

\$1,339,862,766 Government National Mortgage Association GINNIE MAE®

Guaranteed REMIC Pass-Through Securities and MX Securities Ginnie Mae REMIC Trust 2020-148

The Securities

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

The Ginnie Mae Guaranty

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

The Trust and its Assets

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

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

See "Risk Factors" beginning on page S-11 which highlights some of these risks.

The Sponsor and the Co-Sponsor will offer the securities from time to time in negotiated transactions at varying prices. We expect the closing date to be October 30, 2020.

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						
JE	\$ 20,000,000	1.70%	PT	FIX	38382KXZ1	October 2050
JG	25,000,000	1.65 2.50	PT NTL (DT)	FIX	38382KYA5 38382KYB3	October 2050 October 2050
JI	74,900,000 100,000,000	1.00	NTL(PT) PT	FIX/IO FIX	38382KYC1	October 2050 October 2050
<u>JL</u>	100,000,000	1.00	r i	TIA	36362K1C1	October 2030
Security Group 2 IP	66,787,516	4.50	NTL(SC/PAC/AD)	FIX/IO	38382KYD9	February 2048
LA	150,000,000	1.00	SC/PAC/AD	FIX	38382KYE7	February 2048
LZ	271,911	1.00	SC/PAC/AD	FIX/Z	38382KYF4	February 2048
PZ	19,037,195	3.00	SC/SUP	FIX/Z	38382KYG2	February 2048
Security Group 3						
DA	8,683,102	1.25	PT	FIX	38382KYH0	October 2050
DI	4,341,551	2.50	NTL(PT)	FIX/IO	38382KYJ6	October 2050
Security Group 4						
BA	46,048,635	1.00	PT	FIX	38382KYK3	October 2050
BF	105,656,589	(5)	PT	FLT	38382KYL1	October 2050
BS	105,656,589	(5)	NTL(PT)	INV/IO	38382KYM9	October 2050
FB	78,537,947	(5)	PT	FLT	38382KYN7	October 2050
SB	78,537,947	(5)	NTL(PT)	INV/IO	38382KYP2	October 2050
Security Group 5		4.00	200		********	
AB	110,653,541	1.00	PT	FIX	38382KYQ0	October 2050
AC	133,002,848 146,193,833	1.00 2.50	PT NTL (DT)	FIX FIX/IO	38382KYR8 38382KYS6	October 2050 October 2050
<u>AI</u>	140,193,833	2.50	NTL(PT)	FIX/IO	38382K 1 S0	October 2050
Security Group 6	15 250 000	4.50	NITTI (OCUPATI)	EDV/IO	2020217377714	1 2050
CI(1)	15,250,000	4.50	NTL(SC/PT)	FIX/IO	38382KYT4	March 2050
EI	9,563,379 4,000,000	3.00 0.00	NTL(SC/PT)	FIX/IO PO	38382KYU1 38382KYV9	November 2049 November 2049
EO(1)	4,000,000	3.00	SC/PT NTL(SC/PT)	FIX/IO	38382KYW7	June 2049
IQ(1)	4,483,568	4.00	NTL(SC/PT)	FIX/IO	38382KYX5	August 2049
JO(1)	4,075,853	0.00	SC/PT	PO	38382KYY3	June 2049
KC(1)	4,398,148	1.00	SC/PT	FIX	38382KYZ0	September 2050
KO(1)	2,299,999	0.00	SC/PT	PO	38382KD83	September 2050
OE	2,337,379	0.00	SC/PT	PO	38382KZA4	November 2049
PO(1)	3,226,000	0.00	SC/PT	PO	38382KZB2	November 2049
QI(1)	3,315,880	4.00	NTL(SC/PT)	FIX/IO	38382KZC0	August 2049
Security Group 7						
GA	4,497,823	1.50	SUP	FIX	38382KZD8	October 2050
GB	10,000,000	1.50	PAC	FIX	38382KZE6	October 2050
GC	25,000,000 2,213,000	1.00 1.50	PAC I PAC II	FIX FIX	38382KZF3 38382KZG1	October 2050 October 2050
GL	84,053	1.00	PACI	FIX	38382KZH9	October 2050
GT	1,693,429	1.50	SUP	FIX	38382KZJ5	October 2050
IG(1)	17,395,322	2.50	NTL(PT)	FIX/IO	38382KZK2	October 2050
TI(1)	5,016,810	2.50	NTL(PAC I)	FIX/IO	38382KZL0	October 2050
Security Group 8						
YA	8,000,000	0.75	PAC	FIX	38382KZM8	October 2050
YB(1)	25,429,705	1.50	PAC	FIX	38382KZN6	October 2050
YF	26,781,603	(5)	PT	FLT	38382KZP1	October 2050
YI	2,400,000	2.50	NTL(PAC)	FIX/IO	38382KZQ9	October 2050
YL(1)	91,679	1.50	PAC	FIX	38382KZR7	October 2050
YS	26,781,603	(5)	NTL(PT)	INV/IO	38382KZS5	October 2050
YT YW(1)	1,302,097 5,348,924	1.50 1.50	SUP SUP	FIX FIX	38382KZT3 38382KZU0	October 2050 October 2050
	3,340,724	1.50	301	11/1	30302KZ00	JC100C1 2030
Security Group 9	156,985,378	1.00	PT	FIX	38382KZV8	October 2050
AS	61,624,822	(5)	NTL(PT)	INV/IO	38382KZW6	October 2050
FA	89,705,928	(5)	PT	FLT	38382KZX4	October 2050
SA	28,081,106	(5)	NTL(PT)	INV/IO	38382KZY2	October 2050
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Citigroup

Class of REMIC Securities	Original Principal Balance(2)	Interest Rate	Principal Type(3)	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
Security Group 10						
IM(1)	\$ 8,333,333	3.00%	NTL(PAC I/AD)	FIX/IO	38382KZZ9	October 2050
IN(1)	46,165,148	3.00	NTL(PT)	FIX/IO	38382KA29	October 2050
MD	50,000,000	1.00	PAC Ì/AD	FIX	38382KA37	October 2050
MJ(1)	89,557,000	2.00	PAC/AD	FIX	38382KA45	October 2050
MK	5,997,000	1.50	PAC II/AD	FIX	38382KA52	October 2050
MU	4,663,317	1.50	SUP/AD	FIX	38382KA60	October 2050
MZ	1,000	1.50	PAC II	FIX/Z	38382KA78	October 2050
NI(1)	19,132,737	3.00	NTL(PT)	FIX/IO	38382KA86	October 2050
NZ	125,000	1.50	PAC I	FIX/Z	38382KA94	October 2050
ZM	1,000	1.50	SUP	FIX/Z	38382KB28	October 2050
ZP	213,000	2.00	PAC/AD	FIX/Z	38382KB36	October 2050
ZU	14,942,683	2.00	SUP	FIX/Z	38382KB44	October 2050
Residual						
RR	0	0.00	NPR	NPR	38382KB51	October 2050

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

AVAILABLE INFORMATION

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

- this Offering Circular Supplement (this "Supplement"),
- the Base Offering Circular and
- in the case of the Group 2 and 6 securities, each disclosure document relating to the Underlying Certificates (the "Underlying Certificate Disclosure Documents").

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

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

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

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TERMS SHEET

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

Sponsor: Citigroup Global Markets Inc.Co-Sponsor: Great Pacific SecuritiesTrustee: U.S. Bank National Association

Tax Administrator: The Trustee **Closing Date:** October 30, 2020

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 November 2020.

Trust Assets:

Trust Asset Group or Subgroup ⁽²⁾	Trust Asset Type	Certificate Rate	Original Term To Maturity (in years)
1	Ginnie Mae II	2.5%	30
2	Underlying Certificate	(1)	(1)
3	Ginnie Mae II	2.5%	30
4A	Ginnie Mae II	3.0%	30
4B	Ginnie Mae II	3.0%	30
5A	Ginnie Mae II	2.5%	30
5B	Ginnie Mae II	2.5%	30
6A	Underlying Certificate	(1)	(1)
6B	Underlying Certificate	(1)	(1)
6C	Underlying Certificate	(1)	(1)
6D	Underlying Certificate	(1)	(1)
6E	Underlying Certificate	(1)	(1)
6F	Underlying Certificate	(1)	(1)
6G	Underlying Certificate	(1)	(1)
7	Ginnie Mae II	2.5%	30
8	Ginnie Mae II	2.5%	30
9A	Ginnie Mae II	3.0%	30
9B	Ginnie Mae II	3.0%	30
10A	Ginnie Mae II	3.0%	30
10B	Ginnie Mae II	3.0%	30

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

⁽²⁾ The Group 4, 5, 6, 9 and 10 Trust Assets consist of the enumerated subgroups (each, a "Subgroup").

