....	36.6%	21.1%	6.3%	(12.6)%
0.090% .....	36.3%	20.8%	6.0%	(13.0)%
3.195% .....	9.7%	(5.7)%	(20.5)%	(39.7)%
6.300% and above .....	**	**	**	**

**SECURITY GROUP 4**

**Sensitivity of Class HI to Prepayments  
Assumed Price 11.125%\***

<u>PSA Prepayment Assumption Rates</u>				
<u>150%</u>	<u>297%</u>	<u>403%</u>	<u>450%</u>	<u>600%</u>
18.8%	8.1%	0.1%	(3.6)%	(15.9)%

**Sensitivity of Class SH to Prepayments  
Assumed Price 17.125%\***

<u>LIBOR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>150%</u>	<u>297%</u>	<u>450%</u>	<u>600%</u>
0.050% .....	25.0%	14.1%	2.0%	(10.6)%
0.090% .....	24.8%	13.8%	1.8%	(10.8)%
3.195% .....	4.7%	(5.3)%	(16.4)%	(28.0)%
6.300% and above .....	**	**	**	**

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

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

**SECURITY GROUP 5**

**Sensitivity of Class GS to Prepayments  
Assumed Price 25.2813%\***

<u>LIBOR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>200%</u>	<u>422%</u>	<u>650%</u>	<u>900%</u>
0.050% .....	12.7%	0.6%	(12.4)%	(27.4)%
0.090% .....	12.5%	0.4%	(12.6)%	(27.6)%
3.195% .....	(2.0)%	(14.9)%	(29.1)%	(45.8)%
6.300% and above .....	**	**	**	**

**Sensitivity of Class HS to Prepayments  
Assumed Price 13.75%\***

<u>LIBOR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>200%</u>	<u>422%</u>	<u>650%</u>	<u>900%</u>
0.050% .....	36.2%	23.6%	9.9%	(5.9)%
0.090% .....	35.8%	23.2%	9.6%	(6.3)%
3.195% .....	9.5%	(3.7)%	(18.2)%	(35.3)%
6.300% and above .....	**	**	**	**

**SECURITY GROUP 6**

**Sensitivity of Class MI to Prepayments  
Assumed Price 13.1563%\***

<u>PSA Prepayment Assumption Rates</u>				
<u>150%</u>	<u>307%</u>	<u>319%</u>	<u>500%</u>	<u>700%</u>
12.0%	0.9%	0.0%	(13.7)%	(30.2)%

**SECURITY GROUP 7**

**Sensitivity of Class QS to Prepayments  
Assumed Price 16.5252%\***

<u>LIBOR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>200%</u>	<u>438%</u>	<u>650%</u>	<u>900%</u>
0.050% .....	22.6%	4.1%	(14.0)%	(37.9)%
0.090% .....	22.3%	3.9%	(14.2)%	(38.1)%
3.195% .....	1.9%	(15.0)%	(31.5)%	(53.5)%
6.300% 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 SQ to Prepayments**  
**Assumed Price 14.4398%\***

<u>LIBOR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>200%</u>	<u>438%</u>	<u>650%</u>	<u>900%</u>
0.050% .....	29.6%	10.6%	(8.0)%	(32.7)%
0.090% .....	29.2%	10.3%	(8.3)%	(32.9)%
3.195% .....	5.9%	(11.3)%	(28.2)%	(50.5)%
6.300% and above .....	**	**	**	**

**SECURITY GROUP 8**

**Sensitivity of Class NI to Prepayments**  
**Assumed Price 13.625%\***

<u>PSA Prepayment Assumption Rates</u>				
<u>200%</u>	<u>374%</u>	<u>455%</u>	<u>750%</u>	<u>1,000%</u>
9.4%	0.0%	(4.4)%	(21.4)%	(36.5)%

**SECURITY GROUP 9**

**Sensitivity of Class SA to Prepayments**  
**Assumed Price 7.2813%\***

<u>Compounded SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>200%</u>	<u>438%</u>	<u>650%</u>	<u>900%</u>
0.005% .....	26.0%	14.1%	3.1%	(10.1)%
0.050% .....	25.3%	13.3%	2.3%	(11.0)%
1.325% .....	4.6%	(8.7)%	(21.1)%	(36.5)%
2.600% and above .....	**	**	**	**

