

\$1,310,486,671
Government National Mortgage Association
GINNIE MAE®
Guaranteed REMIC Pass-Through Securities
and MX Securities
Ginnie Mae REMIC Trust 2021-196

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 Ginnie Mae 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 November 30, 2021.

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

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

Class of REMIC Securities	Original Principal Balance(2)	Interest Rate	Principal Type(3)	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
Security Group 1						
GY(1)	\$100,000,000	3.00%	PAC/AD	FLX	38383DA46	November 2051
HZ	5,072	3.00	PAC/AD	FLX/Z	38383DAB4	November 2051
ZG	15,321,568	3.00	SUP	FLX/Z	38383DAC2	November 2051
Security Group 2						
EA	150,000,000	1.75	PT	FLX	38383DAD0	November 2051
EI(1)	98,083,686	2.50	NTL(PT)	FLX/IO	38383DAE8	November 2051
NA	250,000,000	2.00	SEQ/AD	FLX	38383DAF5	January 2050
NZ(1)	15,418,431	2.00	SEQ	FLX/Z	38383DAG3	November 2051
Security Group 3						
KA	47,195,703	1.75	PT	FLX	38383DAH1	November 2051
KI	23,597,851	3.50	NTL(PT)	FLX/IO	38383DAJ7	November 2051
Security Group 4						
UA	151,257,460	1.75	PT	FLX	38383DAK4	November 2051
UI	63,023,941	3.00	NTL(PT)	FLX/IO	38383DAL2	November 2051
Security Group 5						
EF(1)	68,280,000	(5)	TAC/AD	FLT	38383DAM0	November 2051
ES	68,280,000	(5)	NTL(TAC/AD)	INV/IO	38383DAN8	November 2051
EZ	8,720,000	3.00	SUP	FLX/Z	38383DAP3	November 2051
FL(1)	63,090,000	(5)	TAC/AD	FLT	38383DAQ1	November 2051
LZ	6,910,000	3.00	SUP	FLX/Z	38383DAR9	November 2051
SL	63,090,000	(5)	NTL(TAC/AD)	INV/IO	38383DAS7	November 2051
Security Group 6						
JG	48,250,000	1.75	PAC/AD	FLX	38383DAT5	November 2051
JI(1)	20,104,166	3.00	NTL(PAC/AD)	FLX/IO	38383DAU2	November 2051
JZ	10,750,000	3.00	SUP	FLX/Z	38383DAV0	November 2051
Security Group 7						
CZ	1,974,376	2.50	SUP	FLX/Z	38383DAW8	November 2051
PA	30,557,000	2.25	SCH/AD	FLX	38383DAX6	September 2051
PI	3,055,700	2.50	NTL(SCH/AD)	FLX/IO	38383DAY4	September 2051
PZ	154,000	2.50	SCH/AD	FLX/Z	38383DAZ1	November 2051
Security Group 8						
TI(1)	6,430,432	2.50	NTL(PT)	FLX/IO	38383DBA5	November 2051
YA	15,000,000	1.50	SEQ/AD	FLX	38383DBB3	January 2050
YZ	1,076,080	1.50	SEQ	FLX/Z	38383DBC1	November 2051
Security Group 9						
IT(1)	12,500,000	3.00	NTL(PAC/AD)	FLX/IO	38383DBD9	November 2051
TG	30,000,000	1.75	PAC/AD	FLX	38383DBE7	November 2051
TZ	6,683,938	3.00	SUP	FLX/Z	38383DBF4	November 2051
Security Group 10						
Q(1)	51,697,000	2.00	PAC/AD	FLX	38383DBG2	November 2051
QI	28,005,459	4.00	NTL(PT)	FLX/IO	38383DBH0	November 2051
QZ	4,311,919	2.00	SUP	FLX/Z	38383DBJ6	November 2051
ZQ	2,000	2.00	PAC/AD	FLX/Z	38383DBK3	November 2051
Security Group 11						
NB	29,932,000	2.50	SEQ/AD	FLX	38383DBL1	November 2050
ZN	871,678	2.50	SEQ	FLX/Z	38383DBM9	November 2051

(Cover continued on next page)

Morgan Stanley

Roberts & Ryan Investments, Inc.

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

<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>
Security Group 12						
<i>LA</i>	<i>\$100,000,000</i>	<i>2.00%</i>	<i>SEQ/AD</i>	<i>FLX</i>	<i>38383DBN7</i>	<i>December 2049</i>
<i>LI(1)</i>	<i>21,317,846</i>	<i>2.50</i>	<i>NTL(PT)</i>	<i>FIX/IO</i>	<i>38383DBP2</i>	<i>November 2051</i>
<i>ZL(1)</i>	<i>6,589,233</i>	<i>2.00</i>	<i>SEQ</i>	<i>FIX/Z</i>	<i>38383DBQ0</i>	<i>November 2051</i>
Security Group 13						
<i>IM</i>	<i>32,146,404</i>	<i>3.00</i>	<i>NTL(PT)</i>	<i>FIX/IO</i>	<i>38383DBR8</i>	<i>November 2051</i>
<i>MB</i>	<i>85,680,000</i>	<i>2.00</i>	<i>SEQ/AD</i>	<i>FLX</i>	<i>38383DBS6</i>	<i>July 2048</i>
<i>ZM</i>	<i>10,759,213</i>	<i>2.00</i>	<i>SEQ</i>	<i>FIX/Z</i>	<i>38383DBT4</i>	<i>November 2051</i>
Residual						
<i>RR</i>	<i>0</i>	<i>0.00</i>	<i>NPR</i>	<i>NPR</i>	<i>38383DBU1</i>	<i>November 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.

The Base Offering Circular is 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.

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.

TABLE OF CONTENTS

	<u>Page</u>		<u>Page</u>
Terms Sheet	S-3	ERISA Matters	S-40
Risk Factors	S-10	Legal Investment Considerations	S-40
The Trust Assets	S-14	Plan of Distribution	S-40
Ginnie Mae Guaranty	S-15	Increase in Size	S-41
Description of the Securities	S-15	Legal Matters	S-41
Yield, Maturity and Prepayment		Schedule I: Available Combinations	S-I-1
Considerations	S-19	Schedule II: Scheduled Principal	
Certain United States Federal Income Tax		Balances	S-II-1
Consequences	S-38		

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: November 30, 2021

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

Trust Assets:

<u>Trust Asset Group or Subgroup⁽¹⁾</u>	<u>Trust Asset Type</u>	<u>Certificate Rate</u>	<u>Original Term To Maturity (in years)</u>
1	Ginnie Mae II	3.000%	30
2	Ginnie Mae II	2.500%	30
3	Ginnie Mae II	3.500%	30
4	Ginnie Mae II	3.000%	30
5A	Ginnie Mae II	3.000%	30
5B	Ginnie Mae II	3.000%	30
6	Ginnie Mae II	3.000%	30
7	Ginnie Mae II	2.500%	30
8	Ginnie Mae II	2.500%	30
9	Ginnie Mae II	3.000%	30
10	Ginnie Mae II	4.000%	30
11	Ginnie Mae II	2.500%	30
12	Ginnie Mae II	2.500%	30
13	Ginnie Mae II	3.000%	30

⁽¹⁾ The Group 5 Trust Assets consist of the enumerated subgroups (each, a “Subgroup”).

Security Groups: This series of Securities consists of multiple Security Groups (each, a “Group”), as shown on the front cover of this Supplement and on Schedule I to this Supplement. Except in the case of certain MX Classes in Groups 2, 6, 8, 9 and 12, 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 Trust Assets⁽¹⁾:

<u>Principal Balance</u>	<u>Weighted Average Remaining Term to Maturity (in months)</u>	<u>Weighted Average Loan Age (in months)</u>	<u>Weighted Average Mortgage Rate⁽²⁾</u>
Group 1 Trust Assets \$115,326,640	348	6	3.373%
Group 2 Trust Assets \$415,418,431	355	1	2.920%
Group 3 Trust Assets \$47,195,703 ⁽⁴⁾	282	71	3.927%
Group 4 Trust Assets \$151,257,460 ⁽⁴⁾	302	54	3.465%
Subgroup 5A Trust Assets \$77,000,000	336	10	3.335%
Subgroup 5B Trust Assets \$70,000,000 ⁽⁴⁾	312	46	3.507%
Group 6 Trust Assets \$59,000,000 ⁽³⁾	357	2	3.419%
Group 7 Trust Assets \$32,685,376	357	1	2.950%
Group 8 Trust Assets \$16,076,080	355	0	2.910%
Group 9 Trust Assets \$36,683,938 ⁽³⁾	357	1	3.436%
Group 10 Trust Assets \$56,010,919	340	18	4.382%
Group 11 Trust Assets \$30,803,678 ⁽⁴⁾	309	38	3.039%
Group 12 Trust Assets \$106,589,233	355	0	2.910%
Group 13 Trust Assets \$96,439,213	358	0	3.409%

⁽¹⁾ As of November 1, 2021.

⁽²⁾ The Mortgage Loans underlying the 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 6 and 9 Trust Assets may be higher balance Mortgage Loans. See "Risk Factors" in this Supplement.

⁽⁴⁾ The Mortgage Loans underlying the Group 3, 4 and 11 and Subgroup 5B 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 will differ from the weighted averages shown above, perhaps significantly. See *“The Trust Assets — The Mortgage Loans” in this Supplement.*

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 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>Compounded SOFR for Minimum Interest Rate</u>
Security Group 5						
EF	Compounded SOFR + 0.35%	0.4%	0.35%	3.00%	0	0.0000%
ES	2.65% - Compounded SOFR	2.6%	0.00%	2.65%	0	2.6500%
FL	Compounded SOFR + 0.35%	0.4%	0.35%	3.00%	0	0.0000%
LF	Compounded SOFR + 0.35%	0.4%	0.35%	3.00%	0	0.0000%
SL	2.65% - Compounded SOFR	2.6%	0.00%	2.65%	0	2.6500%

- (1) 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, the HZ Accrual Amount and the ZG Accrual Amount will be allocated as follows:

- The HZ Accrual Amount, sequentially, to GY and HZ, in that order, until retired
- The Group 1 Principal Distribution Amount and the ZG Accrual Amount in the following order of priority:
 1. Sequentially, to GY and HZ, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date

2. To ZG, until retired
3. Sequentially, to GY and HZ, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired

SECURITY GROUP 2

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

- The NZ Accrual Amount, sequentially, to NA and NZ, in that order, until retired
- The Group 2 Principal Distribution Amount, concurrently, as follows:
 1. 36.1081716184% to EA, until retired
 2. 63.8918283816%, sequentially, to NA and NZ, in that order, until retired

SECURITY GROUP 3

The Group 3 Principal Distribution Amount will be allocated to KA, until retired

SECURITY GROUP 4

The Group 4 Principal Distribution Amount will be allocated to UA, until retired

SECURITY GROUP 5

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

- The Subgroup 5A Principal Distribution Amount and the EZ Accrual Amount in the following order of priority:
 1. To EF, until reduced to its Scheduled Principal Balance for that Distribution Date
 2. To EZ, until retired
 3. To EF, without regard to its Scheduled Principal Balance, until retired
- The Subgroup 5B Principal Distribution Amount and the LZ Accrual Amount in the following order of priority:
 1. To FL, until reduced to its Scheduled Principal Balance for that Distribution Date
 2. To LZ, until retired
 3. To FL, without regard to its Scheduled Principal Balance, until retired

SECURITY GROUP 6

The Group 6 Principal Distribution Amount and the JZ Accrual Amount will be allocated in the following order of priority:

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

SECURITY GROUP 7

The Group 7 Principal Distribution Amount, the CZ Accrual Amount and the PZ Accrual Amount will be allocated as follows:

- The PZ Accrual Amount, sequentially, to PA and PZ, in that order, until retired
- The Group 7 Principal Distribution Amount and the CZ Accrual Amount in the following order of priority:
 1. Sequentially, to PA and PZ, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
 2. To CZ, until retired
 3. Sequentially, to PA and PZ, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired

SECURITY GROUP 8

The Group 8 Principal Distribution Amount and the YZ Accrual Amount will be allocated, sequentially, to YA and YZ, in that order, until retired

SECURITY GROUP 9

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

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

SECURITY GROUP 10

The Group 10 Principal Distribution Amount, the QZ Accrual Amount and the ZQ Accrual Amount will be allocated as follows:

- The ZQ Accrual Amount, sequentially, to Q and ZQ, in that order, until retired
- The Group 10 Principal Distribution Amount and the QZ Accrual Amount in the following order of priority:
 1. Sequentially, to Q and ZQ, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
 2. To QZ, until retired
 3. Sequentially, to Q and ZQ, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired

SECURITY GROUP 11

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

SECURITY GROUP 12

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

SECURITY GROUP 13

The Group 13 Principal Distribution Amount and the ZM Accrual Amount will be allocated, sequentially, to MB and ZM, in that order, until retired

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

<u>Security Group</u>	<u>Structuring Ranges or Rates</u>
PAC Classes	
1 GY and HZ (in the aggregate)	325% PSA through 450% PSA
6 JG	325% PSA through 425% PSA
9 TG	325% PSA through 425% PSA
10 Q and ZQ (in the aggregate)	220% PSA through 281% PSA
Scheduled Classes	
7 PA and PZ (in the aggregate)	240% PSA through 295% PSA
TAC Classes	
5 EF	300% PSA
5 FL	130% PSA

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

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

<u>Class</u>	<u>Original Class Notional Balance</u>	<u>Represents Approximately</u>
Security Group 1		
GI	\$ 83,333,333	83.3333333333% of GY (PAC/AD Class)
Security Group 2		
EI	\$ 98,083,686	65.3891241333% of EA (PT Class)
Security Group 3		
KI	\$ 23,597,851	50% of KA (PT Class)
Security Group 4		
UI	\$ 63,023,941	41.6666666667% of UA (PT Class)

<u>Class</u>	<u>Original Class Notional Balance</u>	<u>Represents Approximately</u>
Security Group 5		
ES	\$ 68,280,000	100% of EF (TAC/AD Class)
SL	63,090,000	100% of FL (TAC/AD Class)
Security Group 6		
JL	\$ 20,104,166	41.6666666667% of JG (PAC/AD Class)
Security Group 7		
PI	\$ 3,055,700	10% of PA (SCH/AD Class)
Security Group 8		
TI	\$ 6,430,432	40% of the Group 8 Trust Assets
Security Group 9		
IT	\$ 12,500,000	41.6666666667% of TG (PAC/AD Class)
Security Groups 6 and 9		
IP	\$ 20,104,166	41.6666666667% of JG (PAC/AD Class)
	12,500,000	41.6666666667% of TG (PAC/AD Class)
	<u>\$ 32,604,166</u>	
Security Group 10		
IQ	\$ 12,924,250	25% of Q (PAC/AD Class)
QI	28,005,459	50% of the Group 10 Trust Assets
Security Group 12		
LI	\$ 21,317,846	20% of the Group 12 Trust Assets
Security Groups 2, 8 and 12		
IO	\$ 98,083,686	65.3891241333% of EA (PT Class)
	6,430,432	40% of the Group 8 Trust Assets
	21,317,846	20% of the Group 12 Trust Assets
	<u>\$125,831,964</u>	
Security Group 13		
IM	\$ 32,146,404	33.3333333333% of the Group 13 Trust Assets
Tax Status: Double REMIC Series. See <i>“Certain United States Federal Income Tax Consequences”</i> 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 Compounded SOFR will affect the yields on floating rate and inverse floating rate securities. If Compounded SOFR performs differently from what you expect, the yield on the floating rate and inverse floating rate securities may be lower than you expect. Lower levels of Compounded SOFR will generally reduce the yield on floating rate securities; higher levels of Compounded SOFR will generally reduce the yield on inverse floating rate securities. You should bear in mind that the timing of

changes in the level of Compounded SOFR may affect your yield: generally, the earlier a change, the greater the effect on your yield. It is doubtful that 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, scheduled and TAC classes, the related 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, scheduled and TAC classes for that distribution date, this excess will be distributed to the related support class.