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

Assumed Characteristics of the Mortgage Loans Underlying the Group 1, 3, 4, 5, 7, 8, 9 and 10 Trust Assets⁽¹⁾:

Principal Balance	Weighted Average Remaining Term to Maturity (in months)	Weighted Average Loan Age (in months)	Weighted Average Mortgage Rate ⁽²⁾
Group 1 Trust Assets \$145,000,000 ⁽³⁾	358	1	2.831%
Group 3 Trust Assets \$8,683,102	358	2	2.873%
Subgroup 4A Trust Assets \$98,172,434	357	3	3.623%
Subgroup 4B Trust Assets \$132,070,737	357	3	3.560%
Subgroup 5A Trust Assets \$110,653,541	355	1	2.962%
Subgroup 5B Trust Assets \$133,002,848	356	1	2.999%
Group 7 Trust Assets \$43,488,305	353	1	2.931%
Group 8 Trust Assets \$66,954,008	359	1	2.971%
Subgroup 9A Trust Assets \$77,223,043	357	2	3.381%
Subgroup 9B Trust Assets \$169,468,263	357	2	3.381%
Subgroup 10A Trust Assets \$48,492,658	357	2	3.463%
Subgroup 10B Trust Assets \$117,007,342	357	2	3.463%

⁽¹⁾ As of October 1, 2020.

The actual remaining terms to maturity, loan ages and Mortgage Rates of many of the Mortgage Loans underlying the Group 1, 3, 4, 5, 7, 8, 9 and 10 Trust Assets will differ from the weighted averages shown above, perhaps significantly. See "The Trust Assets — The Mortgage Loans" in this Supplement.

The Mortgage Loans underlying the Group 1, 3, 4, 5, 7, 8, 9 and 10 Trust Assets may bear interest at rates ranging from 0.25% to 1.50% per annum above the related Certificate Rate.

More than 10% of the Mortgage Loans underlying the Group 1 Trust Assets may be higher balance Mortgage Loans. *See "Risk Factors" in this Supplement.*

Characteristics of the Group 2 and 6 Trust Assets: See Exhibit A to this Supplement for certain information regarding the characteristics of the related Underlying Certificates.

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

Modification and Exchange: If you own exchangeable Securities you will be able, upon notice and payment of an exchange fee, to exchange them for a proportionate interest in the related Securities shown on Schedule I to this Supplement. Under certain circumstances, an MX Class that is a Weighted Average Coupon Class will be subject to mandatory exchange, with no exchange fee, for its related REMIC Securities. *See "Description of the Securities — Modification and Exchange" in this Supplement.*

Increased Minimum Denomination Classes: Each Class that constitutes a Principal Only, Interest Only or Weighted Average Coupon Class. *See "Description of the Securities — Form of Securities" in this Supplement.*

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

The Floating Rate and Inverse Floating Rate Classes will bear interest at per annum rates based on one-month LIBOR (hereinafter referred to as "LIBOR") as follows:

Class	Interest Rate Formula(1)	Initial Interest Rate(2)	Minimum Rate	Maximum Rate	Delay (in days)	LIBOR for Minimum Interest Rate
Security Group 4						
BF	LIBOR + 0.30%	0.44838%	0.30%	3.50%	0	0.00%
BS	3.20% - LIBOR	3.05162%	0.00%	3.20%	0	3.20%
FB	LIBOR + 0.30%	0.44838%	0.30%	3.50%	0	0.00%
SB	3.20% - LIBOR	3.05162%	0.00%	3.20%	0	3.20%
Security Group 8						
YF	LIBOR + 0.30%	0.44700%	0.30%	4.00%	0	0.00%
YS	3.70% - LIBOR	3.55300%	0.00%	3.70%	0	3.70%
Security Group 9						
AS	6.30% - LIBOR	6.15425%	0.00%	6.30%	0	6.30%
FA	LIBOR + 0.20%	0.34575%	0.20%	6.50%	0	0.00%
SA	6.30% - LIBOR	6.15425%	0.00%	6.30%	0	6.30%

⁽¹⁾ LIBOR will be established as described under "Description of the Securities — Interest Distributions — Floating Rate and Inverse Floating Rate Classes" in this Supplement.

Each of Classes CW and WC is a Weighted Average Coupon Class that will accrue interest during each Accrual Period at an equivalent annualized rate derived by aggregating the accrued interest on its related REMIC Classes for such Accrual Period expressed as a percentage of its outstanding principal balance for such Accrual Period, subject to certain limitations as set forth under "Description of the

⁽²⁾ The initial Interest Rate will be in effect during the first Accrual Period; the Interest Rate will adjust monthly thereafter.

Securities — Modification and Exchange" in this Supplement. The approximate initial Interest Rate for each Weighted Average Coupon Class, which will be in effect for the first Accrual Period, is as follows:

Class	Initial Interest Rate
CW	5.21593%
WC	7.79944%

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

SECURITY GROUP 1

The Group 1 Principal Distribution Amount will be allocated, concurrently, to JE, JG and JL, pro rata, until retired

SECURITY GROUP 2

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

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

SECURITY GROUP 3

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

SECURITY GROUP 4

The Subgroup 4A Principal Distribution Amount and the Subgroup 4B Principal Distribution Amount will be allocated as follows:

- 79.999997963% of the Subgroup 4A Principal Distribution Amount to FB, until retired
- 79.999995457% of the Subgroup 4B Principal Distribution Amount to BF, until retired
- The remainder of the Subgroup 4A Principal Distribution Amount and the remainder of the Subgroup 4B Principal Distribution Amount to BA, until retired

SECURITY GROUP 5

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

- The Subgroup 5A Principal Distribution Amount to AB, until retired
- The Subgroup 5B Principal Distribution Amount to AC, until retired

SECURITY GROUP 6

The Subgroup 6A Principal Distribution Amount, the Subgroup 6D Principal Distribution Amount, the Subgroup 6E Principal Distribution Amount and the Subgroup 6F Principal Distribution Amount will be allocated as follows:

- The Subgroup 6A Principal Distribution Amount, concurrently, to EO, OE and PO, pro rata, until retired
- The Subgroup 6D Principal Distribution Amount to JO, until retired
- The Subgroup 6E Principal Distribution Amount to KC, until retired
- The Subgroup 6F Principal Distribution Amount to KO, until retired

SECURITY GROUP 7

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

- 1. 73.1113249873% in the following order of priority:
- a. Sequentially, to GC and GL, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
 - b. To GD, until reduced to its Scheduled Principal Balance for that Distribution Date
 - c. To GA, until retired
 - d. To GD, without regard to its Scheduled Principal Balance, until retired
- e. Sequentially, to GC and GL, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired
- 2. 26.8886750127% in the following order of priority:
 - a. To GB, until reduced to its Scheduled Principal Balance for that Distribution Date
 - b. To GT, until retired
 - c. To GB, without regard to its Scheduled Principal Balance, until retired

SECURITY GROUP 8

The Group 8 Principal Distribution Amount will be allocated, concurrently, as follows:

- 1. 39.999997013% to YF, until retired
- 2. 46.1067364332% in the following order of priority:
- a. Sequentially, to YB and YL, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
 - b. To YW, until retired
- c. Sequentially, to YB and YL, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired
- 3. 13.8932638655% in the following order of priority:
 - a. To YA, until reduced to its Scheduled Principal Balance for that Distribution Date

- b. To YT, until retired
- c. To YA, without regard to its Scheduled Principal Balance, until retired

SECURITY GROUP 9

The Group 9 Principal Distribution Amount will be allocated, concurrently, to A and FA, pro rata, until retired

SECURITY GROUP 10

The Group 10 Principal Distribution Amount, the MZ Accrual Amount, the NZ Accrual Amount, the ZM Accrual Amount, the ZP Accrual Amount and the ZU Accrual Amount will be allocated as follows:

- The MZ Accrual Amount, sequentially, to MK and MZ, in that order, until retired
- The NZ Accrual Amount, sequentially, to MD and NZ, in that order, until retired
- The ZM Accrual Amount, sequentially, to MU and ZM, in that order, until retired
- The ZP Accrual Amount, sequentially, to MJ and ZP, in that order, until retired
- The ZU Accrual Amount in the following order of priority:
- 1. Sequentially, to MJ and ZP, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
 - 2. To ZU, until retired

The Group 10 Principal Distribution Amount, concurrently, as follows:

- 1. 36.7294966767% in the following order of priority:
- a. Sequentially, to MD and NZ, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
- b. Sequentially, to MK and MZ, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
 - c. Sequentially, to MU and ZM, in that order, until retired
- d. Sequentially, to MK and MZ, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired
- e. Sequentially, to MD and NZ, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired
 - 2. 63.2705033233% in the following order of priority:
- a. Sequentially, to MJ and ZP, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
 - b. To ZU, until retired
- c. Sequentially, to MJ and ZP, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired

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

Security Group		Structuring Ranges
	PAC Classes	
2	LA and LZ (in the aggregate)	388% PSA through 525% PSA
7	GB	200% PSA through 310% PSA
8	YA	200% PSA through 305% PSA
8	YB and YL (in the aggregate)	230% PSA through 380% PSA
10	MJ and ZP (in the aggregate)	184% PSA through 300% PSA
	PAC I Classes	
7	GC and GL (in the aggregate)	200% PSA through 375% PSA
10	MD and NZ (in the aggregate)	176% PSA through 300% PSA
	PAC II Classes	
7	GD	250% PSA through 375% PSA
10	MK and MZ (in the aggregate)	240% PSA through 300% PSA