**SECURITY GROUP 10**

**Sensitivity of Class IY to Prepayments**  
**Assumed Price 15.609%\***

<u>PSA Prepayment Assumption Rates</u>				
<u>200%</u>	<u>388%</u>	<u>432%</u>	<u>650%</u>	<u>900%</u>
14.0%	0.1%	(3.4)%	(21.2)%	(44.3)%

**SECURITY GROUP 11**

**Sensitivity of Class IU to Prepayments**  
**Assumed Price 11.7667%\***

<u>PSA Prepayment Assumption Rates</u>				
<u>200%</u>	<u>377%</u>	<u>437%</u>	<u>600%</u>	<u>800%</u>
18.1%	4.8%	0.0%	(13.4)%	(31.5)%

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

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

## SECURITY GROUP 12

### Sensitivity of Class IJ to Prepayments Assumed Price 12.3641%\*

PSA Prepayment Assumption Rates				
<u>150%</u>	<u>297%</u>	<u>347%</u>	<u>450%</u>	<u>600%</u>
14.2%	3.7%	0.1%	(7.8)%	(19.8)%

## SECURITY GROUP 13

### Sensitivity of Class ID to Prepayments Assumed Price 11.340%\*

PSA Prepayment Assumption Rates				
<u>150%</u>	<u>297%</u>	<u>395%</u>	<u>450%</u>	<u>600%</u>
18.1%	7.5%	0.0%	(4.3)%	(16.5)%

## SECURITY GROUP 14

### Sensitivity of Class YI to Prepayments Assumed Price 13.9013%\*

PSA Prepayment Assumption Rates				
<u>200%</u>	<u>394%</u>	<u>436%</u>	<u>650%</u>	<u>900%</u>
14.4%	0.0%	(3.2)%	(20.8)%	(44.0)%

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

## 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	180%
2	446%
3, 7 and 9	438%
4, 12 and 13	297%
5	422%
6	307%
8	455%
10	432%
11	377%
14	436%

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) July 1, 2021 on the Fixed Rate Classes and (2) July 20, 2021 on the Floating Rate and Inverse Floating Rate Classes. The Sponsor may effect these transactions by sales to or through certain securities dealers. These dealers may receive compensation in the form of discounts, concessions or commissions from the Sponsor and/or commissions from any purchasers for which they act as agents. Some of the Securities may be sold through dealers in relatively small sales. In the usual case, the commission charged on a relatively small sale of securities will be a higher percentage of the sales price than that charged on a large sale of securities.

## INCREASE IN SIZE

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

## LEGAL MATTERS

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

## Available Combinations(1)

Class	REMIC Securities		MX Securities						Final Distribution Date(4)
	Original Class Principal Balance	Related MX Class	Maximum Original Class Principal Balance(2)	Principal Type(3)	Interest Rate	Interest Type(3)	CUSIP Number		
<b>Security Group 2</b>									
Combination 1									
A	\$ 100,000,000	BD	\$ 190,121,182	PT	1.25%	FIX	38382WFU6	July 2051	
BA	90,121,182								
Combination 2									
AF	\$ 50,000,000	BF	\$ 95,060,590	PT	(5)	FLT	38382WFFV4	July 2051	
FB	45,060,590								
<b>Security Group 3</b>									
Combination 3									
EA	\$ 244,260,326	GA	\$ 466,535,121	PT	1.25%	FIX	38382WFW2	July 2051	
EB	222,274,795								
Combination 4									
EF	\$ 122,130,163	FG	\$ 233,267,560	PT	(5)	FLT	38382WFX0	July 2051	
FE	111,137,397								
<b>Security Group 5</b>									
Combination 5									
GB	\$ 45,258,990	ED	\$ 151,302,732	PT	1.25%	FIX	38382WFY8	July 2051	
HB	106,043,742								
Combination 6									
GF	\$ 22,629,494	DF	\$ 75,651,364	PT	(5)	FLT	38382WFZ5	July 2051	
HF	53,021,870								
<b>Security Group 7</b>									
Combination 7									
QA	\$ 49,448,429	UA	\$ 119,311,706	PT	1.25%	FIX	38382WGA9	July 2051	
QB	69,863,277								
Combination 8									
FQ	\$ 54,393,270	UF	\$ 89,324,908	PT	(5)	FLT	38382WGB7	July 2051	
QF	34,931,638								

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

- (2) The amount shown for each MX Class represents the maximum Original Class Principal 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.