Up to 10% of the mortgage loans underlying the group 1, 2, 3, 4, 5, 7, 8, 10, 11, 12 and 13 trust assets and up to 100% of the mortgage loans underlying the group 6 and 9 trust assets may be higher balance mortgage loans. Subject to special pooling parameters set forth in the Ginnie Mae Mortgage-Backed Securities Guide, qualifying federally-insured or guaranteed mortgage loans that exceed certain balance thresholds established by Ginnie Mae ("higher balance mortgage loans") may be included in Ginnie Mae guaranteed pools. There are no historical performance data regarding the

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

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

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

SOFR is a relatively new market index, and the floating rate and inverse floating rate securities will likely have no established trading market when issued, and an established trading market may never develop or, if developed, may not be liquid. Investment in the floating rate and inverse floating rate securities carries additional pricing

volatility, illiquidity and market risk, as discussed in more detail under “Description of the Securities — Interest Rate Indices — Determination of SOFR — General” in the base offering circular.

The interest rates of the floating rate and inverse floating rate securities will be based on Compounded SOFR. Ginnie Mae may, in its sole discretion and without the consent of security holders or any other party, convert the interest rates of the floating rate and inverse floating rate securities from Compounded SOFR to term SOFR. In connection with that conversion, Ginnie Mae may, in its sole discretion and without the consent of security holders or any other party, change the calculation methodology or spread, add or subtract a rate adjustment and make other conforming changes with respect to the floating rate and inverse floating rate securities, as described under “Description of the Securities — Interest Rate Indices — Replacement Rate Conforming Changes” in the base offering circular. There can be no assurance that the interest rates of the floating rate and inverse floating rate securities will ever be based on term SOFR or, if based on term SOFR in the future, that the resulting interest rates will yield the same or similar economic results over the lives of the affected securities relative to the results that would have occurred had the interest rates remained based on Compounded SOFR or that the market value will not decrease due to the move from Compounded SOFR to term SOFR.

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

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

Interest on the floating rate and inverse floating rate securities will be determined

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

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

The Trust MBS

The Trust Assets are either:

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

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

The Mortgage Loans

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

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

The Trustee Fee

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

GINNIE MAE GUARANTY

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

DESCRIPTION OF THE SECURITIES

General

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

Form of Securities

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

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

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

Distributions

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

Interest Distributions

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

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

Categories of Classes

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

Accrual Periods

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

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

Fixed Rate Classes

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

Floating Rate and Inverse Floating Rate Classes

The Floating Rate and Inverse Floating Rate Classes will bear interest as shown under “Terms Sheet — Interest Rates” in this Supplement. The Interest Rates for the Floating Rate and Inverse Floating Rate Classes will be based initially on Compounded SOFR with a Corresponding Tenor of 30 days. The Trustee or its agent will determine Compounded SOFR as described under “Description of the Securities — Interest Rate Indices — Determination of SOFR” in the Base Offering Circular.

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

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

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

Accrual Classes

Each of Classes CZ, EZ, HZ, JZ, LZ, NZ, PZ, QZ, TZ, YZ, ZG, ZL, ZM, ZN and ZQ is an Accrual Class. Interest will accrue on the Accrual Classes and be distributed as described under “Terms Sheet — Accrual Classes” in this Supplement.

Principal Distributions

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

Categories of Classes

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

Notional Classes

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

Residual Securities

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

Class Factors

The Trustee will calculate and make available for each Class of Securities, no later than the day preceding the Distribution Date, the factor (carried out to eight decimal places) that when multiplied by the Original Class Principal Balance (or original Class Notional Balance) of that Class, determines the

Class Principal Balance (or Class Notional Balance) after giving effect to the distribution of principal to be made on the Securities (and any addition to the Class Principal Balance of an Accrual Class) or any reduction of Class Notional Balance on that Distribution Date (each, a “Class Factor”).

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

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

Termination

The Trustee, at its option, may purchase or cause the sale of the Trust Assets and thereby terminate the Trust on any Distribution Date on which the aggregate of the Class Principal Balances of the Securities is less than 1% of the aggregate Original Class Principal Balances of the Securities. On any Distribution Date upon the Trustee’s determination that the REMIC status of any Trust REMIC has been lost or that a substantial risk exists that this status will be lost for the then current taxable year, the Trustee will terminate the Trust and retire the Securities.

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

Modification and Exchange

All or a portion of the Classes of REMIC Securities specified on the front cover may be exchanged for a proportionate interest in the related MX Class or Classes shown on Schedule I to this Supplement. Similarly, all or a portion of the related MX Class or Classes may be exchanged for proportionate interests in the related Class or Classes of REMIC Securities and, in the case of Combinations 1 and 4, other related MX Classes. This process may occur repeatedly.

Each exchange may be effected only in proportions that result in the principal and interest entitlements of the Securities received being equal to the entitlements of the Securities surrendered.

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

A Beneficial Owner proposing to effect an exchange must notify the Trustee through the Beneficial Owner’s Book-Entry Depository participant. This notice must be received by the Trustee not later than two Business Days before the proposed exchange date. The exchange date can be any Business Day other than the last Business Day of the month. The notice must contain the outstanding principal or notional balances of the Securities to be included in the exchange and the proposed exchange date. The notice is required to be delivered to the Trustee by email to USBGNMATEam@USBank.com or in writing at its Corporate Trust Office at U.S. Bank National Association, One Federal Street, 3rd Floor, Boston, MA 02110, Attention: Ginnie Mae REMIC Program Agency Group 2021-196. The Trustee may be contacted by telephone at (617) 603-6451 and by fax at (617) 603-6644.

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

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

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

YIELD, MATURITY AND PREPAYMENT CONSIDERATIONS

General

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

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

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

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

- if mortgage interest rates rise materially above the Mortgage Rates on any of the Mortgage Loans, the rate of prepayment of those Mortgage Loans would be expected to decrease.

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

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

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

Accretion Directed Classes

Classes EF, FL, GY, HZ, JG, LA, MB, NA, NB, PA, PZ, Q, TG, YA and ZQ are Accretion Directed Classes. The related Accrual Amounts will be applied to making principal distributions on those Classes as described in this Supplement. Each of Classes ES, IT, JI, PI and SL is a Notional Class whose Class Notional Balance is determined by reference to the Class Principal Balance of the related Accretion Directed Class shown under “Terms Sheet — Notional Classes” in this Supplement.

Each of the Accretion Directed Classes has the AD designation in the suffix position, rather than the prefix position, in its class principal type because it does not have principal payment stability through the applicable pricing prepayment assumption. Although the Accretion Directed Classes are entitled to receive payments from the related Accrual Amounts, they do not have principal payment stability through any constant prepayment rate significantly higher than 0% PSA, except within any applicable Effective Range.

Securities that Receive Principal on the Basis of Schedules

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

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

<u>Security Group</u>	<u>Initial Effective Ranges or Rates</u>
PAC Classes	
1 GY and HZ (in the aggregate)	325% PSA through 450% PSA
6 JG	325% PSA through 425% PSA
9 TG	325% PSA through 425% PSA

<u>Security Group</u>		<u>Initial Effective Ranges or Rates</u>
10	Q and ZQ (in the aggregate)	220% PSA through 281% PSA
	Scheduled Classes	
7	PA and PZ (in the aggregate)	240% PSA through 295% PSA
	TAC Classes	
5	EF	300% PSA
5	FL	130% PSA

- The principal payment stability of the PAC Classes will be supported by the related Support Class.
- The principal payment stability of the Scheduled Classes will be supported by the related Support Class.
- The principal payment stability of the TAC Classes will be supported by the related 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 or Rate and will become more sensitive to prepayments on the related Mortgage Loans.

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

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

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

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

Assumability

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

Final Distribution Date

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

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

Modeling Assumptions

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

1. The Mortgage Loans underlying the Trust Assets have the assumed characteristics shown under “Assumed Characteristics of the Mortgage Loans Underlying the 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 is assumed to have an original and a remaining term to maturity of 360 months and a Mortgage Rate of 1.50% per annum higher than the related Certificate Rate.

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

3. Distributions on the Securities are always received on the 20th day of the month, whether or not a Business Day, commencing in December 2021.

4. A termination of the Trust does not occur.

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

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

7. 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 GA, GB, GC, GD, GE, GH, GI, GJ and GY					Class HZ					Class ZG				
	0%	325%	355%	450%	800%	0%	325%	355%	450%	800%	0%	325%	355%	450%	800%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2022	98	88	88	88	88	103	103	103	103	103	103	103	97	80	14
November 2023	95	69	69	69	53	106	106	106	106	106	106	106	92	48	0
November 2024	93	50	50	50	27	109	109	109	109	109	109	109	89	27	0
November 2025	90	35	35	35	14	113	113	113	113	113	113	113	89	22	0
November 2026	87	24	24	24	7	116	116	116	116	116	116	116	88	23	0
November 2027	84	16	16	16	4	120	120	120	120	120	120	120	83	23	0
November 2028	81	10	10	10	2	123	123	123	123	123	123	123	77	24	0
November 2029	78	6	6	6	1	127	127	127	127	127	127	127	70	25	0
November 2030	75	3	3	3	0	131	131	131	131	131	131	131	64	26	0
November 2031	72	1	1	1	0	135	135	135	135	135	135	135	58	26	0
November 2032	68	0	0	0	0	139	0	0	0	139	139	60	48	22	0
November 2033	64	0	0	0	0	143	0	0	0	143	143	46	36	16	0
November 2034	61	0	0	0	0	148	0	0	0	148	148	36	27	11	0
November 2035	57	0	0	0	0	152	0	0	0	152	152	27	20	8	0
November 2036	52	0	0	0	0	157	0	0	0	157	157	21	15	5	0
November 2037	48	0	0	0	0	162	0	0	0	162	162	16	11	4	0
November 2038	43	0	0	0	0	166	0	0	0	166	166	12	8	2	0
November 2039	39	0	0	0	0	171	0	0	0	171	171	9	6	2	0
November 2040	34	0	0	0	0	177	0	0	0	177	177	7	4	1	0
November 2041	28	0	0	0	0	182	0	0	0	182	182	5	3	1	0
November 2042	23	0	0	0	0	188	0	0	0	188	188	4	2	0	0
November 2043	17	0	0	0	0	193	0	0	0	193	193	3	2	0	0
November 2044	12	0	0	0	0	199	0	0	0	199	199	2	1	0	0
November 2045	5	0	0	0	0	205	0	0	0	205	205	1	1	0	0
November 2046	0	0	0	0	0	0	0	0	0	0	205	1	0	0	0
November 2047	0	0	0	0	0	0	0	0	0	0	167	0	0	0	0
November 2048	0	0	0	0	0	0	0	0	0	0	128	0	0	0	0
November 2049	0	0	0	0	0	0	0	0	0	0	87	0	0	0	0
November 2050	0	0	0	0	0	0	0	0	0	0	45	0	0	0	0
November 2051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	14.6	3.5	3.5	3.5	2.5	24.9	10.5	10.5	10.5	16.2	27.5	11.7	10.4	4.6	0.7