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

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

Class	Original Class Notional Balance	Represents Approximately		
Security Group 1				
JI	\$ 74,900,000	51.6551724138% of the Group 1 Trust Assets		
Security Group 2				
IP	\$ 66,787,516	44.44444444 of LA and LZ (in the aggregate) (SC/PAC/AD Classes)		
Security Group 3				
DI	\$ 4,341,551	50% of DA (PT Class)		
Security Group 4				
BS	\$105,656,589	100% of BF (PT Class)		
SB	78,537,947	100% of FB (PT Class)		
Security Group 5				
AI	\$146,193,833	60% of the Group 5 Trust Assets		
Security Group 6				
CI	\$ 15,250,000	100% of the Subgroup 6G Trust Assets		
EI	9,563,379	100% of the Subgroup 6A Trust Assets		
IJ	4,075,853	100% of JO (SC/PT Class)		
IQ	4,483,568	100% of the Subgroup 6B Trust Assets		
QI	3,315,880	100% of the Subgroup 6C Trust Assets		

Class	Original Class Notional Balance	Represents Approximately
Security Group 7		
GI	\$17,395,322	40% of the Group 7 Trust Assets
	5,016,810	20% of GC and GL (in the aggregate) (PAC I Classes)
	\$22,412,132	
IG	\$17,395,322	40% of the Group 7 Trust Assets
TI	5,016,810	20% of GC and GL (in the aggregate) (PAC I Classes)
Security Group 8		
IY	\$10,171,882	40% of YB (PAC Class)
YI	2,400,000	30% of YA (PAC Class)
YS	26,781,603	100% of YF (PT Class)
Security Group 9		
AS	\$61,624,822	36.3636358272% of the Subgroup 9B Trust Assets
SA	28,081,106	36.3636356573% of the Subgroup 9A Trust Assets
Security Group 10		
IK	\$ 8,333,333	16.66666666667% of MD (PAC I/AD Class)
	19,132,737	39.4549161128% of the Subgroup 10A Trust Assets
	46,165,148	39.4549161128% of the Subgroup 10B Trust Assets
	\$73,631,218	
IM	\$ 8,333,333	16.6666666667% of MD (PAC I/AD Class)
IN	46,165,148	39.4549161128% of the Subgroup 10B Trust Assets
KI	\$19,132,737	39.4549161128% of the Subgroup 10A Trust Assets
	46,165,148	39.4549161128% of the Subgroup 10B Trust Assets
	\$65,297,885	
MI	\$44,778,500	50% of MJ (PAC/AD Class)
NI	19,132,737	39.4549161128% of the Subgroup 10A Trust Assets

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

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

RISK FACTORS

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

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

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

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

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

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

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

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

principal payments are slower than you expected.

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

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

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

the greater the effect on your yield. It is doubtful that LIBOR will remain constant.

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

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

The rate of payments on the underlying certificates will directly affect the rate of payments on the group 2 and 6 securities. The underlying certificates will be sensitive in varying degrees to:

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

As described in the related underlying certificate disclosure document, the underlying certificates included in trust asset subgroups 6A and 6D are

not entitled to distributions of principal until certain classes of the related underlying series have been retired and, accordingly, distributions of principal of the related mortgage loans for extended periods may be applied to the distribution of principal of such classes of certificates having priority over these underlying certificates. Accordingly, these underlying certificates may receive no principal distributions for extended periods of time.

In addition, the underlying certificates included in trust asset subgroups 6E and 6F are classes that provide support to another class, and they are entitled to receive principal distributions (other than from any applicable accrual amount) only if scheduled payments have been made on other specified classes of the related underlying series (or if specified classes have been retired). Accordingly, these underlying certificates may receive no principal distributions for extended periods of time or may receive principal payments that vary widely from period to period.

In addition, the principal entitlements of and the reductions in notional balances of the underlying certificates included in trust asset subgroups 6D and 6G on any payment date are calculated, directly or indirectly, on the basis of schedules; no assurance can be given that the underlying certificates will adhere to their schedules. Further, prepayments on the related mortgage loans may have occurred at rates faster or slower than those initially assumed.

The trust assets underlying the underlying certificates included in trust asset subgroups 6B and 6C are also previously issued certificates that represent beneficial ownership interests in a separate trust. The rate of payments on the previously issued certificates backing these underlying certificates will directly affect the timing and rate of payments on the group 6 securities. You should read the related underlying certificate disclosure document, including the risk factors contained therein, to understand the payments on and related risks of the previously issued certificates backing these underlying certificates.

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

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

Changes to, the elimination of, and uncertainty with respect to, LIBOR could adversely affect your investment. As discussed under "Description of the Securities — Interest Rate Indices — Determination of LIBOR — ICE LIBOR" in the base offering circular, the end of, or significant changes to, LIBOR may occur after 2021. There can be no prediction

of whether or when LIBOR will cease to be available, whether LIBOR will represent the actual rates at which panel banks lend to one another or if one or more alternative reference rates will become a benchmark to replace LIBOR. If LIBOR ceases to be available or changes in a manner that causes regulators or market participants to question LIBOR's continued viability as a benchmark, investors in financial instruments linked to LIBOR will likely experience disparate outcomes based on relevant contractual terms and related amendment provisions, market or product type, jurisdiction, and a host of other factors. There can be no assurance that legislative or regulatory actions will dictate what happens if LIBOR ceases to be available or is no longer representative or if such actions will provide a viable alternative or substitute rate for LIBOR. In addition, although the Alternative Reference Rates Committee ("ARRC") was created to identify best practices for market participants regarding alternative interest rates, there can be no assurance that broadly accepted industry practices will develop either before or after LIBOR ceases to be available or is no longer representative. It is uncertain what effect disparate outcomes, the availability or unavailability of LIBOR or alternative rates, divergent industry practices or any other reforms related to LIBOR that may be adopted in the U.S., U.K. or elsewhere will have on the performance, trading market or value of financial instruments, including securities with an interest rate based on LIBOR ("LIBOR classes").

With respect to LIBOR classes, in the event of a benchmark transition event, Ginnie Mae will select a replacement interest rate, including index, methodology, spread or other related adjustment, in accordance with the ARRC Endorsed Terms, as described under "Description of the Securities — Interest Rate Indices — Determination of LIBOR" in the base offering circular. The ARRC Endorsed Terms, however, generally rely on actions to be taken by regulators or the ARRC, and there can be no assurance whether or when those actions will be taken. Further, there can be no assurance that those actions or related events will be sufficient to trigger a change from LIBOR to an alternative

rate in all circumstances where LIBOR is no longer representative of market interest rates, or that benchmark transition events for LIBOR classes will align with similar events in the market generally or in other parts of the financial markets, such as the derivatives market.

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

Term SOFR, which is the first alternative benchmark specified in the ARRC Endorsed Terms, is a prospective term rate based on SOFR currently under development, and there can be no assurance that its development will be completed at any time either before or after the benchmark replacement date with respect to LIBOR. If term SOFR is unavailable as of the benchmark replacement date, as defined in the base offering circular under "Description of the Securities — Interest Rate Indices — Determination of LIBOR" in the base offering circular, the next alternative benchmark is compounded SOFR. As a benchmark replacement for LIBOR, compounded SOFR is a compounded average for which there

are multiple methodologies that may also diverge from LIBOR.

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

Ginnie Mae will have sole discretion with respect to certain elements of the benchmark replacement process, including determining whether a benchmark transition event and its related benchmark replacement date have occurred, determining which benchmark replacement is available, determining the earliest practicable index determination date for using the benchmark replacement, selecting a benchmark replacement in the event term SOFR or compounded SOFR is unavailable, determining benchmark replacement adjustments (if not otherwise determined by applicable governing bodies or authorities) and making benchmark replacement conforming changes (including potential changes affecting the business day convention and index determination date). If Ginnie Mae, in its sole discretion, determines that an alternative rate is not administratively feasible, including as a result of technical, administrative or operational issues, then such alternative rate will be deemed not determinable as of such date. Ginnie Mae may determine an alternative not to be administratively feasible even if such alternative rate has been adopted by other market participants in similar products. Furthermore, if

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

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

The securities may not be a suitable investment for you. The securities, especially the group 2 and 6 securities and, in particular, the support, interest only, principal only, weighted average coupon, 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

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.

if the mortgage loans prepay at the constant pre-

payment rates set forth in the applicable table.

THE TRUST ASSETS

General

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

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

The Trust MBS are either:

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

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

The Underlying Certificates (Groups 2 and 6)

The Group 2 and 6 Trust Assets are Underlying Certificates that represent beneficial ownership interests in one or more separate trusts, the assets of which evidence direct or indirect beneficial owner-

ship interests in certain Ginnie Mae Certificates. Each Underlying Certificate constitutes all or a portion of a class of a separate Series of certificates described in the related Underlying Certificate Disclosure Document. Each Underlying Certificate Disclosure Document may be obtained from the Information Agent as described under "Available Information" in this Supplement or on ginniemae.gov. Investors are cautioned that material changes in facts and circumstances may have occurred since the date of each Underlying Certificate Disclosure Document, including changes in prepayment rates, prevailing interest rates and other economic factors, which may limit the usefulness of, and be directly contrary to the assumptions used in preparing the information included in, the offering document. See "Underlying Certificates" in the Base Offering Circular.