**Schedule II**

**SCHEDULED PRINCIPAL BALANCES**

<u>Distribution Date</u>	<u>Classes PC and PE (in the aggregate)</u>
Initial Balance .....	\$59,252,000.00
August 2021 .....	59,030,408.73
September 2021 .....	58,788,686.73
October 2021 .....	58,526,924.52
November 2021 .....	58,245,228.05
December 2021 .....	57,943,718.63
January 2022 .....	57,622,532.87
February 2022 .....	57,281,822.54
March 2022 .....	56,921,754.51
April 2022 .....	56,542,510.60
May 2022 .....	56,144,287.39
June 2022 .....	55,727,296.11
July 2022 .....	55,291,762.38
August 2022 .....	54,837,926.04
September 2022 .....	54,366,040.90
October 2022 .....	53,876,374.53
November 2022 .....	53,369,207.92
December 2022 .....	52,844,835.25
January 2023 .....	52,303,563.58
February 2023 .....	51,745,712.53
March 2023 .....	51,171,613.90
April 2023 .....	50,581,611.38
May 2023 .....	49,976,060.16
June 2023 .....	49,355,326.51
July 2023 .....	48,719,787.43
August 2023 .....	48,069,830.21
September 2023 .....	47,405,852.03
October 2023 .....	46,728,259.48
November 2023 .....	46,037,468.14
December 2023 .....	45,333,902.11
January 2024 .....	44,636,132.14
February 2024 .....	43,944,107.97
March 2024 .....	43,257,779.76
April 2024 .....	42,577,098.09
May 2024 .....	41,902,013.95
June 2024 .....	41,232,478.71
July 2024 .....	40,568,444.16
August 2024 .....	39,909,862.49
September 2024 .....	39,256,686.26
October 2024 .....	38,608,868.44
November 2024 .....	37,966,362.39
December 2024 .....	37,329,121.83
January 2025 .....	36,697,100.89
February 2025 .....	36,070,254.05
March 2025 .....	35,448,536.19

<u>Distribution Date</u>	<u>Classes PC and PE (in the aggregate)</u>
April 2025	\$34,831,902.54
May 2025	34,220,308.72
June 2025	33,613,710.69
July 2025	33,012,064.79
August 2025	32,415,327.72
September 2025	31,823,456.54
October 2025	31,236,408.63
November 2025	30,654,141.77
December 2025	30,076,614.06
January 2026	29,503,783.94
February 2026	28,935,610.22
March 2026	28,372,052.01
April 2026	27,813,068.80
May 2026	27,258,620.38
June 2026	26,708,666.88
July 2026	26,163,168.77
August 2026	25,622,086.85
September 2026	25,085,382.21
October 2026	24,553,016.29
November 2026	24,024,950.84
December 2026	23,501,147.94
January 2027	22,981,569.95
February 2027	22,466,179.56
March 2027	21,954,939.78
April 2027	21,447,813.91
May 2027	20,946,522.02
June 2027	20,456,709.23
July 2027	19,978,116.67
August 2027	19,510,491.23
September 2027	19,053,585.44
October 2027	18,607,157.36
November 2027	18,170,970.44
December 2027	17,744,793.40
January 2028	17,328,400.12
February 2028	16,921,569.55
March 2028	16,524,085.54
April 2028	16,135,736.79
May 2028	15,756,316.72
June 2028	15,385,623.33
July 2028	15,023,459.19
August 2028	14,669,631.22
September 2028	14,323,950.70
October 2028	13,986,233.12
November 2028	13,656,298.08
December 2028	13,333,969.23
January 2029	13,019,074.16
February 2029	12,711,444.32
March 2029	12,410,914.92

<u>Distribution Date</u>	<u>Classes PC and PE (in the aggregate)</u>
April 2029	\$12,117,324.89
May 2029	11,830,516.74
June 2029	11,550,336.50
July 2029	11,276,633.68
August 2029	11,009,261.14
September 2029	10,748,075.04
October 2029	10,492,934.77
November 2029	10,243,702.88
December 2029	10,000,244.98
January 2030	9,762,429.71
February 2030	9,530,128.67
March 2030	9,303,216.33
April 2030	9,081,569.96
May 2030	8,865,069.61
June 2030	8,653,598.02
July 2030	8,447,040.56
August 2030	8,245,285.18
September 2030	8,048,222.35
October 2030	7,855,745.00
November 2030	7,667,748.46
December 2030	7,484,130.42
January 2031	7,304,790.89
February 2031	7,129,632.11
March 2031	6,958,558.52
April 2031	6,791,476.71
May 2031	6,628,295.41
June 2031	6,468,925.35
July 2031	6,313,279.32
August 2031	6,161,272.05
September 2031	6,012,820.19
October 2031	5,867,842.30
November 2031	5,726,258.74
December 2031	5,587,991.69
January 2032	5,452,965.07
February 2032	5,321,104.55
March 2032	5,192,337.45
April 2032	5,066,592.72
May 2032	4,943,800.96
June 2032	4,823,894.31
July 2032	4,706,806.44
August 2032	4,592,472.53
September 2032	4,480,829.23
October 2032	4,371,814.61
November 2032	4,265,368.16
December 2032	4,161,430.73
January 2033	4,059,944.51
February 2033	3,960,853.00
March 2033	3,864,100.98