Security Group 2 PSA Prepayment Assumption Rates															
Distribution Date	Classes EA and EI					Class NA					Class NZ				
	0%	150%	277%	450%	600%	0%	150%	277%	450%	600%	0%	150%	277%	450%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2022	98	96	94	91	89	98	95	93	91	88	102	102	102	102	102
November 2023	96	88	82	73	66	96	87	80	72	64	104	104	104	104	104
November 2024	94	78	67	53	42	94	77	64	50	38	106	106	106	106	106
November 2025	93	70	54	38	26	92	67	51	33	21	108	108	108	108	108
November 2026	90	62	44	27	16	89	59	40	22	11	111	111	111	111	111
November 2027	88	54	36	19	10	87	51	31	13	4	113	113	113	113	113
November 2028	86	48	29	13	6	84	44	24	7	0	115	115	115	115	109
November 2029	84	42	23	9	4	82	38	18	3	0	117	117	117	117	67
November 2030	81	37	19	7	2	79	32	13	0	0	120	120	120	115	42
November 2031	79	33	15	5	1	76	27	9	0	0	122	122	122	81	26
November 2032	76	29	12	3	1	73	23	5	0	0	125	125	125	57	16
November 2033	73	25	10	2	1	70	19	2	0	0	127	127	127	40	10
November 2034	71	22	8	2	0	67	15	0	0	0	130	130	130	28	6
November 2035	68	19	6	1	0	64	12	0	0	0	132	132	106	19	4
November 2036	65	16	5	1	0	60	9	0	0	0	135	135	83	13	2
November 2037	61	14	4	1	0	57	6	0	0	0	138	138	66	9	1
November 2038	58	12	3	0	0	53	4	0	0	0	140	140	51	6	1
November 2039	55	10	2	0	0	49	2	0	0	0	143	143	40	4	0
November 2040	51	9	2	0	0	45	0	0	0	0	146	146	31	3	0
November 2041	47	7	1	0	0	41	0	0	0	0	149	123	24	2	0
November 2042	43	6	1	0	0	37	0	0	0	0	152	101	18	1	0
November 2043	39	5	1	0	0	32	0	0	0	0	155	83	13	1	0
November 2044	35	4	1	0	0	27	0	0	0	0	158	66	10	1	0
November 2045	31	3	0	0	0	22	0	0	0	0	162	52	7	0	0
November 2046	26	2	0	0	0	17	0	0	0	0	165	39	5	0	0
November 2047	21	2	0	0	0	12	0	0	0	0	168	28	3	0	0
November 2048	16	1	0	0	0	7	0	0	0	0	172	19	2	0	0
November 2049	11	1	0	0	0	1	0	0	0	0	175	11	1	0	0
November 2050	6	0	0	0	0	0	0	0	0	0	97	4	0	0	0
November 2051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	17.9	8.4	5.7	4.0	3.2	16.6	7.2	4.8	3.4	2.8	29.1	23.1	17.0	11.7	9.0

**Security Group 3
PSA Prepayment Assumption Rates**

Distribution Date	Classes KA and KI				
	0%	200%	385%	600%	800%
Initial Percent	100	100	100	100	100
November 2022	99	86	75	62	51
November 2023	97	73	56	39	26
November 2024	95	63	42	24	13
November 2025	94	53	31	15	6
November 2026	92	45	23	9	3
November 2027	90	38	17	6	2
November 2028	88	32	13	3	1
November 2029	86	27	9	2	0
November 2030	84	23	7	1	0
November 2031	81	19	5	1	0
November 2032	79	16	4	0	0
November 2033	76	13	3	0	0
November 2034	74	11	2	0	0
November 2035	71	9	1	0	0
November 2036	68	7	1	0	0
November 2037	65	5	1	0	0
November 2038	61	4	0	0	0
November 2039	58	3	0	0	0
November 2040	54	2	0	0	0
November 2041	51	2	0	0	0
November 2042	47	1	0	0	0
November 2043	42	1	0	0	0
November 2044	38	0	0	0	0
November 2045	33	0	0	0	0
November 2046	28	0	0	0	0
November 2047	23	0	0	0	0
November 2048	18	0	0	0	0
November 2049	12	0	0	0	0
November 2050	6	0	0	0	0
November 2051	0	0	0	0	0
Weighted Average Life (years)	18.6	5.8	3.4	2.1	1.5

**Security Group 4
PSA Prepayment Assumption Rates**

Distribution Date	Classes UA and UI				
	0%	200%	364%	600%	800%
Initial Percent	100	100	100	100	100
November 2022	98	86	76	62	51
November 2023	97	73	58	39	26
November 2024	95	63	44	24	13
November 2025	93	54	33	15	7
November 2026	91	46	25	9	3
November 2027	89	39	19	6	2
November 2028	87	33	14	4	1
November 2029	85	28	11	2	0
November 2030	83	23	8	1	0
November 2031	80	20	6	1	0
November 2032	78	16	4	0	0
November 2033	75	14	3	0	0
November 2034	72	11	2	0	0
November 2035	69	9	2	0	0
November 2036	66	7	1	0	0
November 2037	63	6	1	0	0
November 2038	60	5	1	0	0
November 2039	56	4	0	0	0
November 2040	53	3	0	0	0
November 2041	49	2	0	0	0
November 2042	45	2	0	0	0
November 2043	41	1	0	0	0
November 2044	36	1	0	0	0
November 2045	32	0	0	0	0
November 2046	27	0	0	0	0
November 2047	22	0	0	0	0
November 2048	17	0	0	0	0
November 2049	12	0	0	0	0
November 2050	6	0	0	0	0
November 2051	0	0	0	0	0
Weighted Average Life (years)	18.3	5.9	3.6	2.1	1.5

**Security Group 5
PSA Prepayment Assumption Rates**

Distribution Date	Classes EF and ES					Class EZ					Classes FL and SL				
	0%	200%	381%	600%	800%	0%	200%	381%	600%	800%	0%	200%	381%	600%	800%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2022	98	90	86	86	81	103	103	80	17	0	98	89	84	69	56
November 2023	95	76	67	58	44	106	106	54	0	0	96	78	63	43	29
November 2024	93	63	51	36	22	109	109	40	0	0	93	68	47	27	14
November 2025	91	51	37	22	11	113	113	37	0	0	91	60	35	17	7
November 2026	88	41	27	14	6	116	116	38	0	0	88	51	26	10	4
November 2027	85	33	19	9	3	120	120	39	0	0	86	43	20	6	2
November 2028	82	25	12	5	1	123	123	40	0	0	83	37	15	4	1
November 2029	79	19	8	3	1	127	127	41	0	0	80	31	11	2	0
November 2030	76	13	4	2	0	131	131	43	0	0	77	26	8	2	0
November 2031	73	8	2	1	0	135	135	44	0	0	74	22	6	1	0
November 2032	70	3	0	1	0	139	139	42	0	0	71	19	4	1	0
November 2033	66	0	0	0	0	143	139	31	0	0	67	16	3	0	0
November 2034	63	0	0	0	0	148	117	23	0	0	64	13	2	0	0
November 2035	59	0	0	0	0	152	97	17	0	0	60	11	2	0	0
November 2036	55	0	0	0	0	157	81	12	0	0	56	9	1	0	0
November 2037	50	0	0	0	0	162	67	9	0	0	52	7	1	0	0
November 2038	46	0	0	0	0	166	55	6	0	0	48	6	1	0	0
November 2039	42	0	0	0	0	171	44	4	0	0	44	5	0	0	0
November 2040	37	0	0	0	0	177	36	3	0	0	39	4	0	0	0
November 2041	32	0	0	0	0	182	28	2	0	0	34	3	0	0	0
November 2042	27	0	0	0	0	188	22	2	0	0	29	2	0	0	0
November 2043	21	0	0	0	0	193	17	1	0	0	24	1	0	0	0
November 2044	16	0	0	0	0	199	13	1	0	0	19	1	0	0	0
November 2045	10	0	0	0	0	205	9	0	0	0	13	1	0	0	0
November 2046	4	0	0	0	0	212	6	0	0	0	7	0	0	0	0
November 2047	0	0	0	0	0	196	4	0	0	0	1	0	0	0	0
November 2048	0	0	0	0	0	150	2	0	0	0	0	0	0	0	0
November 2049	0	0	0	0	0	103	0	0	0	0	0	0	0	0	0
November 2050	0	0	0	0	0	52	0	0	0	0	0	0	0	0	0
November 2051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	15.1	4.7	3.6	2.9	2.2	27.9	16.7	6.7	0.6	0.4	15.5	6.5	3.8	2.3	1.6

PSA Prepayment Assumption Rates

Distribution Date	Class LF					Class LZ				
	0%	200%	381%	600%	800%	0%	200%	381%	600%	800%
Initial Percent	100	100	100	100	100	100	100	100	100	100
November 2022	98	89	85	78	69	103	62	0	0	0
November 2023	96	77	65	51	37	106	33	0	0	0
November 2024	93	66	49	32	19	109	13	0	0	0
November 2025	91	55	36	20	9	113	1	0	0	0
November 2026	88	46	27	12	5	116	0	0	0	0
November 2027	86	38	19	8	2	120	0	0	0	0
November 2028	83	31	14	5	1	123	0	0	0	0
November 2029	80	25	9	3	1	127	0	0	0	0
November 2030	77	19	6	2	0	131	0	0	0	0
November 2031	74	15	4	1	0	135	0	0	0	0
November 2032	70	11	2	1	0	139	0	0	0	0
November 2033	67	7	2	0	0	143	0	0	0	0
November 2034	63	6	1	0	0	148	0	0	0	0
November 2035	59	5	1	0	0	152	0	0	0	0
November 2036	55	4	1	0	0	157	0	0	0	0
November 2037	51	3	0	0	0	162	0	0	0	0
November 2038	47	3	0	0	0	166	0	0	0	0
November 2039	43	2	0	0	0	171	0	0	0	0
November 2040	38	2	0	0	0	177	0	0	0	0
November 2041	33	1	0	0	0	182	0	0	0	0
November 2042	28	1	0	0	0	188	0	0	0	0
November 2043	23	1	0	0	0	193	0	0	0	0
November 2044	17	0	0	0	0	199	0	0	0	0
November 2045	11	0	0	0	0	205	0	0	0	0
November 2046	5	0	0	0	0	212	0	0	0	0
November 2047	0	0	0	0	0	218	0	0	0	0
November 2048	0	0	0	0	0	173	0	0	0	0
November 2049	0	0	0	0	0	118	0	0	0	0
November 2050	0	0	0	0	0	60	0	0	0	0
November 2051	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	15.3	5.6	3.7	2.6	1.9	28.1	1.6	0.3	0.2	0.1

**Security Group 6
PSA Prepayment Assumption Rates**

Distribution Date	Classes JG and JI					Class JZ				
	0%	325%	355%	425%	800%	0%	325%	355%	425%	800%
Initial Percent	100	100	100	100	100	100	100	100	100	100
November 2022	97	90	90	90	90	103	103	100	94	59
November 2023	95	72	72	72	68	106	106	98	78	0
November 2024	92	52	52	52	35	109	109	95	64	0
November 2025	89	35	35	35	18	113	113	96	60	0
November 2026	86	21	21	21	9	116	115	98	61	0
November 2027	82	11	11	11	5	120	115	97	63	0
November 2028	79	4	4	4	2	123	112	96	65	0
November 2029	75	0	0	0	1	127	101	86	59	0
November 2030	72	0	0	0	1	131	79	66	43	0
November 2031	68	0	0	0	0	135	61	50	31	0
November 2032	64	0	0	0	0	139	47	38	22	0
November 2033	60	0	0	0	0	143	37	29	16	0
November 2034	55	0	0	0	0	148	28	22	11	0
November 2035	51	0	0	0	0	152	22	16	8	0
November 2036	46	0	0	0	0	157	17	12	6	0
November 2037	41	0	0	0	0	162	13	9	4	0
November 2038	36	0	0	0	0	166	10	7	3	0
November 2039	31	0	0	0	0	171	7	5	2	0
November 2040	25	0	0	0	0	177	5	4	1	0
November 2041	19	0	0	0	0	182	4	3	1	0
November 2042	13	0	0	0	0	188	3	2	1	0
November 2043	7	0	0	0	0	193	2	1	0	0
November 2044	0	0	0	0	0	199	2	1	0	0
November 2045	0	0	0	0	0	175	1	1	0	0
November 2046	0	0	0	0	0	149	1	0	0	0
November 2047	0	0	0	0	0	122	0	0	0	0
November 2048	0	0	0	0	0	93	0	0	0	0
November 2049	0	0	0	0	0	64	0	0	0	0
November 2050	0	0	0	0	0	33	0	0	0	0
November 2051	0	0	0	0	0	0	0	0	0	0
Weighted Average										
Life (years)	13.3	3.4	3.4	3.4	2.8	26.7	11.3	10.6	7.4	1.1

**Security Group 7
PSA Prepayment Assumption Rates**

Distribution Date	Class CZ					Classes PA and PI					Class PZ				
	0%	150%	270%	450%	600%	0%	150%	270%	450%	600%	0%	150%	270%	450%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2022	103	103	95	51	14	98	95	94	94	94	103	103	103	103	103
November 2023	105	105	81	0	0	96	87	82	78	71	105	105	105	105	105
November 2024	108	108	64	0	0	94	76	68	56	45	108	108	108	108	108
November 2025	111	111	54	0	0	91	67	55	40	28	111	111	111	111	111
November 2026	113	113	51	0	0	89	58	44	28	17	113	113	113	113	113
November 2027	116	116	50	0	0	86	50	35	20	10	116	116	116	116	116
November 2028	119	119	49	0	0	84	43	28	14	6	119	119	119	119	119
November 2029	122	122	46	0	0	81	37	22	10	4	122	122	122	122	122
November 2030	125	125	43	0	0	78	31	18	7	2	125	125	125	125	125
November 2031	128	128	39	0	0	75	26	14	4	1	128	128	128	128	128
November 2032	132	132	34	0	0	72	22	11	3	0	132	132	132	132	132
November 2033	135	135	30	0	0	69	17	8	2	0	135	135	135	135	121
November 2034	138	138	26	0	0	66	14	6	1	0	138	138	138	138	74
November 2035	142	142	23	0	0	62	10	5	0	0	142	142	142	142	45
November 2036	145	145	19	0	0	59	7	4	0	0	145	145	145	145	27
November 2037	149	149	16	0	0	55	5	3	0	0	149	149	149	115	17
November 2038	153	153	13	0	0	51	2	2	0	0	153	153	153	79	10
November 2039	157	138	11	0	0	47	1	1	0	0	157	157	157	54	6
November 2040	161	119	9	0	0	43	1	1	0	0	161	161	161	36	4
November 2041	165	102	7	0	0	39	0	0	0	0	165	165	165	24	2
November 2042	169	86	6	0	0	34	0	0	0	0	169	169	169	16	1
November 2043	173	71	5	0	0	30	0	0	0	0	173	128	128	11	1
November 2044	178	58	4	0	0	25	0	0	0	0	178	93	93	7	0
November 2045	182	46	3	0	0	20	0	0	0	0	182	66	66	4	0
November 2046	187	36	2	0	0	15	0	0	0	0	187	45	45	3	0
November 2047	191	26	1	0	0	9	0	0	0	0	191	30	30	2	0
November 2048	196	18	1	0	0	4	0	0	0	0	196	18	18	1	0
November 2049	181	11	0	0	0	0	0	0	0	0	10	10	10	0	0
November 2050	93	4	0	0	0	0	0	0	0	0	3	3	3	0	0
November 2051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average															
Life (years)	28.9	22.2	8.3	1.0	0.7	16.3	7.0	5.5	4.1	3.3	27.8	23.8	23.8	17.9	13.8