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

The Mortgage Loans

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

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

The Trustee Fee

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

GINNIE MAE GUARANTY

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

DESCRIPTION OF THE SECURITIES

General

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

Form of Securities

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

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

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

Distributions

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

Interest Distributions

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

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

Categories of Classes

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

Accrual Periods

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

Class	Accrual Period
Fixed Rate and Delay Classes	The calendar month preceding the related Distribution Date
Floating Rate and Inverse	From the 20th day of the month preceding the month of the related
Floating Rate Classes	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 on LIBOR. The Trustee or its agent will determine LIBOR on the basis of the ICE LIBOR method, as described under "Description of the Securities — Interest Rate Indices — Determination of LIBOR" in the Base Offering Circular.

We can provide no assurance that LIBOR for a Distribution Date accurately represents the offered rate at which one-month U.S. dollar deposits are being quoted to prime banks in the London interbank market, nor that the procedures for calculating LIBOR on the basis of the ICE LIBOR method for one-month U.S. dollar deposits will not change. Any change in LIBOR values resulting from any change in reporting or in the determination of LIBOR may cause LIBOR to fluctuate disproportionately to changes in other market lending rates. If LIBOR 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 LIBOR" in the Base Offering Circular.

Weighted Average Coupon Classes

The Weighted Average Coupon Classes will bear interest as shown under "Terms Sheet — Interest Rates" in this Supplement.

The Trustee's determination of LIBOR and its calculation of the Interest Rates will be final except in the case of clear error. Investors can obtain LIBOR 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 LZ, MZ, NZ, PZ, ZM, ZP and ZU 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 5 and 8, 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 5 and 8, the related REMIC Securities may be exchanged for proportionate interests in various subcombinations of MX Classes. Similarly, all or a portion of these MX Classes may be exchanged for proportionate interests in the related REMIC Securities or in other subcombinations of the related MX Classes. Each subcombination may be effected only in proportions that result in the principal and interest entitlements of the Securities received being equal to the entitlements of the Securities surrendered. See the example under "Description of the Securities — Modification and Exchange" in the Base Offering Circular.

In the case of Combinations 1 and 2, each of the MX Securities is a Weighted Average Coupon Class that will accrue interest as described under "Terms Sheet — Interest Rates" in this Supplement. In the event that either (1) the Interest Rate of any such MX Class will equal or exceed 1,200% per annum for any Accrual Period or (2) the Class Principal Balance of any such MX Class will be reduced to zero on any Distribution Date, the Trustee will, prior to the close of business on the last Business Day of the calendar month immediately preceding the related Distribution Date in the first case, and prior to the related Distribution Date on which the Class Principal Balance of any such MX Class would be reduced

to zero in the second case, effect a mandatory exchange of such MX Class for its related REMIC Securities. Thereafter, no further exchanges of such REMIC Securities will be permitted for the related Combination.

A Beneficial Owner proposing to effect an exchange must notify the Trustee through the Beneficial Owner's Book-Entry Depository participant. This notice must be received by the Trustee not later than two Business Days before the proposed exchange date. The exchange date can be any Business Day other than the last Business Day of the month. The notice must contain the outstanding principal and notional balances of the Securities to be included in the exchange and the proposed exchange date. The notice is required to be delivered to the Trustee by email to USBGNMATeam@USBank.com or in writing at its Corporate Trust Office at U.S. Bank National Association, One Federal Street, 3rd Floor, Boston, MA 02110, Attention: Ginnie Mae REMIC Program Agency Group 2020-148. 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 a mandatory exchange described above; and provided, further, that no fee will be payable in respect of an interest only security unless all securities involved in the exchange are interest only securities. The fee must be paid concurrently with the exchange.

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

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

YIELD, MATURITY AND PREPAYMENT CONSIDERATIONS

General

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

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

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

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

In addition, following any Mortgage Loan default and the subsequent liquidation of the underlying Mortgaged Property, the principal balance of the Mortgage Loan will be distributed through a

combination of liquidation proceeds, advances from the related Ginnie Mae Issuer and, to the extent necessary, proceeds of Ginnie Mae's guaranty of the Ginnie Mae Certificates. As a result, defaults experienced on the Mortgage Loans will accelerate the distribution of principal of the Securities.

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

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

Investors in the Group 2 and 6 Securities are urged to review the discussion under "Risk Factors — The rate of payments on the underlying certificates will directly affect the rate of payments on the group 2 and 6 securities" in this Supplement.

Accretion Directed Classes

Classes LA, LZ, MD, MJ, MK, MU and ZP 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 IM and IP is a Notional Class whose Class Notional Balance is determined by reference to the Class Principal Balance of the related Accretion Directed Class or Classes shown under "Terms Sheet — Notional Classes" in this Supplement.

Each of the Accretion Directed Classes has the AD designation in the suffix position, rather than the prefix position, in its class principal type because it does not have principal payment stability through the applicable pricing prepayment assumption. Although the Accretion Directed Classes are entitled to receive payments from the related Accrual Amounts, they do not have principal payment stability through any 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 Class will receive principal payments in accordance with a schedule calculated on the basis of, among other things, a Structuring Range. See "Terms Sheet — Scheduled Principal Balances." However, whether any such Class will adhere to its schedule and receive "Scheduled Payments" on a Distribution Date will largely depend on the level of prepayments experienced by the related Mortgage Loans.

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

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

Security Grou	<u>1p</u>	Initial Effective Ranges
	PAC Classes	
2	LA and LZ (in the aggregate)	388% PSA through 525% PSA
7	GB	200% PSA through 310% PSA
8	YA	200% PSA through 305% PSA
8	YB and YL (in the aggregate)	230% PSA through 380% PSA
10	MJ and ZP (in the aggregate)	184% PSA through 300% PSA
	PAC I Classes	
7	GC and GL (in the aggregate)	200% PSA through 375% PSA
10	MD and NZ (in the aggregate)	176% PSA through 300% PSA
	PAC II Classes	
7	GD	250% PSA through 375% PSA
10	MK and MZ (in the aggregate)	240% PSA through 300% PSA

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

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

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

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

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

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

Assumability

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

Final Distribution Date

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

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

Modeling Assumptions

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

- 1. The Mortgage Loans underlying the Group 1, 3, 4, 5, 7, 8, 9 and 10 Trust Assets have the assumed characteristics shown under "Assumed Characteristics of the Mortgage Loans Underlying the Group 1, 3, 4, 5, 7, 8, 9 and 10 Trust Assets" in the Terms Sheet, except in the case of information set forth under the 0% PSA Prepayment Assumption Rate, for which each Mortgage Loan underlying a Group 1, 3, 4, 5, 7, 8, 9 or 10 Trust Asset is assumed to have an original and a remaining term to maturity of 360 months and a Mortgage Rate of 1.50% per annum higher than the related Certificate Rate.
- 2. The Mortgage Loans prepay at the constant percentages of PSA (described below) shown in the related table.
- 3. Distributions on the Securities are always received on the 20th day of the month whether or not a Business Day, commencing in November 2020.
 - 4. A termination of the Trust or any Underlying Trust does not occur.
 - 5. The Closing Date for the Securities is October 30, 2020.
- 6. No expenses or fees are paid by the Trust other than the Trustee Fee, which is paid as described under "The Trust Assets The Trustee Fee" in this Supplement.
- 7. Distributions on the Underlying Certificates are made as described in the related Underlying Certificate Disclosure Documents.
- 8. Each Class is held from the Closing Date and is not exchanged in whole or in part, including that there is no mandatory exchange of any MX Class that is a Weighted Average Coupon Class.

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

		Class	es JE, JG, JI a	ınd JL	
Distribution Date	0%	250%	500%	750%	1,000%
Initial Percent	100	100	100	100	100
October 2021	98	94	90	87	83
October 2022	96	83	71	60	49
October 2023	94	69	49	33	20
October 2024	93	57	34	18	8
October 2025	90	47	23	9	3
October 2026	88	39	16	5	1
October 2027	86	32	11	3	0
October 2028	84	27	7	1	0
October 2029	81	22	5	1	0
October 2030	79	18	3	0	0
October 2031	76	15	2	0	0
October 2032	73	12	1	0	0
October 2033	71	10	1	0	0
October 2034	68	8	1	0	0
October 2035	65	6	0	0	0
October 2036	61	5	0	0	0
October 2037	58	4	0	0	0
October 2038	55	3 3	0	0	0
October 2039	51	3	0	0	0
October 2040	47	2	0	0	0
October 2041	43	2	0	0	0
October 2042	39	1	0	0	0
October 2043	35	1	0	0	0
October 2044	31	1	0	0	0
October 2045	26	0	0	0	0
October 2046	21	0	0	0	0
October 2047	16	0	0	0	0
October 2048	11	0	0	0	0
October 2049	6	0	0	0	0
October 2050	0	0	0	0	0
Weighted Average					
Life (years)	17.9	6.1	3.7	2.7	2.2