<u>Distribution Date</u>	<u>Classes PC and PE (in the aggregate)</u>
April 2033	\$ 3,769,634.48
May 2033	3,677,400.76
June 2033	3,587,348.28
July 2033	3,499,426.65
August 2033	3,413,586.65
September 2033	3,329,780.15
October 2033	3,247,960.14
November 2033	3,168,080.66
December 2033	3,090,096.80
January 2034	3,013,964.67
February 2034	2,939,641.38
March 2034	2,867,085.01
April 2034	2,796,254.61
May 2034	2,727,110.13
June 2034	2,659,612.47
July 2034	2,593,723.40
August 2034	2,529,405.55
September 2034	2,466,622.44
October 2034	2,405,338.37
November 2034	2,345,518.50
December 2034	2,287,128.77
January 2035	2,230,135.87
February 2035	2,174,507.30
March 2035	2,120,211.26
April 2035	2,067,216.69
May 2035	2,015,493.26
June 2035	1,965,011.30
July 2035	1,915,741.84
August 2035	1,867,656.57
September 2035	1,820,727.81
October 2035	1,774,928.55
November 2035	1,730,232.36
December 2035	1,686,613.44
January 2036	1,644,046.58
February 2036	1,602,507.12
March 2036	1,561,971.01
April 2036	1,522,414.72
May 2036	1,483,815.27
June 2036	1,446,150.20
July 2036	1,409,397.58
August 2036	1,373,535.97
September 2036	1,338,544.43
October 2036	1,304,402.51
November 2036	1,271,090.21
December 2036	1,238,588.00
January 2037	1,206,876.81
February 2037	1,175,937.99
March 2037	1,145,753.33

<u>Distribution Date</u>	<u>Classes PC and PE (in the aggregate)</u>
April 2037	\$ 1,116,305.05
May 2037	1,087,575.75
June 2037	1,059,548.47
July 2037	1,032,206.61
August 2037	1,005,533.96
September 2037	979,514.70
October 2037	954,133.36
November 2037	929,374.84
December 2037	905,224.36
January 2038	881,667.52
February 2038	858,690.23
March 2038	836,278.74
April 2038	814,419.60
May 2038	793,099.68
June 2038	772,306.17
July 2038	752,026.54
August 2038	732,248.54
September 2038	712,960.24
October 2038	694,149.95
November 2038	675,806.27
December 2038	657,918.07
January 2039	640,474.46
February 2039	623,464.82
March 2039	606,878.77
April 2039	590,706.17
May 2039	574,937.13
June 2039	559,561.96
July 2039	544,571.24
August 2039	529,955.72
September 2039	515,706.41
October 2039	501,814.50
November 2039	488,271.40
December 2039	475,068.72
January 2040	462,198.26
February 2040	449,652.02
March 2040	437,422.18
April 2040	425,501.10
May 2040	413,881.33
June 2040	402,555.59
July 2040	391,516.77
August 2040	380,757.93
September 2040	370,272.28
October 2040	360,053.20
November 2040	350,094.23
December 2040	340,389.06
January 2041	330,931.52
February 2041	321,715.59
March 2041	312,735.39