**Security Group 8
PSA Prepayment Assumption Rates**

Distribution Date	Class TI					Class YA					Class YZ				
	0%	150%	277%	450%	600%	0%	150%	277%	450%	600%	0%	150%	277%	450%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2022	98	96	94	92	90	98	96	94	91	89	102	102	102	102	102
November 2023	96	89	83	75	68	96	87	81	73	66	103	103	103	103	103
November 2024	94	79	68	54	44	94	77	65	51	39	105	105	105	105	105
November 2025	93	70	55	39	27	92	67	51	34	22	106	106	106	106	106
November 2026	90	62	45	27	17	89	59	40	22	10	108	108	108	108	108
November 2027	88	55	36	19	11	87	51	31	13	3	109	109	109	109	109
November 2028	86	48	29	14	7	84	44	23	7	0	111	111	111	111	98
November 2029	84	43	24	10	4	82	38	17	2	0	113	113	113	113	61
November 2030	81	38	19	7	3	79	32	12	0	0	114	114	114	103	38
November 2031	79	33	15	5	2	76	27	8	0	0	116	116	116	72	23
November 2032	76	29	12	3	1	73	22	5	0	0	118	118	118	51	14
November 2033	73	25	10	2	1	70	18	2	0	0	120	120	120	35	9
November 2034	71	22	8	2	0	67	15	0	0	0	122	122	117	25	5
November 2035	68	19	6	1	0	64	11	0	0	0	123	123	93	17	3
November 2036	65	16	5	1	0	60	9	0	0	0	125	125	73	12	2
November 2037	61	14	4	1	0	57	6	0	0	0	127	127	58	8	1
November 2038	58	12	3	0	0	53	4	0	0	0	129	129	45	6	1
November 2039	55	10	2	0	0	49	2	0	0	0	131	131	35	4	0
November 2040	51	9	2	0	0	45	0	0	0	0	133	128	27	3	0
November 2041	47	7	1	0	0	41	0	0	0	0	135	107	21	2	0
November 2042	43	6	1	0	0	37	0	0	0	0	137	89	16	1	0
November 2043	39	5	1	0	0	32	0	0	0	0	139	72	12	1	0
November 2044	35	4	1	0	0	27	0	0	0	0	141	58	9	0	0
November 2045	31	3	0	0	0	22	0	0	0	0	143	45	6	0	0
November 2046	26	2	0	0	0	17	0	0	0	0	145	34	4	0	0
November 2047	21	2	0	0	0	12	0	0	0	0	148	25	3	0	0
November 2048	16	1	0	0	0	7	0	0	0	0	150	16	2	0	0
November 2049	11	1	0	0	0	1	0	0	0	0	152	9	1	0	0
November 2050	6	0	0	0	0	0	0	0	0	0	84	3	0	0	0
November 2051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	17.9	8.5	5.8	4.0	3.3	16.6	7.2	4.8	3.4	2.8	29.1	22.9	16.8	11.5	8.8

**Security Group 9
PSA Prepayment Assumption Rates**

Distribution Date	Classes IT and TG					Class TZ				
	0%	325%	355%	425%	800%	0%	325%	355%	425%	800%
Initial Percent	100	100	100	100	100	100	100	100	100	100
November 2022	97	91	91	91	91	103	103	101	95	64
November 2023	95	74	74	74	71	106	106	98	80	0
November 2024	92	53	53	53	37	109	109	96	65	0
November 2025	89	36	36	36	19	113	113	96	60	0
November 2026	86	22	22	22	9	116	116	98	61	0
November 2027	82	12	12	12	5	120	115	98	63	0
November 2028	79	4	4	4	2	123	112	96	65	0
November 2029	75	0	0	0	1	127	103	88	61	0
November 2030	72	0	0	0	1	131	80	67	44	0
November 2031	68	0	0	0	0	135	62	51	32	0
November 2032	64	0	0	0	0	139	48	39	23	0
November 2033	60	0	0	0	0	143	37	29	16	0
November 2034	55	0	0	0	0	148	29	22	12	0
November 2035	51	0	0	0	0	152	22	17	8	0
November 2036	46	0	0	0	0	157	17	12	6	0
November 2037	41	0	0	0	0	162	13	9	4	0
November 2038	36	0	0	0	0	166	10	7	3	0
November 2039	31	0	0	0	0	171	7	5	2	0
November 2040	25	0	0	0	0	177	6	4	1	0
November 2041	19	0	0	0	0	182	4	3	1	0
November 2042	13	0	0	0	0	188	3	2	1	0
November 2043	7	0	0	0	0	193	2	1	0	0
November 2044	0	0	0	0	0	199	2	1	0	0
November 2045	0	0	0	0	0	175	1	1	0	0
November 2046	0	0	0	0	0	149	1	0	0	0
November 2047	0	0	0	0	0	122	0	0	0	0
November 2048	0	0	0	0	0	93	0	0	0	0
November 2049	0	0	0	0	0	64	0	0	0	0
November 2050	0	0	0	0	0	33	0	0	0	0
November 2051	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	13.3	3.4	3.4	3.4	2.9	26.7	11.4	10.7	7.5	1.2

**Security Groups 6 and 9
PSA Prepayment Assumption Rates**

Distribution Date	Class IP				
	0%	325%	355%	425%	800%
Initial Percent	100	100	100	100	100
November 2022	97	91	91	91	91
November 2023	95	73	73	73	69
November 2024	92	52	52	52	36
November 2025	89	35	35	35	18
November 2026	86	21	21	21	9
November 2027	82	11	11	11	5
November 2028	79	4	4	4	2
November 2029	75	0	0	0	1
November 2030	72	0	0	0	1
November 2031	68	0	0	0	0
November 2032	64	0	0	0	0
November 2033	60	0	0	0	0
November 2034	55	0	0	0	0
November 2035	51	0	0	0	0
November 2036	46	0	0	0	0
November 2037	41	0	0	0	0
November 2038	36	0	0	0	0
November 2039	31	0	0	0	0
November 2040	25	0	0	0	0
November 2041	19	0	0	0	0
November 2042	13	0	0	0	0
November 2043	7	0	0	0	0
November 2044	0	0	0	0	0
November 2045	0	0	0	0	0
November 2046	0	0	0	0	0
November 2047	0	0	0	0	0
November 2048	0	0	0	0	0
November 2049	0	0	0	0	0
November 2050	0	0	0	0	0
November 2051	0	0	0	0	0
Weighted Average Life (years)	13.3	3.4	3.4	3.4	2.8

**Security Group 10
PSA Prepayment Assumption Rates**

Distribution Date	Classes IQ, Q, QC, QD, QE and QG					Class QI					Class QZ					Class ZQ				
	0%	220%	250%	281%	500%	0%	220%	250%	281%	500%	0%	220%	250%	281%	500%	0%	220%	250%	281%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2022	98	86	86	86	80	99	88	86	85	74	102	102	83	64	0	102	102	102	102	102
November 2023	97	72	72	72	55	97	75	72	69	51	104	104	68	32	0	104	104	104	104	104
November 2024	95	60	60	60	38	96	63	60	56	35	106	106	59	13	0	106	106	106	106	106
November 2025	93	49	49	49	26	94	54	50	46	24	108	108	55	3	0	108	108	108	108	108
November 2026	91	40	40	40	18	92	46	41	37	16	111	111	54	0	0	111	111	111	111	111
November 2027	89	33	33	33	12	91	39	34	30	11	113	111	53	0	0	113	113	113	113	113
November 2028	87	26	26	26	8	89	33	28	24	8	115	107	51	0	0	115	115	115	115	115
November 2029	84	21	21	21	6	87	27	23	20	5	117	102	48	0	0	117	117	117	117	117
November 2030	82	17	17	17	4	85	23	19	16	3	120	95	44	0	0	120	120	120	120	120
November 2031	79	14	14	14	3	83	19	16	13	2	122	87	40	0	0	122	122	122	122	122
November 2032	77	11	11	11	2	80	16	13	10	2	125	78	36	0	0	125	125	125	125	125
November 2033	74	9	9	9	1	78	14	11	8	1	127	70	31	0	0	127	127	127	127	127
November 2034	71	7	7	7	1	75	11	9	6	1	130	62	27	0	0	130	130	130	130	130
November 2035	67	6	6	6	1	72	9	7	5	0	132	54	24	0	0	132	132	132	132	132
November 2036	64	4	4	4	0	69	8	6	4	0	135	47	20	0	0	135	135	135	135	135
November 2037	60	3	3	3	0	66	6	4	3	0	138	40	17	0	0	138	138	138	138	138
November 2038	57	3	3	3	0	63	5	4	2	0	140	34	14	0	0	140	140	140	140	140
November 2039	53	2	2	2	0	60	4	3	2	0	143	29	12	0	0	143	143	143	143	143
November 2040	49	2	2	2	0	56	3	2	1	0	146	24	10	0	0	146	146	146	146	146
November 2041	44	1	1	1	0	52	3	2	1	0	149	19	8	0	0	149	149	149	149	149
November 2042	40	1	1	1	0	48	2	1	1	0	152	16	6	0	0	152	152	152	152	152
November 2043	35	1	1	1	0	44	2	1	1	0	155	12	5	0	0	155	155	155	155	155
November 2044	30	0	0	0	0	40	1	1	0	0	158	9	4	0	0	158	158	158	158	158
November 2045	24	0	0	0	0	35	1	1	0	0	162	7	3	0	0	162	162	162	162	140
November 2046	18	0	0	0	0	30	1	0	0	0	165	5	2	0	0	165	165	165	165	77
November 2047	12	0	0	0	0	24	0	0	0	0	168	3	1	0	0	168	168	168	168	39
November 2048	6	0	0	0	0	19	0	0	0	0	172	2	1	0	0	172	172	172	172	16
November 2049	0	0	0	0	0	13	0	0	0	0	167	0	0	0	0	175	175	175	175	3
November 2050	0	0	0	0	0	7	0	0	0	0	86	0	0	0	0	0	0	0	0	0
November 2051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	17.3	5.2	5.2	5.2	3.0	19.0	6.0	5.4	4.9	2.8	29.0	14.6	8.3	1.6	0.3	28.2	28.2	28.2	28.2	25.2

**Security Group 11
PSA Prepayment Assumption Rates**

Distribution Date	Class NB					Class ZN				
	0%	150%	279%	450%	600%	0%	150%	279%	450%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100
November 2022	98	88	80	70	61	103	103	103	103	103
November 2023	96	78	65	49	37	105	105	105	105	105
November 2024	94	68	51	34	22	108	108	108	108	108
November 2025	92	60	41	23	12	111	111	111	111	111
November 2026	90	52	32	15	6	113	113	113	113	113
November 2027	87	45	25	10	2	116	116	116	116	116
November 2028	85	39	19	6	0	119	119	119	119	119
November 2029	83	34	15	3	0	122	122	122	122	76
November 2030	80	29	11	1	0	125	125	125	125	47
November 2031	77	24	8	0	0	128	128	128	106	29
November 2032	75	20	5	0	0	132	132	132	74	17
November 2033	72	17	3	0	0	135	135	135	51	10
November 2034	69	14	2	0	0	138	138	138	35	6
November 2035	65	11	0	0	0	142	142	142	24	4
November 2036	62	9	0	0	0	145	145	116	16	2
November 2037	59	6	0	0	0	149	149	89	11	1
November 2038	55	4	0	0	0	153	153	67	7	1
November 2039	52	3	0	0	0	157	157	50	5	0
November 2040	48	1	0	0	0	161	161	37	3	0
November 2041	44	0	0	0	0	165	158	27	2	0
November 2042	40	0	0	0	0	169	121	19	1	0
November 2043	35	0	0	0	0	173	88	12	1	0
November 2044	31	0	0	0	0	178	60	8	0	0
November 2045	26	0	0	0	0	182	35	4	0	0
November 2046	21	0	0	0	0	187	14	2	0	0
November 2047	16	0	0	0	0	191	0	0	0	0
November 2048	11	0	0	0	0	196	0	0	0	0
November 2049	5	0	0	0	0	201	0	0	0	0
November 2050	0	0	0	0	0	198	0	0	0	0
November 2051	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	17.2	6.5	4.1	2.6	1.9	29.5	22.4	17.5	12.2	9.1