Security Group 2 PSA Prepayment Assumption Rates

		-	Class II	,			(Class L	<u> </u>			(Class LZ	:			-	Class Pa	<u>.</u>	
Distribution Date	0%	388%	420%	525%	900%	0%	388%	420%	525%	900%	0%	388%	420%	525%	900%	0%	388%	420%	525%	900%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
October 2021	97	72	72	72	51	97	72	72	72	51	101	101	101	101	101	103	103	86	31	0
October 2022	95	50	50	50	23	95	50	50	50	23	102	102	102	102	102	106	106	81	4	0
October 2023	92	34	34	34	10	92	34	34	34	10	103	103	103	103	103	109	109	81	0	0
October 2024	89	23	23	23	5	89	23	23	23	4	104	104	104	104	104	113	103	76	0	0
October 2025	86	15	15	15	2	86	15	15	15	2	105	105	105	105	105	116	91	66	0	0
October 2026	83	10	10	10	1	83	10	10	10	1	106	106	106	106	106	120	78	56	0	0
October 2027	79	7	7	7	0	79	7	7	7	0	107	107	107	107	107	123	64	45	0	0
October 2028	76	4	4	4	0	76	4	4	4	0	108	108	108	108	102	127	52	36	0	0
October 2029	72	3	3	3	0	72	3	3	3	0	109	109	109	109	45	131	41	28	0	0
October 2030	68	2	2	2	0	68	2	2	2	0	111	111	111	111	20	135	32	22	0	0
October 2031	64	1	1	1	0	64	1	1	1	0	112	112	112	112	9	139	25	16	0	0
October 2032	60	1	1	1	0	60	1	1	1	0	113	113	113	113	4	143	19	12	0	0
October 2033	56	1	1	1	0	56	0	0	0	0	114	114	114	114	2	148	14	9	0	0
October 2034	51	0	0	0	0	51	0	0	0	0	115	115	115	115	1	152	11	7	0	0
October 2035	46	0	0	0	0	46	0	0	0	0	116	116	116	116	0	157	8	5	0	0
October 2036	41	0	0	0	0	41	0	0	0	0	117	80	80	80	0	162	6	4	0	0
October 2037	36	0	0	0	0	35	0	0	0	0	119	50	50	50	0	166	4	2	0	0
October 2038	30	0	0	0	0	30	0	0	0	0	120	32	32	32	0	171	3	2	0	0
October 2039	24	0	0	0	0	24	0	0	0	0	121	19	19	19	0	177	2	1	0	0
October 2040	18	0	0	0	0	18	0	0	0	0	122	12	12	12	0	182	1	1	0	0
October 2041	12	0	0	0	0	11	0	0	0	0	123	7	7	7	0	188	1	1	0	0
October 2042	5	0	0	0	0	5	0	0	0	0	125	4	4	4	0	193	1	0	0	0
October 2043	0	0	0	0	0	0	0	0	0	0	2	2	2	2	0	181	0	0	0	0
October 2044	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	128	0	0	0	0
October 2045	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	73	0	0	0	0
October 2046	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0
October 2047	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
October 2048	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average																				
Life (years)	13.3	2.7	2.7	2.7	1.4	13.3	2.7	2.7	2.7	1.4	22.7	17.3	17.3	17.3	9.2	24.5	8.6	6.9	0.8	0.1

Security Group 3 PSA Prepayment Assumption Rates

		Cla	sses DA and	DI	
Distribution Date	0%	100%	250%	400%	500%
Initial Percent	100	100	100	100	100
October 2021	98	96	94	91	89
October 2022	96	90	82	74	69
October 2023	94	83	68	56	48
October 2024	93	76	57	41	33
October 2025	90	69	47	30	22
October 2026	88	63	39	22	15
October 2027	86	58	32	17	10
October 2028	84	53	26	12	7
October 2029	81	48	22	9	5
October 2030	79	43	18	7	3 2
October 2031	76	39	14	5	2
October 2032	73	35	12	4	1
October 2033	71	32	10	3	1
October 2034	68	29	8	2	1
October 2035	65	25	6	1	0
October 2036	61	23	5	1	0
October 2037	58	20	4	1	0
October 2038	55	18	3	0	0
October 2039	51	15	3 2	0	0
October 2040	47	13		0	0
October 2041	43	11	2	0	0
October 2042	39	10	1	0	0
October 2043	35	8	1	0	0
October 2044	31	6	1	0	0
October 2045	26	5	0	0	0
October 2046	21	4	0	0	0
October 2047	16	3	0	0	0
October 2048	11	2	0	0	0
October 2049	6	1	0	0	0
October 2050	0	0	0	0	0
Weighted Average					
Life (years)	17.9	10.3	6.1	4.3	3.6

Security Group 4
PSA Prepayment Assumption Rates

			Class BA				Class	ses BF ar	nd BS			Class	ses FB ar	nd SB	
Distribution Date	0%	100%	250%	400%	500%	0%	100%	250%	400%	500%	0%	100%	250%	400%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
October 2021	98	96	93	91	89	98	96	93	91	89	98	96	93	91	89
October 2022	97	90	82	73	68	97	90	82	73	68	97	90	82	73	68
October 2023	95	83	68	55	47	95	83	68	55	47	95	83	68	55	47
October 2024	93	76	57	41	32	93	76	56	41	32	93	76	57	41	32
October 2025	91	70	47	30	22	91	70	47	30	22	91	70	47	30	22
October 2026	89	64	39	22	15	89	64	39	22	15	89	64	39	22	15
October 2027	87	59	32	17	10	87	59	32	17	10	87	59	32	17	10
October 2028	85	53	26	12	7	85	53	26	12	7	85	54	27	12	7
October 2029	83	49	22	9	5	83	49	22	9	5	83	49	22	9	5
October 2030	80	44	18	7	3	80	44	18	7	3	80	44	18	7	3
October 2031	78	40	15	5	2	78	40	15	5	2	78	40	15	5	2
October 2032	75	36	12	4	1	75	36	12	4	1	75	36	12	4	1
October 2033	72	33	10	3	1	72	33	10	3	1	72	33	10	3	1
October 2034	69	29	8	2	1	69	29	8	2	1	69	29	8	2	1
October 2035	66	26	6	1	0	66	26	6	1	0	66	26	6	1	0
October 2036	63	23	5	1	0	63	23	5	1	0	63	23	5	1	0
October 2037	60	21	4	1	0	60	21	4	1	0	60	21	4	1	0
October 2038	56	18	3	0	0	56	18	3	0	0	56	18	3	0	0
October 2039	53	16	3	0	0	53	16	3	0	0	53	16	3	0	0
October 2040	49	14	2	0	0	49	14	2	0	0	49	14	2	0	0
October 2041	45	12	2	0	0	45	12	2	0	0	45	12	2	0	0
October 2042	41	10	1	0	0	41	10	1	0	0	41	10	1	0	0
October 2043	36	8	1	0	0	36	8	1	0	0	36	8	1	0	0
October 2044	32	7	1	0	0	32	7	1	0	0	32	7	1	0	0
October 2045	27	5	0	0	0	27	5	0	0	0	27	5	0	0	0
October 2046	22	4	0	0	0	22	4	0	0	0	22	4	0	0	0
October 2047	17	3	0	0	0	17	3	0	0	0	17	3	0	0	0
October 2048	12	2	0	0	0	12	2	0	0	0	12	2	0	0	0
October 2049	6	1	0	0	0	6	1	0	0	0	6	1	0	0	0
October 2050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average															
Life (years)	18.3	10.5	6.1	4.2	3.5	18.3	10.4	6.1	4.2	3.5	18.3	10.5	6.1	4.2	3.5

Security Group 5 PSA Prepayment Assumption Rates

			Class AB					Class AC	;				Class AI		
Distribution Date	0%	100%	250%	400%	500%	0%	100%	250%	400%	500%	0%	100%	250%	400%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
October 2021	98	96	94	92	90	98	96	94	92	90	98	96	94	92	90
October 2022	96	91	83	76	71	96	91	83	76	71	96	91	83	76	71
October 2023	94	83	69	57	49	94	83	69	57	49	94	83	69	57	49
October 2024	93	76	57	42	34	93	76	57	42	34	93	76	57	42	34
October 2025	90	70	47	31	23	90	70	48	31	23	90	70	48	31	23
October 2026	88	64	39	23	16	88	64	39	23	16	88	64	39	23	16
October 2027	86	58	32	17	11	86	58	32	17	11	86	58	32	17	11
October 2028	84	53	27	12	7	84	53	27	12	7	84	53	27	12	7
October 2029	81	48	22	9	5	81	48	22	9	5	81	48	22	9	5
October 2030	79	44	18	7	3	79	44	18	7	3	79	44	18	7	3
October 2031	76	39	15	5	2	76	40	15	5	2	76	39	15	5	2
October 2032	73	36	12	4	1	73	36	12	4	1	73	36	12	4	1
October 2033	71	32	10	3	1	71	32	10	3	1	71	32	10	3	1
October 2034	68	29	8	2	1	68	29	8	2	1	68	29	8	2	1
October 2035	65	25	6	1	0	65	26	6	1	0	65	26	6	1	0
October 2036	61	23	5	1	0	61	23	5	1	0	61	23	5	1	0
October 2037	58	20	4	1	0	58	20	4	1	0	58	20	4	1	0
October 2038	55	18	3	0	0	55	18	3	0	0	55	18	3	0	0
October 2039	51	15	3	0	0	51	15	3	0	0	51	15	3	0	0
October 2040	47	13	2	0	0	47	13	2	0	0	47	13	2	0	0
October 2041	43	11	2	0	0	43	11	2	0	0	43	11	2	0	0
October 2042	39	9	1	0	0	39	10	1	0	0	39	10	1	0	0
October 2043	35	8	1	0	0	35	8	1	0	0	35	8	1	0	0
October 2044	31	6	1	0	0	31	6	1	0	0	31	6	1	0	0
October 2045	26	5	0	0	0	26	5	0	0	0	26	5	0	0	0
October 2046	21	4	0	0	0	21	4	0	0	0	21	4	0	0	0
October 2047	16	3	0	0	0	16	3	0	0	0	16	3	0	0	0
October 2048	11	1	0	0	0	11	2	0	0	0	11	2	0	0	0
October 2049	6	1	Ŏ	Õ	Ŏ	6	1	Ŏ	Ŏ	Ŏ	6	1	Ŏ	Ŏ	Ö
October 2050	0	0	0	0	Õ	Õ	0	Õ	Õ	Õ	Ö	0	Õ	Õ	Õ
Weighted Average															
Life (years)	17.9	10.3	6.1	4.3	3.7	17.9	10.3	6.1	4.3	3.7	17.9	10.3	6.1	4.3	3.7