<u>Distribution Date</u>	<u>Classes PC and PE (in the aggregate)</u>
April 2041 . . . . .	\$ 303,985.18
May 2041 . . . . .	295,459.37
June 2041 . . . . .	287,152.47
July 2041 . . . . .	279,059.14
August 2041 . . . . .	271,174.17
September 2041 . . . . .	263,492.46
October 2041 . . . . .	256,009.04
November 2041 . . . . .	248,719.06
December 2041 . . . . .	241,617.77
January 2042 . . . . .	234,700.54
February 2042 . . . . .	227,962.86
March 2042 . . . . .	221,400.32
April 2042 . . . . .	215,008.60
May 2042 . . . . .	208,783.51
June 2042 . . . . .	202,720.93
July 2042 . . . . .	196,816.87
August 2042 . . . . .	191,067.40
September 2042 . . . . .	185,468.71
October 2042 . . . . .	180,017.07
November 2042 . . . . .	174,708.85
December 2042 . . . . .	169,540.48
January 2043 . . . . .	164,508.50
February 2043 . . . . .	159,609.53
March 2043 . . . . .	154,840.27
April 2043 . . . . .	150,197.47
May 2043 . . . . .	145,678.01
June 2043 . . . . .	141,278.80
July 2043 . . . . .	136,996.85
August 2043 . . . . .	132,829.22
September 2043 . . . . .	128,773.07
October 2043 . . . . .	124,825.59
November 2043 . . . . .	120,984.08
December 2043 . . . . .	117,245.87
January 2044 . . . . .	113,608.37
February 2044 . . . . .	110,069.06
March 2044 . . . . .	106,625.45
April 2044 . . . . .	103,275.15
May 2044 . . . . .	100,015.79
June 2044 . . . . .	96,845.10
July 2044 . . . . .	93,760.81
August 2044 . . . . .	90,760.76
September 2044 . . . . .	87,842.80
October 2044 . . . . .	85,004.86
November 2044 . . . . .	82,244.90
December 2044 . . . . .	79,560.95
January 2045 . . . . .	76,951.06
February 2045 . . . . .	74,413.36
March 2045 . . . . .	71,946.00

<u>Distribution Date</u>	<u>Classes PC and PE (in the aggregate)</u>
April 2045 . . . . .	\$ 69,547.19
May 2045 . . . . .	67,215.18
June 2045 . . . . .	64,948.24
July 2045 . . . . .	62,744.73
August 2045 . . . . .	60,603.00
September 2045 . . . . .	58,521.47
October 2045 . . . . .	56,498.60
November 2045 . . . . .	54,532.87
December 2045 . . . . .	52,622.80
January 2046 . . . . .	50,766.96
February 2046 . . . . .	48,963.95
March 2046 . . . . .	47,212.40
April 2046 . . . . .	45,510.97
May 2046 . . . . .	43,858.36
June 2046 . . . . .	42,253.30
July 2046 . . . . .	40,694.56
August 2046 . . . . .	39,180.92
September 2046 . . . . .	37,711.20
October 2046 . . . . .	36,284.26
November 2046 . . . . .	34,898.97
December 2046 . . . . .	33,554.25
January 2047 . . . . .	32,249.02
February 2047 . . . . .	30,982.25
March 2047 . . . . .	29,752.92
April 2047 . . . . .	28,560.04
May 2047 . . . . .	27,402.65
June 2047 . . . . .	26,279.80
July 2047 . . . . .	25,190.59
August 2047 . . . . .	24,134.11
September 2047 . . . . .	23,109.50
October 2047 . . . . .	22,115.90
November 2047 . . . . .	21,152.49
December 2047 . . . . .	20,218.45
January 2048 . . . . .	19,313.01
February 2048 . . . . .	18,435.38
March 2048 . . . . .	17,584.83
April 2048 . . . . .	16,760.62
May 2048 . . . . .	15,962.04
June 2048 . . . . .	15,188.40
July 2048 . . . . .	14,439.02
August 2048 . . . . .	13,713.23
September 2048 . . . . .	13,010.41
October 2048 . . . . .	12,329.92
November 2048 . . . . .	11,671.15
December 2048 . . . . .	11,033.50
January 2049 . . . . .	10,416.40
February 2049 . . . . .	9,819.29
March 2049 . . . . .	9,241.60

<u>Distribution Date</u>	<u>Classes PC and PE (in the aggregate)</u>
April 2049 .....	\$ 8,682.80
May 2049 .....	8,142.38
June 2049 .....	7,619.81
July 2049 .....	7,114.61
August 2049 .....	6,626.29
September 2049 .....	6,154.38
October 2049 .....	5,698.41
November 2049 .....	5,257.95
December 2049 .....	4,832.54
January 2050 .....	4,421.78
February 2050 .....	4,025.24
March 2050 .....	3,642.52
April 2050 .....	3,273.23
May 2050 .....	2,916.99
June 2050 .....	2,573.42
July 2050 .....	2,242.16
August 2050 .....	1,922.85
September 2050 .....	1,615.16
October 2050 .....	1,318.74
November 2050 .....	1,033.27
December 2050 .....	758.43
January 2051 .....	493.91
February 2051 .....	239.41
March 2051 and thereafter .....	0.00