**Security Group 12
PSA Prepayment Assumption Rates**

Distribution Date	Class LA					Class LI					Class ZL				
	0%	150%	277%	450%	600%	0%	150%	277%	450%	600%	0%	150%	277%	450%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2022	98	96	94	91	89	98	96	94	92	90	102	102	102	102	102
November 2023	96	88	81	73	66	96	89	83	75	68	104	104	104	104	104
November 2024	94	77	65	51	40	94	79	68	54	44	106	106	106	106	106
November 2025	91	68	52	34	22	93	70	55	39	27	108	108	108	108	108
November 2026	89	59	40	22	11	90	62	45	27	17	111	111	111	111	111
November 2027	87	51	31	13	4	88	55	36	19	11	113	113	113	113	113
November 2028	84	44	24	7	0	86	48	29	14	7	115	115	115	115	106
November 2029	82	38	17	3	0	84	43	24	10	4	117	117	117	117	66
November 2030	79	32	12	0	0	81	38	19	7	3	120	120	120	111	41
November 2031	76	27	8	0	0	79	33	15	5	2	122	122	122	78	25
November 2032	73	22	5	0	0	76	29	12	3	1	125	125	125	55	15
November 2033	70	18	2	0	0	73	25	10	2	1	127	127	127	38	9
November 2034	67	15	0	0	0	71	22	8	2	0	130	130	127	27	6
November 2035	63	11	0	0	0	68	19	6	1	0	132	132	101	19	4
November 2036	60	9	0	0	0	65	16	5	1	0	135	135	80	13	2
November 2037	56	6	0	0	0	61	14	4	1	0	138	138	63	9	1
November 2038	53	4	0	0	0	58	12	3	0	0	140	140	49	6	1
November 2039	49	1	0	0	0	55	10	2	0	0	143	143	38	4	0
November 2040	45	0	0	0	0	51	9	2	0	0	146	139	29	3	0
November 2041	40	0	0	0	0	47	7	1	0	0	149	116	23	2	0
November 2042	36	0	0	0	0	43	6	1	0	0	152	96	17	1	0
November 2043	32	0	0	0	0	39	5	1	0	0	155	78	13	1	0
November 2044	27	0	0	0	0	35	4	1	0	0	158	63	9	1	0
November 2045	22	0	0	0	0	31	3	0	0	0	162	49	7	0	0
November 2046	17	0	0	0	0	26	2	0	0	0	165	37	5	0	0
November 2047	11	0	0	0	0	21	2	0	0	0	168	27	3	0	0
November 2048	6	0	0	0	0	16	1	0	0	0	172	18	2	0	0
November 2049	0	0	0	0	0	11	1	0	0	0	175	10	1	0	0
November 2050	0	0	0	0	0	6	0	0	0	0	91	3	0	0	0
November 2051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	16.5	7.2	4.8	3.5	2.8	17.9	8.5	5.8	4.0	3.3	29.0	22.9	16.9	11.6	8.9

**Security Groups 2, 8 and 12
PSA Prepayment Assumption Rates**

<u>Distribution Date</u>	<u>Class IO</u>				
	<u>0%</u>	<u>150%</u>	<u>277%</u>	<u>450%</u>	<u>600%</u>
Initial Percent	100	100	100	100	100
November 2022	98	96	94	91	89
November 2023	96	88	82	74	67
November 2024	94	78	67	53	43
November 2025	93	70	55	38	27
November 2026	90	62	44	27	17
November 2027	88	55	36	19	10
November 2028	86	48	29	13	6
November 2029	84	42	23	10	4
November 2030	81	37	19	7	2
November 2031	79	33	15	5	2
November 2032	76	29	12	3	1
November 2033	73	25	10	2	1
November 2034	71	22	8	2	0
November 2035	68	19	6	1	0
November 2036	65	16	5	1	0
November 2037	61	14	4	1	0
November 2038	58	12	3	0	0
November 2039	55	10	2	0	0
November 2040	51	9	2	0	0
November 2041	47	7	1	0	0
November 2042	43	6	1	0	0
November 2043	39	5	1	0	0
November 2044	35	4	1	0	0
November 2045	31	3	0	0	0
November 2046	26	2	0	0	0
November 2047	21	2	0	0	0
November 2048	16	1	0	0	0
November 2049	11	1	0	0	0
November 2050	6	0	0	0	0
November 2051	0	0	0	0	0
Weighted Average Life (years)	17.9	8.5	5.7	4.0	3.2

**Security Groups 2 and 12
PSA Prepayment Assumption Rates**

<u>Distribution Date</u>	<u>Class Z</u>				
	<u>0%</u>	<u>150%</u>	<u>277%</u>	<u>450%</u>	<u>600%</u>
Initial Percent	100	100	100	100	100
November 2022	102	102	102	102	102
November 2023	104	104	104	104	104
November 2024	106	106	106	106	106
November 2025	108	108	108	108	108
November 2026	111	111	111	111	111
November 2027	113	113	113	113	113
November 2028	115	115	115	115	108
November 2029	117	117	117	117	67
November 2030	120	120	120	114	41
November 2031	122	122	122	80	26
November 2032	125	125	125	56	16
November 2033	127	127	127	39	10
November 2034	130	130	129	27	6
November 2035	132	132	104	19	4
November 2036	135	135	82	13	2
November 2037	138	138	65	9	1
November 2038	140	140	51	6	1
November 2039	143	143	39	4	0
November 2040	146	144	30	3	0
November 2041	149	121	23	2	0
November 2042	152	100	18	1	0
November 2043	155	81	13	1	0
November 2044	158	65	10	1	0
November 2045	162	51	7	0	0
November 2046	165	39	5	0	0
November 2047	168	28	3	0	0
November 2048	172	19	2	0	0
November 2049	175	11	1	0	0
November 2050	95	4	0	0	0
November 2051	0	0	0	0	0
Weighted Average Life (years)	29.1	23.1	17.0	11.7	9.0

**Security Group 13
PSA Prepayment Assumption Rates**

Distribution Date	Class IM					Class MB					Class ZM				
	0%	200%	374%	600%	800%	0%	200%	374%	600%	800%	0%	200%	374%	600%	800%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2022	98	95	93	90	88	98	95	92	89	86	102	102	102	102	102
November 2023	97	87	79	69	60	96	84	75	64	55	104	104	104	104	104
November 2024	95	75	60	44	32	94	71	55	36	22	106	106	106	106	106
November 2025	93	64	46	27	16	91	59	38	17	5	108	108	108	108	108
November 2026	91	55	35	17	8	89	48	25	5	0	111	111	111	111	73
November 2027	89	47	26	11	4	86	39	15	0	0	113	113	113	96	37
November 2028	87	41	20	7	2	84	31	8	0	0	115	115	115	60	19
November 2029	85	35	15	4	1	81	24	2	0	0	117	117	117	37	9
November 2030	83	30	11	3	1	78	18	0	0	0	120	120	100	23	5
November 2031	80	25	8	2	0	75	13	0	0	0	122	122	75	14	2
November 2032	78	21	6	1	0	72	8	0	0	0	125	125	56	9	1
November 2033	75	18	5	1	0	68	4	0	0	0	127	127	42	5	1
November 2034	72	15	3	0	0	65	1	0	0	0	130	130	31	3	0
November 2035	69	13	3	0	0	61	0	0	0	0	132	115	23	2	0
November 2036	66	11	2	0	0	58	0	0	0	0	135	96	17	1	0
November 2037	63	9	1	0	0	54	0	0	0	0	138	80	12	1	0
November 2038	60	7	1	0	0	50	0	0	0	0	140	66	9	0	0
November 2039	56	6	1	0	0	45	0	0	0	0	143	55	7	0	0
November 2040	53	5	1	0	0	41	0	0	0	0	146	45	5	0	0
November 2041	49	4	0	0	0	36	0	0	0	0	149	36	3	0	0
November 2042	45	3	0	0	0	31	0	0	0	0	152	29	2	0	0
November 2043	41	3	0	0	0	26	0	0	0	0	155	23	2	0	0
November 2044	36	2	0	0	0	21	0	0	0	0	158	18	1	0	0
November 2045	32	2	0	0	0	16	0	0	0	0	162	14	1	0	0
November 2046	27	1	0	0	0	10	0	0	0	0	165	10	1	0	0
November 2047	22	1	0	0	0	4	0	0	0	0	168	7	0	0	0
November 2048	17	1	0	0	0	0	0	0	0	0	153	5	0	0	0
November 2049	12	0	0	0	0	0	0	0	0	0	104	3	0	0	0
November 2050	6	0	0	0	0	0	0	0	0	0	53	1	0	0	0
November 2051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average															
Life (years)	18.3	7.3	4.7	3.3	2.6	15.8	5.5	3.6	2.6	2.2	28.4	18.1	11.8	7.8	5.9

Yield Considerations

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

- the anticipated yield of that Class resulting from its purchase price,
- the investor's own projection of Mortgage Loan prepayment rates under a variety of scenarios and
- in the case of a Floating Rate or an Inverse Floating Rate Class, the investor's own projection of levels of Compounded SOFR under a variety of scenarios.

No representation is made regarding Mortgage Loan prepayment rates, 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.

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

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

Payment Delay: Effect on Yields of the Fixed Rate Classes

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

Yield Tables

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

The Mortgage Loans will not prepay at any constant rate until maturity, and it is unlikely that 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 Compounded SOFR 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 GI to Prepayments
Assumed Price 9.0625%***

PSA Prepayment Assumption Rates				
<u>325%</u>	<u>355%</u>	<u>450%</u>	<u>616%</u>	<u>800%</u>
5.7%	5.7%	5.7%	0.0%	(11.2)%

SECURITY GROUP 2

**Sensitivity of Class EI to Prepayments
Assumed Price 12.65625%***

PSA Prepayment Assumption Rates				
<u>150%</u>	<u>277%</u>	<u>321%</u>	<u>450%</u>	<u>600%</u>
9.3%	2.4%	0.0%	(7.2)%	(15.8)%

SECURITY GROUP 3

**Sensitivity of Class KI to Prepayments
Assumed Price 10.90625%***

PSA Prepayment Assumption Rates				
<u>200%</u>	<u>385%</u>	<u>411%</u>	<u>600%</u>	<u>800%</u>
15.9%	2.1%	0.0%	(15.4)%	(33.3)%

SECURITY GROUP 4

**Sensitivity of Class UI to Prepayments
Assumed Price 8.3125%***

PSA Prepayment Assumption Rates				
<u>200%</u>	<u>364%</u>	<u>463%</u>	<u>600%</u>	<u>800%</u>
20.3%	7.9%	0.0%	(11.5)%	(29.7)%

SECURITY GROUP 5

**Sensitivity of Class ES to Prepayments
Assumed Price 4.5625%***

Compounded SOFR	PSA Prepayment Assumption Rates			
	<u>200%</u>	<u>381%</u>	<u>600%</u>	<u>800%</u>
0.025%	46.2%	38.3%	29.5%	16.3%
0.050%	45.5%	37.6%	28.8%	15.6%
1.350%	10.3%	1.9%	(7.1)%	(21.2)%
2.650% 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 SL to Prepayments
Assumed Price 4.65625%*

<u>Compounded SOFR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>200%</u>	<u>381%</u>	<u>600%</u>	<u>800%</u>
0.025%	47.4%	35.0%	15.3%	(5.1)%
0.050%	46.8%	34.4%	14.7%	(5.6)%
1.350%	14.8%	2.3%	(15.2)%	(33.1)%
2.650% and above	**	**	**	**

SECURITY GROUP 6

Sensitivity of Class JI to Prepayments
Assumed Price 8.0%*

<u>PSA Prepayment Assumption Rates</u>				
<u>325%</u>	<u>355%</u>	<u>425%</u>	<u>800%</u>	<u>831%</u>
10.2%	10.2%	10.2%	1.6%	0.0%

SECURITY GROUP 7

Sensitivity of Class PI to Prepayments
Assumed Price 9.0%*

<u>PSA Prepayment Assumption Rates</u>				
<u>150%</u>	<u>270%</u>	<u>450%</u>	<u>519%</u>	<u>600%</u>
16.7%	11.6%	3.8%	0.0%	(4.5)%

SECURITY GROUP 8

Sensitivity of Class TI to Prepayments
Assumed Price 12.3125%*

<u>PSA Prepayment Assumption Rates</u>				
<u>150%</u>	<u>277%</u>	<u>339%</u>	<u>450%</u>	<u>600%</u>
10.0%	3.4%	0.0%	(6.0)%	(14.4)%

SECURITY GROUP 9

Sensitivity of Class IT to Prepayments
Assumed Price 8.125%*

<u>PSA Prepayment Assumption Rates</u>				
<u>325%</u>	<u>355%</u>	<u>425%</u>	<u>800%</u>	<u>843%</u>
10.3%	10.3%	10.3%	2.1%	0.0%

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

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

SECURITY GROUPS 6 AND 9

**Sensitivity of Class IP to Prepayments
Assumed Price 8.04792%***

PSA Prepayment Assumption Rates				
<u>325%</u>	<u>355%</u>	<u>425%</u>	<u>800%</u>	<u>836%</u>
10.2%	10.2%	10.2%	1.8%	0.0%

SECURITY GROUP 10

**Sensitivity of Class IQ to Prepayments
Assumed Price 15.5%***

PSA Prepayment Assumption Rates				
<u>220%</u>	<u>250%</u>	<u>281%</u>	<u>387%</u>	<u>500%</u>
6.9%	6.9%	6.9%	0.0%	(8.3)%

**Sensitivity of Class QI to Prepayments
Assumed Price 14.5%***

PSA Prepayment Assumption Rates				
<u>220%</u>	<u>250%</u>	<u>281%</u>	<u>385%</u>	<u>500%</u>
11.6%	9.6%	7.4%	0.1%	(8.4)%

SECURITY GROUP 12

**Sensitivity of Class LI to Prepayments
Assumed Price 12.25%***

PSA Prepayment Assumption Rates				
<u>150%</u>	<u>277%</u>	<u>342%</u>	<u>450%</u>	<u>600%</u>
10.2%	3.5%	0.0%	(5.9)%	(14.2)%

SECURITY GROUPS 2, 8 AND 12

**Sensitivity of Class IO to Prepayments
Assumed Price 12.56986%***

PSA Prepayment Assumption Rates				
<u>150%</u>	<u>277%</u>	<u>325%</u>	<u>450%</u>	<u>600%</u>
9.5%	2.7%	0.0%	(6.9)%	(15.5)%

SECURITY GROUP 13

**Sensitivity of Class IM to Prepayments
Assumed Price 12.65625%***

PSA Prepayment Assumption Rates				
<u>200%</u>	<u>374%</u>	<u>421%</u>	<u>600%</u>	<u>800%</u>
11.6%	2.5%	0.0%	(9.7)%	(20.8)%

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

CERTAIN UNITED STATES FEDERAL INCOME TAX CONSEQUENCES

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

REMIC Elections

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

Regular Securities

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

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

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

<u>Group(s)</u>	<u>PSA</u>
1, 6 and 9	355%
2, 8 and 12	277%
3	385%
4	364%
5	381%
7	270%
10	250%
11	279%
13	374%

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 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.

MX Securities

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

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

ERISA MATTERS

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

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

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

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

See “ERISA Considerations” in the Base Offering Circular.