Security Group 6 PSA Prepayment Assumption Rates

		- (Class C	Į.			C	lass CV	V		Class	ses EI, I	O, OE,	PO and	l WC		Class	es IJ an	ıd JO	
Distribution Date	0%	100%	250%	400%	500%	0%	100%	250%	400%	500%	0%	100%	250%	400%	500%	0%	100%	250%	400%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
October 2021	98	95	90	85	82	100	100	100	94	90	100	100	100	100	100	100	100	100	100	100
October 2022	97	88	76	65	58	100	100	100	81	68	100	100	100	100	100	100	100	100	100	100
October 2023	95	82	64	49	40	100	100	100	68	52	100	100	100	100	100	100	100	100	100	100
October 2024	93	75	53	36	28	100	100	100	61	52	100	100	100	100	100	100	100	100	100	100
October 2025	91	69	44	27	19	100	100	100	58	52	100	100	100	100	100	100	100	100	100	100
October 2026	89	64	37	20	13	100	100	99	58	52	100	100	100	100	100	100	100	100	100	100
October 2027	87	58	30	15	9	100	100	96	57	39	100	100	100	100	73	100	100	100	100	77
October 2028	85	53	25	11	6	100	100	92	54	27	100	100	100	92	50	100	100	100	100	53
October 2029	82	49	21	8	4	100	100	88	40	18	100	100	100	68	34	100	100	100	74	36
October 2030	80	44	17	6	3	100	100	84	30	12	100	100	100	50	23	100	100	100	54	24
October 2031	77	40	14	4	2	100	100	79	22	8	100	100	100	36	15	100	100	100	40	16
October 2032	74	37	12	3	1	100	100	74	16	6	100	100	96	26	10	100	100	100	29	11
October 2033	71	33	9	2	1	100	100	63	12	4	100	100	78	19	7	100	100	89	21	7
October 2034	68	30	8	2	1	100	100	52	9	2	100	100	63	14	5	100	100	72	15	5
October 2035	65	27	6	1	0	100	100	42	6	2	100	100	51	10	3	100	100	58	11	3
October 2036	62	24	5	1	0	100	100	34	5	1	100	100	41	7	2	100	100	47	8	2
October 2037	58	21	4	1	0	100	100	27	3	1	100	100	32	5	1	100	100	37	6	1
October 2038	55	19	3	0	0	100	96	22	2	0	100	100	26	4	1	100	100	30	4	1
October 2039	51	16	3	0	0	100	91	17	2	0	100	100	20	3	1	100	100	23	3	1
October 2040	46	14	2	0	0	100	86	13	1	0	100	100	16	2	0	100	100	18	2	0
October 2041	42	12	2	0	0	100	78	10	1	0	100	95	12	1	0	100	94	14	1	0
October 2042	38	10	1	0	0	100	64	8	1	0	100	79	9	1	0	100	75	10	1	0
October 2043	33	8	1	0	0	100	52	6	0	0	100	64	7	1	0	100	57	8	1	0
October 2044	28	7	1	0	0	100	40	4	0	0	100	51	5	0	0	100	40	5	0	0
October 2045	23	5	0	0	0	100	29	3	0	0	100	38	3	0	0	100	25	4	0	0
October 2046	17	4	0	0	0	99	19	2	0	0	100	27	2	0	0	100	11	2	0	0
October 2047	11	2	0	0	0	73	11	1	0	0	85	16	1	0	0	64	0	1	0	0
October 2048	5	1	0	0	0	32	6	0	0	0	37	7	0	0	0	3	0	0	0	0
October 2049	0	0	0	0	0	11	2	0	0	0	0	0	0	0	0	0	0	0	0	0
October 2050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average																				
Life (years)	17.7	10.4	5.8	3.9	3.2	27.7	23.3	14.7	7.3	5.4	27.8	24.3	16.1	10.9	8.8	27.2	23.5	16.7	11.2	8.9

Security Group 6 PSA Prepayment Assumption Rates

		(Class IQ	2			(Class K	0			(lass K0)			(Class QI		
Distribution Date	0%	100%	250%	400%	500%	0%	100%	250%	400%	500%	0%	100%	250%	400%	500%	0%	100%	250%	400%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
October 2021	98	94	87	80	75	100	100	100	88	79	100	100	100	88	79	98	94	87	80	76
October 2022	96	86	72	59	51	100	100	100	60	34	100	100	100	60	34	96	86	73	60	52
October 2023	94	80	60	44	35	100	100	100	33	0	100	100	100	33	0	94	80	60	45	36
October 2024	92	73	50	33	24	100	100	100	18	0	100	100	100	18	0	92	73	50	33	24
October 2025	90	67	42	24	17	100	100	100	13	0	100	100	100	13	0	90	67	42	25	17
October 2026	88	62	34	18	11	100	100	99	12	0	100	100	99	12	0	88	62	35	18	11
October 2027	86	56	29	13	8	100	100	92	10	0	100	100	92	10	0	86	56	29	14	8
October 2028	83	52	24	10	5	100	100	84	9	0	100	100	84	9	0	83	52	24	10	5
October 2029	81	47	19	7	4	100	100	75	7	0	100	100	75	7	0	81	47	20	7	4
October 2030	78	43	16	5	2	100	100	66	6	0	100	100	66	6	0	78	43	16	5	2
October 2031	75	39	13	4	2	100	100	57	5	0	100	100	57	5	0	75	39	13	4	2
October 2032	73	35	11	3	1	100	100	48	4	0	100	100	48	4	0	73	35	11	3	1
October 2033	70	32	9	2	1	100	100	41	3	0	100	100	41	3	0	70	32	9	2	1
October 2034	66	28	7	2	0	100	100	34	2	0	100	100	34	2	0	66	28	7	2	0
October 2035	63	25	6	1	0	100	100	28	2	0	100	100	28	2	0	63	25	6	1	0
October 2036	60	22	5	1	0	100	100	23	1	0	100	100	23	1	0	60	22	5	1	0
October 2037	56	20	4	1	0	100	100	19	1	0	100	100	19	1	0	56	20	4	1	0
October 2038	52	17	3	0	0	100	92	15	1	0	100	92	15	1	0	52	17	3	0	0
October 2039	48	15	2	0	0	100	81	12	1	0	100	81	12	1	0	48	15	2	0	0
October 2040	44	13	2	0	0	100	70	10	0	0	100	70	10	0	0	44	13	2	0	0
October 2041	39	11	1	0	0	100	60	8	0	0	100	60	8	0	0	40	11	1	0	0
October 2042	35	9	1	0	0	100	51	6	0	0	100	51	6	0	0	35	9	1	0	0
October 2043	30	7	1	0	0	100	43	4	0	0	100	43	4	0	0	31	7	1	0	0
October 2044	25	6	1	0	0	100	35	3	0	0	100	35	3	0	0	26	6	1	0	0
October 2045	20	4	0	0	0	100	27	2	0	0	100	27	2	0	0	20	4	0	0	0
October 2046	14	3	0	0	0	97	21	2	0	0	97	21	2	0	0	15	3	0	0	0
October 2047	8	2	0	0	0	73	15	1	0	0	73	15	1	0	0	9	2	0	0	0
October 2048	2	0	0	0	0	48	9	1	0	0	48	9	1	0	0	3	1	0	0	0
October 2049	0	0	0	0	0	22	4	0	0	0	22	4	0	0	0	0	0	0	0	0
October 2050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average																				
Life (years)	17.2	10.0	5.5	3.6	2.9	27.9	22.6	12.8	3.3	1.6	27.9	22.6	12.8	3.3	1.6	17.3	10.0	5.5	3.6	2.9