Underlying Certificates

Trust Asset Group	Issuer	Series	Class	Issue Date	CUSIP Number	Interest Rate	Interest Type(1)	Final Distribution Date	Principal Type(1)	Original or Notional Balance of Class	Underlying Certificate Factor(2)	Principal or Notional Balance in Trust	Percentage of Class in Trust	Ginnie Mae I or II
6	Ginnie Mae	2011-157	QZ	December 30, 2011	38378AWZ0	3.5%	FIX/Z	December 2041	SEQ	\$16,733,500	0.98537618	\$16,488,792	100.00000000000000%	II
6	Ginnie Mae	2012-007	Z	January 30, 2012	38378CNT0	3.5	FIX/Z	January 2042	SEQ	24,448,000	1.01298487	24,765,454	100.00000000000000	II
6	Ginnie Mae	2012-012	NY(3)	January 30, 2012	38378CZ91	3.5	FIX	January 2042	PAC	44,863,000	0.88727755	39,805,932	100.00000000000000	II
6	Ginnie Mae	2012-013	ZK	January 30, 2012	38378CLR6	3.5	FIX/Z	January 2042	SEQ	51,326,986	1.29688851	66,565,378	100.00000000000000	II
6	Ginnie Mae	2012-026	ZA	February 29, 2012	38378G3P0	3.5	FIX/Z	February 2042	SEQ	19,740,858	1.29980506	25,659,267	100.00000000000000	II
6	Ginnie Mae	2012-052	PH	April 30, 2012	38375CE63	3.5	FIX	April 2042	PAC/AD	28,295,000	0.94161580	26,643,019	100.00000000000000	II
6	Ginnie Mae	2012-054	VZ	April 30, 2012	38375CVC1	3.5	FIX/Z	April 2042	SEQ	9,587,885	1.11130892	10,655,102	100.00000000000000	II
6	Ginnie Mae	2012-065	BZ	May 30, 2012	38378BJN4	3.5	FIX/Z	May 2042	SEQ	15,000,000	0.90689892	13,603,483	100.00000000000000	II
11	Ginnie Mae	2021-078	IG(4)	May 28, 2021	38382TCH5	3.5	FIX/IO	May 2051	NTL(PT)	5,604,522	0.93366582	1,633,915	31.2247859853	II
11	Ginnie Mae	2021-078	IT(4)	May 28, 2021	38382QL40	4.0	FIX/IO	May 2051	NTL(PT)	14,011,306	0.93366586	13,081,878	100.00000000000000	II
12	Ginnie Mae	2021-078	II(3)(4)	May 28, 2021	38382TCX0	3.5	FIX/IO	May 2051	NTL(PT)	20,118,043	0.95095317	15,305,054	80.00000029824	II
12	Ginnie Mae	2021-078	II(4)	May 28, 2021	38382QK41	3.5	FIX/IO	May 2051	NTL(PT)	54,285,714	0.94457782	51,277,081	100.00000000000000	II
12	Ginnie Mae	2021-098	WI(4)	June 30, 2021	38382TK29	3.5	FIX/IO	June 2051	NTL(PT)	14,866,459	0.97351052	14,472,654	100.00000000000000	II
13	Ginnie Mae	2021-098	BI(4)	June 30, 2021	38382TB29	3.5	FIX/IO	June 2051	NTL(PT)	29,634,338	0.97105828	28,794,450	100.00000000000000	II
13	Ginnie Mae	2021-098	BI(4)	June 30, 2021	38382TF74	3.5	FIX/IO	June 2051	NTL(PT)	9,385,942	0.93625182	8,787,605	100.00000000000000	II

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

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

(3) MX Class.

(4) The Mortgage Loans underlying these Underlying Certificates 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.



*\$2,274,113,136*

*Government National  
Mortgage Association*

*GINNIE MAE<sup>®</sup>*

*Guaranteed REMIC  
Pass-Through Securities  
and MX Securities  
Ginnie Mae REMIC Trust 2021-117*

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*OFFERING CIRCULAR SUPPLEMENT  
July 26, 2021*

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*Morgan Stanley  
Roberts & Ryan Investments*