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

LEGAL INVESTMENT CONSIDERATIONS

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

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

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

PLAN OF DISTRIBUTION

Subject to the terms and conditions of the Sponsor Agreement, the Sponsor has agreed to purchase all of the Securities if any are sold and purchased. The Sponsor proposes to offer the Regular and MX Classes to the public from time to time for sale in negotiated transactions at varying prices to be determined at the time of sale, plus accrued interest from (1) November 1, 2021 on the Fixed Rate Classes and (2) November 20, 2021 on the Floating Rate and Inverse Floating Rate Classes. The Sponsor may effect these transactions by sales to or through certain securities dealers. These dealers may receive compensation in the form of discounts, concessions or commissions from the Sponsor and/or commissions from any purchasers for which they act as agents. Some of the Securities may be sold through dealers in relatively small sales. In the usual case, the commission charged on a relatively small sale of securities will be a higher percentage of the sales price than that charged on a large sale of securities.

INCREASE IN SIZE

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

LEGAL MATTERS

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

Available Combinations(1)

Class	REMIC Securities		MX Securities						
	Original Class Principal Balance or Class Notional Balance	Related MX Class	Maximum Principal Balance or Class Notional Balance(2)	Principal Type(3)	Interest Rate	Interest Type(3)	CUSIP Number	Final Distribution Date(4)	
Security Group 1									
Combination 1(6)									
GY	\$100,000,000								
		GA	\$100,000,000	PAC/AD	2.00%	FIX	38383DBV9	November 2051	
		GB	100,000,000	PAC/AD	1.75	FIX	38383DBW7	November 2051	
		GC	100,000,000	PAC/AD	1.50	FIX	38383DBX5	November 2051	
		GD	100,000,000	PAC/AD	1.25	FIX	38383DBY3	November 2051	
		GE	100,000,000	PAC/AD	1.00	FIX	38383DBZ0	November 2051	
		GH	100,000,000	PAC/AD	0.75	FIX	38383DCA4	November 2051	
		GI	83,333,333	NTL(PAC/AD)	3.00	FIX/IO	38383DCB2	November 2051	
		GJ	100,000,000	PAC/AD	0.50	FIX	38383DCC0	November 2051	
Security Group 5									
Combination 2									
EF	\$ 68,280,000	LF	\$131,370,000	TAC/AD	(5)	FLT	38383DCD8	November 2051	
FL	63,090,000								
Security Groups 6 and 9									
Combination 3(7)									
IT	\$ 12,500,000	IP	\$ 32,604,166	NTL(PAC/AD)	3.00%	FIX/IO	38383DCE6	November 2051	
JL	20,104,166								
Security Group 10									
Combination 4(6)									
Q	\$ 51,697,000	IQ	\$ 12,924,250	NTL(PAC/AD)	4.00%	FIX/IO	38383DCF3	November 2051	
		QC	51,697,000	PAC/AD	1.00	FIX	38383DCG1	November 2051	
		QD	51,697,000	PAC/AD	1.25	FIX	38383DCH9	November 2051	
		QE	51,697,000	PAC/AD	1.50	FIX	38383DCJ5	November 2051	
		QG	51,697,000	PAC/AD	1.75	FIX	38383DCK2	November 2051	

REMIC Securities

MX Securities

Class	Original Class Principal Balance or Class Notional Balance		Related MX Class	Maximum Original Class Principal Balance or Class Notional Balance(2)		Principal Type(3)	Interest Rate	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
	Principal Balance	Notional Balance		Principal Balance	Notional Balance					
Security Groups 2, 8 and 12										
Combination 5(7)										
EI	\$ 98,083,686		IO	\$ 125,831,964		NTL(PT)	2.50%	FIX/IO	38383DCLO	November 2051
LI	21,317,846									
TI	6,430,432									
Security Groups 2 and 12										
Combination 6(7)										
NZ	\$ 15,418,431		Z	\$ 22,007,664		SEQ	2.00%	FIX/Z	38383DCM8	November 2051
ZL	6,589,233									

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

(2) The amount shown for each the MX Class represents the maximum Original Class Principal Balance (or original Class Notional Balance) of that Class, assuming it were to be issued on the Closing Date.

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

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

(5) The Interest Rate will be calculated as described under “Terms Sheet — Interest Rates” in this Supplement.

(6) In the case of Combinations 1 and 4, various subcombinations are permitted. See “Description of the Securities — Modification and Exchange” in the Base Offering Circular for a discussion of subcombinations.

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

SCHEDULED PRINCIPAL BALANCES

<u>Distribution Date</u>	<u>Classes GY and HZ (in the aggregate)</u>	<u>Class EF</u>	<u>Class FL</u>	<u>Class JG</u>
Initial Balance	\$100,005,072.00	\$68,280,000.00	\$63,090,000.00	\$48,250,000.00
December 2021	99,325,094.25	67,683,229.21	62,463,817.04	48,031,098.14
January 2022	98,582,792.74	67,049,341.09	61,842,223.27	47,779,848.49
February 2022	97,778,909.92	66,379,031.15	61,225,185.31	47,496,406.31
March 2022	96,914,292.83	65,673,052.00	60,612,670.03	47,180,980.35
April 2022	95,989,891.93	64,932,212.02	60,004,644.51	46,833,832.85
May 2022	95,006,759.62	64,157,373.88	59,401,076.09	46,455,279.42
June 2022	93,966,048.54	63,349,452.96	58,801,932.30	46,045,688.79
July 2022	92,869,009.48	62,509,415.54	58,207,180.91	45,605,482.34
August 2022	91,716,989.07	61,638,276.94	57,616,789.94	45,135,133.56
September 2022	90,511,427.15	60,737,099.46	57,030,727.58	44,635,167.31
October 2022	89,253,853.87	59,806,990.17	56,448,962.29	44,106,158.98
November 2022	87,945,886.56	58,849,098.70	55,871,462.72	43,548,733.43
December 2022	86,589,226.26	57,864,614.76	55,298,197.75	42,963,563.86
January 2023	85,185,654.05	56,854,765.61	54,729,136.48	42,351,370.53
February 2023	83,737,027.12	55,820,813.46	54,164,248.21	41,712,919.24
March 2023	82,245,274.62	54,764,052.73	53,603,502.46	41,049,019.82
April 2023	80,712,393.27	53,685,807.22	53,046,868.96	40,360,524.40
May 2023	79,140,442.75	52,587,427.21	52,494,317.67	39,648,325.54
June 2023	77,531,540.96	51,470,286.51	51,945,818.74	38,913,354.29
July 2023	75,887,859.03	50,335,779.38	51,401,342.52	38,156,578.11
August 2023	74,211,616.20	49,221,053.66	50,860,859.58	37,378,998.65
September 2023	72,505,074.55	48,125,761.86	50,324,340.69	36,581,649.47
October 2023	70,770,533.60	47,049,562.52	49,791,756.83	35,765,593.64
November 2023	69,010,324.83	45,992,120.04	49,263,079.18	34,931,921.24
December 2023	67,283,262.30	44,953,104.64	48,738,279.11	34,081,746.79
January 2024	65,588,713.15	43,932,192.22	48,217,328.20	33,216,206.63
February 2024	63,926,056.43	42,929,064.28	47,700,198.22	32,336,456.18
March 2024	62,294,682.83	41,943,407.82	47,186,861.15	31,443,667.17
April 2024	60,693,994.53	40,974,915.26	46,677,289.14	30,567,475.12
May 2024	59,123,404.93	40,023,284.31	46,171,454.56	29,707,563.25
June 2024	57,582,338.45	39,088,217.92	45,669,329.97	28,863,620.71
July 2024	56,070,230.36	38,169,424.18	45,170,888.09	28,035,342.52
August 2024	54,586,526.54	37,266,616.21	44,676,101.87	27,222,429.39
September 2024	53,130,683.29	36,379,512.10	44,184,944.42	26,424,587.66
October 2024	51,702,167.16	35,507,834.81	43,697,389.05	25,641,529.18
November 2024	50,300,454.71	34,651,312.11	43,213,409.27	24,872,971.22
December 2024	48,925,032.38	33,809,676.45	42,732,978.73	24,118,636.34
January 2025	47,575,396.26	32,982,664.94	42,256,071.31	23,378,252.33
February 2025	46,251,051.95	32,170,019.20	41,782,661.05	22,651,552.09
March 2025	44,951,514.33	31,371,485.38	41,312,722.18	21,938,273.52
April 2025	43,676,307.45	30,586,813.96	40,846,229.09	21,238,159.46
May 2025	42,424,964.30	29,815,759.79	40,383,156.37	20,550,957.60
June 2025	41,197,026.69	29,058,081.95	39,923,478.78	19,876,420.33
July 2025	39,992,045.06	28,313,543.69	39,467,171.25	19,214,304.74

<u>Distribution Date</u>	<u>Classes GY and HZ (in the aggregate)</u>	<u>Class EF</u>	<u>Class FL</u>	<u>Class JG</u>
August 2025	\$ 38,809,578.32	\$27,581,912.35	\$39,014,208.89	\$18,564,372.45
September 2025	37,649,193.68	26,862,959.33	38,564,566.98	17,926,389.59
October 2025	36,510,466.55	26,156,459.98	38,118,220.98	17,300,126.68
November 2025	35,392,980.31	25,462,193.53	37,675,146.52	16,685,358.55
December 2025	34,300,962.95	24,779,943.05	37,235,319.38	16,081,864.27
January 2026	33,238,832.90	24,109,495.38	36,798,715.54	15,489,427.08
February 2026	32,205,772.91	23,450,641.04	36,365,311.13	14,907,834.28
March 2026	31,200,987.85	22,803,174.20	35,935,082.44	14,336,877.18
April 2026	30,223,704.15	22,166,892.60	35,508,005.93	13,776,351.04
May 2026	29,273,169.23	21,541,597.47	35,084,058.24	13,229,050.64
June 2026	28,348,650.90	20,927,093.51	34,663,216.15	12,695,458.95
July 2026	27,449,436.83	20,323,188.81	34,245,456.62	12,175,223.87
August 2026	26,574,834.03	19,729,694.79	33,830,756.75	11,668,002.22
September 2026	25,724,168.29	19,146,426.13	33,419,093.83	11,173,459.56
October 2026	24,896,783.71	18,573,200.77	33,010,445.27	10,691,269.91
November 2026	24,092,042.18	18,009,839.76	32,604,788.67	10,221,115.56
December 2026	23,309,322.93	17,456,167.30	32,202,101.77	9,762,686.90
January 2027	22,548,022.04	16,912,010.63	31,802,362.47	9,315,682.15
February 2027	21,807,551.98	16,377,199.99	31,405,548.83	8,879,807.21
March 2027	21,087,341.18	15,851,568.59	31,011,639.04	8,454,775.45
April 2027	20,386,833.62	15,334,952.52	30,620,611.47	8,040,307.52
May 2027	19,705,488.36	14,827,190.73	30,232,444.63	7,636,131.16
June 2027	19,042,779.17	14,328,124.98	29,847,117.17	7,241,981.06
July 2027	18,398,194.15	13,837,599.77	29,464,607.91	6,857,598.61
August 2027	17,771,235.28	13,355,462.31	29,084,895.79	6,482,731.81
September 2027	17,161,418.11	12,881,562.47	28,707,959.93	6,117,135.06
October 2027	16,568,271.35	12,415,752.75	28,333,779.56	5,760,569.01
November 2027	15,991,336.54	11,957,888.21	27,962,334.09	5,412,800.38
December 2027	15,430,167.70	11,507,826.41	27,593,603.05	5,073,601.84
January 2028	14,884,330.97	11,065,427.42	27,227,566.11	4,742,751.85
February 2028	14,353,404.33	10,630,553.76	26,864,203.10	4,420,034.51
March 2028	13,836,977.21	10,203,070.30	26,503,493.98	4,105,239.40
April 2028	13,334,650.26	9,782,844.32	26,145,418.86	3,798,161.47
May 2028	12,846,034.98	9,369,745.37	25,789,957.96	3,498,600.89
June 2028	12,370,753.47	8,963,645.30	25,437,091.68	3,206,362.92
July 2028	11,908,438.12	8,564,418.19	25,086,800.52	2,921,257.79
August 2028	11,458,731.34	8,171,940.32	24,739,065.15	2,643,100.54
September 2028	11,021,285.28	7,786,090.12	24,393,866.33	2,371,710.96
October 2028	10,595,761.60	7,406,748.15	24,051,185.00	2,106,913.40
November 2028	10,181,831.16	7,033,797.05	23,711,002.21	1,848,536.71
December 2028	9,779,173.80	6,667,121.52	23,373,299.15	1,596,414.10
January 2029	9,387,478.12	6,306,608.27	23,038,057.12	1,350,383.03
February 2029	9,006,441.20	5,952,145.97	22,705,257.58	1,110,285.12
March 2029	8,635,768.38	5,603,625.27	22,374,882.11	875,966.00
April 2029	8,275,173.06	5,260,938.70	22,046,912.41	647,275.27
May 2029	7,924,376.45	4,923,980.69	21,721,330.31	424,066.37
June 2029	7,583,107.40	4,592,647.51	21,398,117.78	206,196.45
July 2029	7,251,102.14	4,266,837.23	21,077,256.90	0.00