Security Group 7
PSA Prepayment Assumption Rates

			Class GA					Class GE	3				Class GC	2	
Distribution Date	0%	200%	280%	375%	600%	0%	200%	280%	375%	600%	0%	200%	280%	375%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
October 2021	100	100	97	87	63	98	94	94	94	94	98	93	93	93	93
October 2022	100	100	90	57	0	96	83	83	83	78	95	82	82	82	82
October 2023	100	100	82	26	0	94	69	69	69	49	93	67	67	67	53
October 2024	100	100	76	8	0	91	57	57	52	31	90	53	53	53	33
October 2025	100	100	74	ĩ	Õ	89	46	46	39	19	88	42	42	42	20
October 2026	100	100	72	0	0	86	37	37	29	12	85	32	32	32	13
October 2027	100	100	68	0	Õ	84	29	29	22	7	82	24	24	24	8
October 2028	100	100	62	Õ	Ŏ	81	23	23	17	5	79	18	18	18	5
October 2029	100	100	55	0	0	78	18	18	12	3	76	13	13	13	3
October 2030	100	100	48	0	Õ	75	14	14	9	2	73	10	10	10	2
October 2031	100	100	42	Õ	Ŏ	72	11	11	Ź	1	70	7	7	7	1
October 2032	100	91	36	0	Õ	69	9	9	5	1	66	5	5	5	0
October 2033	100	80	30	Õ	Õ	66	Ź	7	4	0	63	4	4	4	Õ
October 2034	100	69	25	Õ	Ŏ	62	5	5	3	Ŏ	59	3	3	3	Õ
October 2035	100	59	21	0	Õ	59	4	4	2	Õ	55	2	2	2	0
October 2036	100	51	17	Õ	Ŏ	55	3	3	2	Õ	51	1	1	1	Õ
October 2037	100	43	14	Ŏ	ŏ	51	2	2	1	Ŏ	47	î.	1	1	Ŏ
October 2038	100	36	11	Õ	Ŏ	47	2	2	1	Õ	42	1	1	1	Õ
October 2039	100	29	9	Õ	Õ	43	1	1	1	Õ	38	0	0	0	0
October 2040	100	24	ź	Ŏ	ŏ	38	1	1	0	Ŏ	33	Ŏ	ő	ő	Ŏ
October 2041	100	19	5	Õ	Ŏ	34	1	1	Õ	Õ	28	Õ	Õ	Õ	Õ
October 2042	100	15	4	ŏ	Ŏ	29	1	1	ő	Ő	23	Ŏ	ő	ő	Õ
October 2043	100	12	3	Ŏ	Ŏ	24	0	0	ő	Ŏ	17	Ŏ	ő	ő	Ŏ
October 2044	100	9	2	Õ	Ŏ	19	Õ	Õ	Õ	Õ	12	Õ	Õ	Õ	Õ
October 2045	100	7	2	Õ	Ŏ	13	ő	ő	ő	Ŏ	6	Ő	ő	ő	Ŏ
October 2046	100	5	- ī	ŏ	Ŏ	8	ő	ő	ő	Ŏ	ŏ	Ŏ	Ŏ	Ŏ	Õ
October 2047	100	3	1	Õ	Ŏ	2	ő	ő	ő	Ŏ	Ŏ	Õ	Ŏ	Ő	ő
October 2048	78	2	0	0	0	0	0	0	0	0	0	Ő	Ő	Ő	0
October 2049	40	0	Ő	ő	ő	ő	Ő	ő	Ő	ő	ő	ő	ő	ő	ő
October 2050	0	0	0	0	0	0	0	0	0	0	0	Ő	0	0	0
Weighted Average	0	0	0	· ·	0	0	0	0	0	V	0	V	0	0	V
Life (years)	28.7	17.1	10.0	2.3	1.1	16.1	5.7	5.7	5.0	3.5	15.2	5.1	5.1	5.1	3.6

Security Group 7
PSA Prepayment Assumption Rates

			Class GD	,				Class GI					Class GI		
Distribution Date	0%	200%	280%	375%	600%	0%	200%	280%	375%	600%	0%	200%	280%	375%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
October 2021	100	100	89	89	89	98	95	94	93	90	100	100	100	100	100
October 2022	100	100	65	65	30	96	85	82	78	70	100	100	100	100	100
October 2023	100	100	36	36	0	94	72	67	60	45	100	100	100	100	100
October 2024	100	100	16	16	0	92	61	54	46	28	100	100	100	100	100
October 2025	100	100	4	4	0	90	51	43	35	17	100	100	100	100	100
October 2026	100	100	0	0	0	88	43	35	27	11	100	100	100	100	100
October 2027	100	92	0	0	0	85	36	27	20	7	100	100	100	100	100
October 2028	100	76	0	0	0	83	30	22	15	4	100	100	100	100	100
October 2029	100	55	0	0	0	80	25	17	11	3	100	100	100	100	100
October 2030	100	31	0	0	0	78	21	14	8	2	100	100	100	100	100
October 2031	100	6	0	0	0	75	18	11	6	1	100	100	100	100	100
October 2032	100	0	0	0	0	72	15	9	5	1	100	100	100	100	100
October 2033	100	0	0	0	0	69	12	7	3	0	100	100	100	100	100
October 2034	100	0	0	0	0	66	10	5	3	0	100	100	100	100	79
October 2035	100	0	0	0	0	62	8	4	2	0	100	100	100	100	48
October 2036	100	0	0	0	0	59	7	3	1	0	100	100	100	100	29
October 2037	100	0	0	0	0	55	6	2	1	0	100	100	100	100	17
October 2038	100	0	0	0	0	52	5	2	1	0	100	100	100	100	10
October 2039	100	0	0	0	0	48	4	1	1	0	100	100	100	100	6
October 2040	100	0	0	0	0	44	3	1	0	0	100	100	100	100	4
October 2041	100	0	0	0	0	40	2	1	0	0	100	92	92	92	2
October 2042	100	0	0	0	0	36	2	1	0	0	100	63	63	63	1
October 2043	100	0	0	0	0	31	1	0	0	0	100	43	43	43	1
October 2044	100	0	0	0	0	26	1	0	0	0	100	29	29	29	0
October 2045	100	0	0	0	0	21	1	0	0	0	100	18	18	18	0
October 2046	100	0	0	0	0	16	1	0	0	0	14	11	11	11	0
October 2047	29	0	0	0	0	13	0	0	0	0	6	6	6	6	0
October 2048	Ó	0	0	0	0	9	0	0	0	0	3	3	3	3	0
October 2049	0	0	0	0	0	4	0	0	0	0	1	1	1	1	0
October 2050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average															
Life (years)	26.7	9.1	2.6	2.6	1.7	17.3	6.7	5.5	4.7	3.3	26.1	23.2	23.2	23.2	15.5

PSA	Prepayme	ent Ass	sumptio	n R	ates
1 021	repayme	TIL TIO	Jumpuo		···

			Class GI					Class IG					Class TI		
Distribution Date	0%	200%	280%	375%	600%	0%	200%	280%	375%	600%	0%	200%	280%	375%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
October 2021	100	100	92	82	59	98	95	94	92	89	98	94	94	94	94
October 2022	100	100	73	41	0	96	85	82	77	66	95	82	82	82	82
October 2023	100	100	51	0	0	94	74	67	59	42	93	67	67	67	53
October 2024	100	100	36	0	0	93	63	54	44	26	91	53	53	53	33
October 2025	100	100	28	0	0	90	54	44	33	16	88	42	42	42	21
October 2026	100	100	25	0	0	88	46	35	25	10	85	32	32	32	13
October 2027	100	99	23	0	0	86	39	29	19	6	82	24	24	24	8
October 2028	100	96	22	0	0	84	34	23	14	4	79	18	18	18	5
October 2029	100	90	20	0	0	81	29	18	11	2	76	13	13	13	3
October 2030	100	83	18	0	0	79	24	15	8	1	73	10	10	10	2
October 2031	100	76	16	Ŏ	Ŏ	76	21	12	6	1	70	7	7	7	1
October 2032	100	68	14	0	0	73	17	9	4	1	66	6	6	6	1
October 2033	100	60	12	Õ	0	71	15	7	3	0	63	4	4	4	0
October 2034	100	53	10	Ő	Õ	68	12	6	2	Ö	59	3	3	3	Õ
October 2035	100	46	8	0	0	65	10	5	2	0	55	2	2	2	0
October 2036	100	40	7	Õ	0	61	8	4	1	Õ	51	2	2	2	Õ
October 2037	100	34	6	Õ	Õ	58	7	3	1	Ö	47	1	1	1	Ö
October 2038	100	29	5	0	0	55	6	2	1	0	42	1	1	1	0
October 2039	100	24	4	Õ	Õ	51	5	2	0	Õ	38	1	1	1	Õ
October 2040	100	20	3	Õ	Õ	47	4	1	Õ	Ö	33	0	0	0	Õ
October 2041	100	16	2	Õ	0	43	3	1	Õ	Õ	28	Õ	Õ	Õ	Õ
October 2042	100	13	2	Õ	0	39	2	1	Õ	Õ	23	Õ	Õ	Õ	Õ
October 2043	100	10	1	Õ	Õ	35	2	1	Õ	Ö	18	Õ	Õ	Õ	Õ
October 2044	100	8	1	Õ	0	31	1	0	Õ	Õ	12	Õ	Õ	Õ	Õ
October 2045	100	6	1	Õ	Õ	26	1	Õ	Õ	Ŏ	6	Õ	Õ	Õ	Õ
October 2046	100	4	0	Ő	Ŏ	21	1	ő	Ŏ	Ŏ	Ő	Ŏ	Ŏ	Ŏ	Ŏ
October 2047	100	3	Õ	Õ	Õ	16	0	Õ	Õ	Ŏ	Õ	Õ	Õ	Õ	Õ
October 2048	76	1	Ő	ő	Ő	11	Ő	Ő	ő	ő	Ő	ő	ő	ő	ő
October 2049	39	0	Ŏ	Ŏ	Ŏ	6	ŏ	Ŏ	Ŏ	Ŏ	ŏ	Ŏ	ŏ	ŏ	Ŏ
October 2050	0	0	ő	ő	ő	ő	ő	0	ő	ő	0	ő	0	0	0
Weighted Average	O	· ·	· ·	0	· ·	Ů	· ·	0	0	· ·	· ·	· ·	0	0	0
Life (years)	28.7	15.3	5.3	1.8	1.1	17.9	7.1	5.7	4.6	3.2	15.2	5.1	5.1	5.1	3.7