<u>Distribution Date</u>	<u>Classes GY and HZ (in the aggregate)</u>	<u>Class EF</u>	<u>Class FL</u>	<u>Class JG</u>
August 2029	\$ 6,928,104.12	\$ 3,946,449.72	\$20,758,729.89	\$ 0.00
September 2029	6,613,863.81	3,631,386.61	20,442,519.07	0.00
October 2029	6,308,138.48	3,321,551.21	20,128,606.91	0.00
November 2029	6,010,692.06	3,016,848.58	19,816,975.98	0.00
December 2029	5,721,294.92	2,717,185.40	19,507,609.00	0.00
January 2030	5,439,723.72	2,422,470.00	19,200,488.78	0.00
February 2030	5,165,761.23	2,132,612.32	18,895,598.27	0.00
March 2030	4,899,196.15	1,847,523.85	18,592,920.54	0.00
April 2030	4,639,822.99	1,567,117.67	18,292,438.75	0.00
May 2030	4,387,441.87	1,291,308.37	17,994,136.22	0.00
June 2030	4,141,858.38	1,020,012.01	17,697,996.36	0.00
July 2030	3,902,883.45	753,146.17	17,404,002.69	0.00
August 2030	3,670,333.19	490,629.83	17,112,138.87	0.00
September 2030	3,444,028.72	232,383.43	16,822,388.65	0.00
October 2030	3,223,796.11	0.00	16,534,735.91	0.00
November 2030	3,009,466.16	0.00	16,249,164.64	0.00
December 2030	2,800,874.33	0.00	15,965,658.93	0.00
January 2031	2,597,860.58	0.00	15,684,202.99	0.00
February 2031	2,400,269.28	0.00	15,404,781.15	0.00
March 2031	2,207,949.06	0.00	15,127,377.83	0.00
April 2031	2,020,752.70	0.00	14,851,977.57	0.00
May 2031	1,838,537.02	0.00	14,578,565.02	0.00
June 2031	1,661,162.80	0.00	14,307,124.93	0.00
July 2031	1,488,494.61	0.00	14,037,642.17	0.00
August 2031	1,320,400.77	0.00	13,770,101.69	0.00
September 2031	1,156,753.18	0.00	13,504,488.57	0.00
October 2031	997,427.32	0.00	13,240,787.98	0.00
November 2031	842,302.03	0.00	12,978,985.21	0.00
December 2031	691,259.53	0.00	12,719,065.63	0.00
January 2032	544,185.26	0.00	12,461,014.73	0.00
February 2032	400,967.81	0.00	12,204,818.10	0.00
March 2032	261,498.86	0.00	11,950,461.42	0.00
April 2032	125,673.03	0.00	11,697,930.48	0.00
May 2032	0.00	0.00	11,447,211.16	0.00
June 2032	0.00	0.00	11,198,289.44	0.00
July 2032	0.00	0.00	10,951,151.42	0.00
August 2032	0.00	0.00	10,705,783.27	0.00
September 2032	0.00	0.00	10,462,171.27	0.00
October 2032	0.00	0.00	10,220,301.78	0.00
November 2032	0.00	0.00	9,980,161.28	0.00
December 2032	0.00	0.00	9,741,736.33	0.00
January 2033	0.00	0.00	9,505,013.58	0.00
February 2033	0.00	0.00	9,269,979.79	0.00
March 2033	0.00	0.00	9,036,621.80	0.00
April 2033	0.00	0.00	8,804,926.53	0.00
May 2033	0.00	0.00	8,574,881.02	0.00
June 2033	0.00	0.00	8,346,472.39	0.00
July 2033	0.00	0.00	8,119,687.83	0.00

<u>Distribution Date</u>	<u>Classes GY and HZ (in the aggregate)</u>	<u>Class EF</u>	<u>Class FL</u>	<u>Class JG</u>
August 2033	\$ 0.00	\$ 0.00	\$ 7,894,514.64	\$ 0.00
September 2033	0.00	0.00	7,670,940.22	0.00
October 2033	0.00	0.00	7,448,952.03	0.00
November 2033	0.00	0.00	7,228,537.62	0.00
December 2033	0.00	0.00	7,009,684.66	0.00
January 2034	0.00	0.00	6,792,380.87	0.00
February 2034	0.00	0.00	6,576,614.07	0.00
March 2034	0.00	0.00	6,362,372.18	0.00
April 2034	0.00	0.00	6,149,643.16	0.00
May 2034	0.00	0.00	5,938,415.11	0.00
June 2034	0.00	0.00	5,728,676.17	0.00
July 2034	0.00	0.00	5,520,414.59	0.00
August 2034	0.00	0.00	5,313,618.69	0.00
September 2034	0.00	0.00	5,108,276.87	0.00
October 2034	0.00	0.00	4,904,377.62	0.00
November 2034	0.00	0.00	4,701,909.49	0.00
December 2034	0.00	0.00	4,500,861.14	0.00
January 2035	0.00	0.00	4,301,221.30	0.00
February 2035	0.00	0.00	4,102,978.75	0.00
March 2035	0.00	0.00	3,906,122.40	0.00
April 2035	0.00	0.00	3,710,641.18	0.00
May 2035	0.00	0.00	3,516,524.15	0.00
June 2035	0.00	0.00	3,323,760.41	0.00
July 2035	0.00	0.00	3,132,339.16	0.00
August 2035	0.00	0.00	2,942,249.65	0.00
September 2035	0.00	0.00	2,753,481.24	0.00
October 2035	0.00	0.00	2,566,023.32	0.00
November 2035	0.00	0.00	2,379,865.40	0.00
December 2035	0.00	0.00	2,194,997.03	0.00
January 2036	0.00	0.00	2,011,407.86	0.00
February 2036	0.00	0.00	1,829,087.57	0.00
March 2036	0.00	0.00	1,648,025.97	0.00
April 2036	0.00	0.00	1,468,212.89	0.00
May 2036	0.00	0.00	1,289,638.26	0.00
June 2036	0.00	0.00	1,112,292.07	0.00
July 2036	0.00	0.00	936,164.38	0.00
August 2036	0.00	0.00	761,245.33	0.00
September 2036	0.00	0.00	587,525.12	0.00
October 2036	0.00	0.00	414,994.01	0.00
November 2036	0.00	0.00	243,642.34	0.00
December 2036	0.00	0.00	73,460.52	0.00
January 2037 and thereafter	0.00	0.00	0.00	0.00

<u>Distribution Date</u>	<u>Classes PA and PZ (in the aggregate)</u>	<u>Class TG</u>	<u>Classes Q and ZQ (in the aggregate)</u>
Initial Balance	\$30,711,000.00	\$30,000,000.00	\$51,699,000.00
December 2021	30,623,381.73	29,884,207.52	51,203,033.27
January 2022	30,522,564.71	29,748,292.48	50,688,827.66
February 2022	30,408,602.16	29,592,318.25	50,156,853.61
March 2022	30,281,563.43	29,416,381.24	49,607,600.99
April 2022	30,141,533.96	29,220,611.04	49,041,578.28
May 2022	29,988,615.27	29,005,170.43	48,459,311.85
June 2022	29,822,924.85	28,770,255.29	47,861,345.11
July 2022	29,644,596.09	28,516,094.41	47,248,237.64
August 2022	29,453,778.11	28,242,949.24	46,620,564.30
September 2022	29,250,635.58	27,951,113.57	45,978,914.33
October 2022	29,035,348.56	27,640,913.01	45,323,890.37
November 2022	28,808,112.20	27,312,704.52	44,656,107.53
December 2022	28,569,136.52	26,966,875.74	43,996,686.73
January 2023	28,318,646.07	26,603,844.27	43,345,524.63
February 2023	28,056,879.62	26,224,056.89	42,702,519.15
March 2023	27,784,089.79	25,827,988.63	42,067,569.45
April 2023	27,500,542.65	25,416,141.82	41,440,575.91
May 2023	27,206,517.30	24,989,044.99	40,821,440.12
June 2023	26,902,305.40	24,547,251.78	40,210,064.86
July 2023	26,588,210.73	24,091,339.65	39,606,354.10
August 2023	26,264,548.63	23,621,908.66	39,010,212.96
September 2023	25,931,645.53	23,139,580.06	38,421,547.73
October 2023	25,589,838.33	22,644,994.88	37,840,265.81
November 2023	25,239,473.88	22,138,812.43	37,266,275.76
December 2023	24,880,908.32	21,621,708.79	36,699,487.22
January 2024	24,514,506.53	21,094,375.16	36,139,810.95
February 2024	24,140,641.42	20,557,516.29	35,587,158.77
March 2024	23,759,693.34	20,011,848.73	35,041,443.58
April 2024	23,372,049.34	19,458,099.16	34,502,579.37
May 2024	22,989,857.76	18,914,642.53	33,970,481.12
June 2024	22,613,042.76	18,381,282.40	33,445,064.88
July 2024	22,241,529.53	17,857,825.97	32,926,247.71
August 2024	21,875,244.30	17,344,084.11	32,413,947.68
September 2024	21,514,114.28	16,839,871.19	31,908,083.85
October 2024	21,158,067.70	16,345,005.10	31,408,576.28
November 2024	20,807,033.74	15,859,307.13	30,915,345.99
December 2024	20,460,942.57	15,382,601.93	30,428,314.95
January 2025	20,119,725.29	14,914,717.43	29,947,406.10
February 2025	19,783,313.98	14,455,484.83	29,472,543.30
March 2025	19,451,641.59	14,004,738.45	29,003,651.36
April 2025	19,124,642.04	13,562,315.76	28,540,655.98
May 2025	18,802,250.11	13,128,057.27	28,083,483.78
June 2025	18,484,401.50	12,701,806.48	27,632,062.26
July 2025	18,171,032.77	12,283,409.85	27,186,319.81
August 2025	17,862,081.35	11,872,716.72	26,746,185.70
September 2025	17,557,485.54	11,469,579.24	26,311,590.05
October 2025	17,257,184.47	11,073,852.38	25,882,463.84

<u>Distribution Date</u>	<u>Classes PA and PZ (in the aggregate)</u>	<u>Class TG</u>	<u>Classes Q and ZQ (in the aggregate)</u>
November 2025	\$16,961,118.09	\$10,685,393.81	\$25,458,738.88
December 2025	16,669,227.19	10,304,063.88	25,040,347.81
January 2026	16,381,453.37	9,929,725.57	24,627,224.11
February 2026	16,097,739.02	9,562,244.45	24,219,302.06
March 2026	15,818,027.32	9,201,488.61	23,816,516.72
April 2026	15,542,262.22	8,847,328.61	23,418,803.98
May 2026	15,270,388.46	8,499,637.48	23,026,100.48
June 2026	15,002,351.50	8,160,288.52	22,638,343.66
July 2026	14,738,097.59	7,829,437.85	22,255,471.69
August 2026	14,477,573.68	7,506,867.16	21,877,423.53
September 2026	14,220,727.46	7,192,363.71	21,504,138.85
October 2026	13,967,507.34	6,885,720.15	21,135,558.09
November 2026	13,717,862.43	6,586,734.38	20,771,622.39
December 2026	13,471,742.54	6,295,209.44	20,412,365.30
January 2027	13,229,098.17	6,010,953.36	20,059,085.07
February 2027	12,989,880.50	5,733,779.08	19,711,684.69
March 2027	12,754,041.37	5,463,504.24	19,370,068.71
April 2027	12,521,533.29	5,199,951.16	19,034,143.20
May 2027	12,292,309.41	4,942,946.63	18,703,815.76
June 2027	12,066,323.54	4,692,321.88	18,378,995.41
July 2027	11,843,907.62	4,447,912.41	18,059,592.67
August 2027	11,625,457.79	4,209,557.91	17,745,519.47
September 2027	11,410,904.91	3,977,102.13	17,436,689.15
October 2027	11,200,181.05	3,750,392.82	17,133,016.44
November 2027	10,993,219.43	3,529,281.58	16,834,417.41
December 2027	10,789,954.42	3,313,623.80	16,540,809.50
January 2028	10,590,321.51	3,103,278.53	16,252,111.47
February 2028	10,394,257.30	2,898,108.43	15,968,243.35
March 2028	10,201,699.49	2,697,979.64	15,689,126.48
April 2028	10,012,586.83	2,502,761.72	15,414,683.44
May 2028	9,826,859.14	2,312,327.55	15,144,838.07
June 2028	9,644,457.25	2,126,553.23	14,879,515.39
July 2028	9,465,323.04	1,945,318.03	14,618,641.67
August 2028	9,289,399.35	1,768,504.30	14,362,144.32
September 2028	9,116,630.04	1,595,997.38	14,109,951.93
October 2028	8,946,959.90	1,427,685.55	13,861,994.23
November 2028	8,780,334.69	1,263,459.90	13,618,202.09
December 2028	8,616,701.11	1,103,214.33	13,378,507.47
January 2029	8,456,006.76	946,845.44	13,142,843.42
February 2029	8,298,200.14	794,252.46	12,911,144.07
March 2029	8,143,230.65	645,337.19	12,683,344.62
April 2029	7,991,048.55	500,003.95	12,459,381.28
May 2029	7,841,604.96	358,159.48	12,239,191.31
June 2029	7,694,851.85	219,712.92	12,022,712.96
July 2029	7,550,742.01	84,575.73	11,809,885.48
August 2029	7,409,229.04	0.00	11,600,649.08
September 2029	7,270,267.33	0.00	11,394,944.96
October 2029	7,133,812.09	0.00	11,192,715.24

<u>Distribution Date</u>	<u>Classes PA and PZ (in the aggregate)</u>	<u>Class TG</u>	<u>Classes Q and ZQ (in the aggregate)</u>
November 2029	\$ 6,999,819.27	\$ 0.00	\$10,993,902.97
December 2029	6,868,245.59	0.00	10,798,452.12
January 2030	6,739,048.53	0.00	10,606,307.57
February 2030	6,612,186.27	0.00	10,417,415.07
March 2030	6,487,617.75	0.00	10,231,721.26
April 2030	6,365,302.59	0.00	10,049,173.62
May 2030	6,245,201.13	0.00	9,869,720.49
June 2030	6,127,274.38	0.00	9,693,311.02
July 2030	6,011,484.02	0.00	9,519,895.20
August 2030	5,897,792.40	0.00	9,349,423.82
September 2030	5,786,162.53	0.00	9,181,848.46
October 2030	5,676,558.05	0.00	9,017,121.47
November 2030	5,568,943.22	0.00	8,855,195.98
December 2030	5,463,282.93	0.00	8,696,025.88
January 2031	5,359,542.67	0.00	8,539,565.79
February 2031	5,257,688.53	0.00	8,385,771.06
March 2031	5,157,687.20	0.00	8,234,597.77
April 2031	5,059,505.92	0.00	8,086,002.71
May 2031	4,963,112.53	0.00	7,939,943.36
June 2031	4,868,475.39	0.00	7,796,377.88
July 2031	4,775,563.44	0.00	7,655,265.12
August 2031	4,684,346.14	0.00	7,516,564.59
September 2031	4,594,793.49	0.00	7,380,236.44
October 2031	4,506,876.00	0.00	7,246,241.48
November 2031	4,420,564.70	0.00	7,114,541.14
December 2031	4,335,831.12	0.00	6,985,097.50
January 2032	4,252,647.29	0.00	6,857,873.21
February 2032	4,170,985.71	0.00	6,732,831.56
March 2032	4,090,819.37	0.00	6,609,936.43
April 2032	4,012,121.72	0.00	6,489,152.25
May 2032	3,934,866.69	0.00	6,370,444.08
June 2032	3,859,028.64	0.00	6,253,777.49
July 2032	3,784,582.40	0.00	6,139,118.65
August 2032	3,711,503.20	0.00	6,026,434.25
September 2032	3,639,766.75	0.00	5,915,691.54
October 2032	3,569,349.14	0.00	5,806,858.28
November 2032	3,500,226.90	0.00	5,699,902.78
December 2032	3,432,376.97	0.00	5,594,793.83
January 2033	3,365,776.66	0.00	5,491,500.76
February 2033	3,300,403.73	0.00	5,389,993.37
March 2033	3,236,236.27	0.00	5,290,241.95
April 2033	3,173,252.79	0.00	5,192,217.31
May 2033	3,111,432.15	0.00	5,095,890.68
June 2033	3,050,753.61	0.00	5,001,233.80
July 2033	2,991,196.77	0.00	4,908,218.84
August 2033	2,932,741.58	0.00	4,816,818.45
September 2033	2,875,368.35	0.00	4,727,005.69
October 2033	2,819,057.74	0.00	4,638,754.09

<u>Distribution Date</u>	<u>Classes PA and PZ (in the aggregate)</u>	<u>Class TG</u>	<u>Classes Q and ZQ (in the aggregate)</u>
November 2033	\$ 2,763,790.73	\$ 0.00	\$ 4,552,037.60
December 2033	2,709,548.65	0.00	4,466,830.57
January 2034	2,656,313.15	0.00	4,383,107.81
February 2034	2,604,066.20	0.00	4,300,844.50
March 2034	2,552,790.08	0.00	4,220,016.26
April 2034	2,502,467.38	0.00	4,140,599.07
May 2034	2,453,081.02	0.00	4,062,569.33
June 2034	2,404,614.17	0.00	3,985,903.82
July 2034	2,357,050.35	0.00	3,910,579.68
August 2034	2,310,373.33	0.00	3,836,574.44
September 2034	2,264,567.17	0.00	3,763,865.98
October 2034	2,219,616.22	0.00	3,692,432.58
November 2034	2,175,505.11	0.00	3,622,252.82
December 2034	2,132,218.71	0.00	3,553,305.67
January 2035	2,089,742.19	0.00	3,485,570.42
February 2035	2,048,060.96	0.00	3,419,026.72
March 2035	2,007,160.69	0.00	3,353,654.53
April 2035	1,967,027.30	0.00	3,289,434.15
May 2035	1,927,646.97	0.00	3,226,346.20
June 2035	1,889,006.10	0.00	3,164,371.62
July 2035	1,851,091.34	0.00	3,103,491.65
August 2035	1,813,889.59	0.00	3,043,687.85
September 2035	1,777,387.95	0.00	2,984,942.08
October 2035	1,741,573.78	0.00	2,927,236.48
November 2035	1,706,434.64	0.00	2,870,553.51
December 2035	1,671,958.31	0.00	2,814,875.90
January 2036	1,638,132.79	0.00	2,760,186.66
February 2036	1,604,946.30	0.00	2,706,469.09
March 2036	1,572,387.25	0.00	2,653,706.77
April 2036	1,540,444.26	0.00	2,601,883.51
May 2036	1,509,106.17	0.00	2,550,983.44
June 2036	1,478,361.99	0.00	2,500,990.91
July 2036	1,448,200.94	0.00	2,451,890.55
August 2036	1,418,612.41	0.00	2,403,667.23
September 2036	1,389,586.02	0.00	2,356,306.06
October 2036	1,361,111.52	0.00	2,309,792.43
November 2036	1,333,178.88	0.00	2,264,111.93
December 2036	1,305,778.23	0.00	2,219,250.41
January 2037	1,278,899.88	0.00	2,175,193.94
February 2037	1,252,534.31	0.00	2,131,928.84
March 2037	1,226,672.17	0.00	2,089,441.63
April 2037	1,201,304.27	0.00	2,047,719.06
May 2037	1,176,421.59	0.00	2,006,748.11
June 2037	1,152,015.27	0.00	1,966,515.97
July 2037	1,128,076.60	0.00	1,927,010.03
August 2037	1,104,597.03	0.00	1,888,217.89
September 2037	1,081,568.16	0.00	1,850,127.37
October 2037	1,058,981.74	0.00	1,812,726.48

<u>Distribution Date</u>	<u>Classes PA and PZ (in the aggregate)</u>	<u>Class TG</u>	<u>Classes Q and ZQ (in the aggregate)</u>
November 2037	\$ 1,036,829.66	\$ 0.00	\$ 1,776,003.43
December 2037	1,015,103.96	0.00	1,739,946.62
January 2038	993,796.83	0.00	1,704,544.64
February 2038	972,900.58	0.00	1,669,786.28
March 2038	952,407.67	0.00	1,635,660.51
April 2038	932,310.69	0.00	1,602,156.49
May 2038	912,602.36	0.00	1,569,263.53
June 2038	893,275.54	0.00	1,536,971.16
July 2038	874,323.20	0.00	1,505,269.04
August 2038	855,738.44	0.00	1,474,147.05
September 2038	837,514.50	0.00	1,443,595.19
October 2038	819,644.73	0.00	1,413,603.65
November 2038	802,122.58	0.00	1,384,162.78
December 2038	784,941.64	0.00	1,355,263.09
January 2039	768,095.61	0.00	1,326,895.25
February 2039	751,578.30	0.00	1,299,050.08
March 2039	735,383.63	0.00	1,271,718.55
April 2039	719,505.63	0.00	1,244,891.79
May 2039	703,938.43	0.00	1,218,561.07
June 2039	688,676.28	0.00	1,192,717.81
July 2039	673,713.52	0.00	1,167,353.56
August 2039	659,044.59	0.00	1,142,460.03
September 2039	644,664.05	0.00	1,118,029.06
October 2039	630,566.52	0.00	1,094,052.62
November 2039	616,746.76	0.00	1,070,522.81
December 2039	603,199.59	0.00	1,047,431.89
January 2040	589,919.94	0.00	1,024,772.21
February 2040	576,902.82	0.00	1,002,536.28
March 2040	564,143.35	0.00	980,716.72
April 2040	551,636.71	0.00	959,306.26
May 2040	539,378.19	0.00	938,297.79
June 2040	527,363.15	0.00	917,684.29
July 2040	515,587.05	0.00	897,458.85
August 2040	504,045.40	0.00	877,614.70
September 2040	492,733.82	0.00	858,145.17
October 2040	481,648.01	0.00	839,043.70
November 2040	470,783.73	0.00	820,303.85
December 2040	460,136.82	0.00	801,919.28
January 2041	449,703.21	0.00	783,883.75
February 2041	439,478.88	0.00	766,191.15
March 2041	429,459.91	0.00	748,835.44
April 2041	419,642.42	0.00	731,810.70
May 2041	410,022.62	0.00	715,111.11
June 2041	400,596.80	0.00	698,730.94
July 2041	391,361.28	0.00	682,664.56
August 2041	382,312.49	0.00	666,906.45
September 2041	373,446.88	0.00	651,451.15
October 2041	364,761.01	0.00	636,293.32

<u>Distribution Date</u>	<u>Classes PA and PZ (in the aggregate)</u>	<u>Class TG</u>	<u>Classes Q and ZQ (in the aggregate)</u>
November 2041	\$ 356,251.46	\$ 0.00	\$ 621,427.69
December 2041	347,914.91	0.00	606,849.10
January 2042	339,748.07	0.00	592,552.46
February 2042	331,747.72	0.00	578,532.78
March 2042	323,910.71	0.00	564,785.14
April 2042	316,233.94	0.00	551,304.70
May 2042	308,714.35	0.00	538,086.73
June 2042	301,348.96	0.00	525,126.55
July 2042	294,134.82	0.00	512,419.58
August 2042	287,069.07	0.00	499,961.29
September 2042	280,148.87	0.00	487,747.26
October 2042	273,371.43	0.00	475,773.13
November 2042	266,734.04	0.00	464,034.60
December 2042	260,234.01	0.00	452,527.48
January 2043	253,868.72	0.00	441,247.60
February 2043	247,635.58	0.00	430,190.91
March 2043	241,532.06	0.00	419,353.39
April 2043	235,555.67	0.00	408,731.12
May 2043	229,703.97	0.00	398,320.23
June 2043	223,974.57	0.00	388,116.91
July 2043	218,365.11	0.00	378,117.43
August 2043	212,873.28	0.00	368,318.12
September 2043	207,496.81	0.00	358,715.36
October 2043	202,233.48	0.00	349,305.60
November 2043	197,081.10	0.00	340,085.36
December 2043	192,037.52	0.00	331,051.22
January 2044	187,100.65	0.00	322,199.78
February 2044	182,268.41	0.00	313,527.76
March 2044	177,538.77	0.00	305,031.88
April 2044	172,909.75	0.00	296,708.96
May 2044	168,379.39	0.00	288,555.83
June 2044	163,945.76	0.00	280,569.42
July 2044	159,606.99	0.00	272,746.69
August 2044	155,361.24	0.00	265,084.64
September 2044	151,206.67	0.00	257,580.34
October 2044	147,141.52	0.00	250,230.91
November 2044	143,164.03	0.00	243,033.52
December 2044	139,272.49	0.00	235,985.37
January 2045	135,465.22	0.00	229,083.73
February 2045	131,740.57	0.00	222,325.91
March 2045	128,096.90	0.00	215,709.26
April 2045	124,532.64	0.00	209,231.19
May 2045	121,046.21	0.00	202,889.13
June 2045	117,636.08	0.00	196,680.59
July 2045	114,300.76	0.00	190,603.09
August 2045	111,038.76	0.00	184,654.21
September 2045	107,848.64	0.00	178,831.56
October 2045	104,728.97	0.00	173,132.81

<u>Distribution Date</u>	<u>Classes PA and PZ (in the aggregate)</u>	<u>Class TG</u>	<u>Classes Q and ZQ (in the aggregate)</u>
November 2045	\$ 101,678.35	\$ 0.00	\$ 167,555.66
December 2045	98,695.42	0.00	162,097.84
January 2046	95,778.84	0.00	156,757.14
February 2046	92,927.28	0.00	151,531.37
March 2046	90,139.45	0.00	146,418.39
April 2046	87,414.07	0.00	141,416.09
May 2046	84,749.92	0.00	136,522.39
June 2046	82,145.75	0.00	131,735.28
July 2046	79,600.38	0.00	127,052.73
August 2046	77,112.62	0.00	122,472.80
September 2046	74,681.32	0.00	117,993.55
October 2046	72,305.35	0.00	113,613.09
November 2046	69,983.58	0.00	109,329.54
December 2046	67,714.94	0.00	105,141.09
January 2047	65,498.36	0.00	101,045.93
February 2047	63,332.77	0.00	97,042.30
March 2047	61,217.15	0.00	93,128.46
April 2047	59,150.49	0.00	89,302.70
May 2047	57,131.80	0.00	85,563.35
June 2047	55,160.10	0.00	81,908.77
July 2047	53,234.43	0.00	78,337.33
August 2047	51,353.87	0.00	74,847.44
September 2047	49,517.50	0.00	71,437.55
October 2047	47,724.40	0.00	68,106.13
November 2047	45,973.70	0.00	64,851.66
December 2047	44,264.53	0.00	61,672.67
January 2048	42,596.03	0.00	58,567.70
February 2048	40,967.38	0.00	55,535.33
March 2048	39,377.75	0.00	52,574.15
April 2048	37,826.34	0.00	49,682.78
May 2048	36,312.36	0.00	46,859.88
June 2048	34,835.04	0.00	44,104.11
July 2048	33,393.62	0.00	41,414.17
August 2048	31,987.35	0.00	38,788.78
September 2048	30,615.52	0.00	36,226.67
October 2048	29,277.39	0.00	33,726.60
November 2048	27,972.27	0.00	31,287.38
December 2048	26,699.48	0.00	28,907.79
January 2049	25,458.33	0.00	26,586.67
February 2049	24,248.16	0.00	24,322.87
March 2049	23,068.33	0.00	22,115.25
April 2049	21,918.19	0.00	19,962.71
May 2049	20,797.13	0.00	17,864.15
June 2049	19,704.53	0.00	15,818.51
July 2049	18,639.78	0.00	13,824.74
August 2049	17,602.31	0.00	11,881.79
September 2049	16,591.53	0.00	9,988.66
October 2049	15,606.88	0.00	8,144.35

<u>Distribution Date</u>	<u>Classes PA and PZ (in the aggregate)</u>	<u>Class TG</u>	<u>Classes Q and ZQ (in the aggregate)</u>
November 2049	\$ 14,647.80	\$ 0.00	\$ 6,347.88
December 2049	13,713.74	0.00	4,598.30
January 2050	12,804.18	0.00	2,894.65
February 2050	11,918.58	0.00	1,236.02
March 2050	11,056.44	0.00	0.00
April 2050	10,217.25	0.00	0.00
May 2050	9,400.52	0.00	0.00
June 2050	8,605.76	0.00	0.00
July 2050	7,832.50	0.00	0.00
August 2050	7,080.27	0.00	0.00
September 2050	6,348.63	0.00	0.00
October 2050	5,637.11	0.00	0.00
November 2050	4,945.28	0.00	0.00
December 2050	4,272.72	0.00	0.00
January 2051	3,619.00	0.00	0.00
February 2051	2,983.71	0.00	0.00
March 2051	2,366.44	0.00	0.00
April 2051	1,766.79	0.00	0.00
May 2051	1,184.39	0.00	0.00
June 2051	618.83	0.00	0.00
July 2051	69.77	0.00	0.00
August 2051 and thereafter	0.00	0.00	0.00



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