Security Group 8 PSA Prepayment Assumption Rates

	Class	ses IY, Y	B, YC, Y	D, YE an	d YG		Classe	s Y, YF a	and YS			Class	ses YA aı	nd YI	
Distribution Date	0%	230%	260%	380%	600%	0%	230%	260%	380%	600%	0%	230%	260%	380%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
October 2021	98	93	93	93	93	98	95	94	92	89	98	94	94	94	94
October 2022	96	81	81	81	80	96	84	83	77	67	96	83	83	83	77
October 2023	93	65	65	65	51	94	71	68	58	42	94	70	70	68	49
October 2024	91	51	51	51	32	93	60	56	44	26	91	57	57	51	31
October 2025	88	40	40	40	20	90	50	46	33	16	89	47	47	38	19
October 2026	86	30	30	30	12	88	42	38	25	10	86	38	38	29	12
October 2027	83	22	22	22	7	86	35	31	19	6	84	30	30	22	7
October 2028	80	17	17	17	4	84	29	25	14	4	81	24	24	16	5
October 2029	77	12	12	12	3	81	25	21	10	2	78	19	19	12	3
October 2030	74	9	9	9	1	79	20	17	8	2	75	15	15	9	2
October 2031	71	7	7	7	1	76	17	14	6	1	72	12	12	7	1
October 2032	68	5	5	5	0	73	14	11	4	1	69	9	9	5	1
October 2033	64	3	3	3	0	71	12	9	3	0	66	7	7	4	0
October 2034	61	2	2	2	0	68	10	7	2	0	62	6	6	3	0
October 2035	57	2	2	2	0	65	8	6	2	0	59	4	4	2	0
October 2036	53	1	1	1	0	61	6	5	1	0	55	3	3	1	0
October 2037	49	1	1	1	0	58	5	4	1	0	51	3	3	1	0
October 2038	45	0	0	0	0	55	4	3	1	0	47	2	2	1	0
October 2039	40	0	0	0	0	51	3	2	0	0	43	1	1	1	0
October 2040	36	0	0	0	0	47	3	2	0	0	39	1	1	0	0
October 2041	31	0	0	0	0	43	2	1	0	0	34	1	1	0	0
October 2042	26	0	0	0	0	39	2	1	0	0	29	1	1	0	0
October 2043	21	0	0	0	0	35	1	1	0	0	24	0	0	0	0
October 2044	16	0	0	0	0	31	1	1	0	0	19	0	0	0	0
October 2045	10	0	0	0	0	26	1	0	0	0	14	0	0	0	0
October 2046	4	0	0	0	0	21	0	0	0	0	8	0	0	0	0
October 2047	0	0	0	0	0	16	0	0	0	0	3	0	0	0	0
October 2048	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0
October 2049	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0
October 2050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	15.7	4.9	4.9	4.9	3.5	17.9	6.5	6.0	4.5	3.2	16.2	5.8	5.8	5.0	3.5

PSA	Prepayment	Assumption	Rates

			Class YI						Class YT					Class YW	7	
Distribution Date	0%	230%	260%	380%	600%	0	%	230%	260%	380%	600%	0%	230%	260%	380%	600%
Initial Percent	100	100	100	100	100	1	00	100	100	100	100	100	100	100	100	100
October 2021	100	100	100	100	100		00	97	94	81	57	100	100	97	87	68
October 2022	100	100	100	100	100	1	00	89	79	37	0	100	100	91	58	0
October 2023	100	100	100	100	100	1	00	81	62	0	0	100	100	85	27	0
October 2024	100	100	100	100	100	1	00	74	50	0	0	100	100	80	9	0
October 2025	100	100	100	100	100	1	00	71	43	0	0	100	100	78	1	0
October 2026	100	100	100	100	100	1	00	69	40	0	0	100	100	76	0	0
October 2027	100	100	100	100	100	1	00	67	38	0	0	100	96	72	0	0
October 2028	100	100	100	100	100	1	00	64	36	0	0	100	89	67	0	0
October 2029	100	100	100	100	100	1	00	60	33	0	0	100	82	60	0	0
October 2030	100	100	100	100	100	1	00	55	30	0	0	100	73	53	0	0
October 2031	100	100	100	100	100	1	00	49	27	0	0	100	64	46	0	0
October 2032	100	100	100	100	100	1	00	44	24	0	0	100	56	40	0	0
October 2033	100	100	100	100	100	1	00	39	20	0	0	100	49	34	0	0
October 2034	100	100	100	100	72	1	00	34	18	0	0	100	41	28	0	0
October 2035	100	100	100	100	44	1	00	29	15	0	0	100	35	24	0	0
October 2036	100	100	100	100	26	1	00	25	13	0	0	100	29	20	0	0
October 2037	100	100	100	100	16	1	00	21	11	0	0	100	24	16	0	0
October 2038	100	100	100	100	10	1	00	18	9	0	0	100	20	13	0	0
October 2039	100	100	100	100	6	1	00	15	7	0	0	100	16	10	0	0
October 2040	100	100	100	100	3	1	00	12	6	0	0	100	13	8	0	0
October 2041	100	79	79	79	2	1	00	10	5	0	0	100	11	7	0	0
October 2042	100	55	55	55	1	1	00	8	4	0	0	100	8	5	0	0
October 2043	100	37	37	37	1	1	00	6	3	0	0	100	6	4	0	0
October 2044	100	25	25	25	0	1	00	5	2	0	0	100	5	3	0	0
October 2045	100	16	16	16	0	1	00	3	2	0	0	100	4	2	0	0
October 2046	100	10	10	10	0	1	00	2	1	0	0	100	3	1	0	0
October 2047	6	6	6	6	0	1	00	2	1	0	0	93	2	1	0	0
October 2048	3	3	3	3	0		78	1	0	0	0	63	1	1	0	0
October 2049	ĭ	ĭ	1	1	0		40	0	0	0	0	32	0	0	0	0
October 2050	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0
Weighted Average							-									
Life (years)	26.8	22.9	22.9	22.9	15.3	28	3.7	11.0	7.2	1.7	1.1	28.4	13.8	10.7	2.3	1.2

Security Group 9 PSA Prepayment Assumption Rates

		Clas	ses A an	d FA				Class AS	;				Class SA		
Distribution Date	0%	100%	250%	400%	500%	0%	100%	250%	400%	500%	0%	100%	250%	400%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
October 2021	98	96	94	91	90	98	96	94	91	90	98	96	94	91	90
October 2022	97	90	82	75	70	97	90	82	75	70	97	90	82	75	70
October 2023	95	83	69	56	48	95	83	69	56	48	95	83	69	56	48
October 2024	93	76	57	41	33	93	76	57	41	33	93	76	57	41	33
October 2025	91	70	47	31	22	91	70	47	31	22	91	70	47	31	22
October 2026	89	64	39	23	15	89	64	39	23	15	89	64	39	23	15
October 2027	87	59	32	17	10	87	59	32	17	10	87	59	32	17	10
October 2028	85	53	27	12	7	85	53	27	12	7	85	53	27	12	7
October 2029	83	49	22	9	5	83	49	22	9	5	83	49	22	9	5
October 2030	80	44	18	7	3	80	44	18	7	3	80	44	18	7	3
October 2031	78	40	15	5	2	78	40	15	5	2	78	40	15	5	2
October 2032	75	36	12	4	1	75	36	12	4	1	75	36	12	4	1
October 2033	72	33	10	3	1	72	33	10	3	1	72	33	10	3	1
October 2034	69	29	8	2	1	69	29	8	2	1	69	29	8	2	1
October 2035	66	26	6	1	0	66	26	6	1	0	66	26	6	1	0
October 2036	63	23	5	1	0	63	23	5	1	0	63	23	5	1	0
October 2037	60	21	4	1	0	60	21	4	1	0	60	21	4	1	0
October 2038	56	18	3	1	0	56	18	3	1	0	56	18	3	1	0
October 2039	53	16	3	0	0	53	16	3	0	0	53	16	3	0	0
October 2040	49	14	2	0	0	49	14	2	0	0	49	14	2	0	0
October 2041	45	12	2	0	0	45	12	2	0	0	45	12	2	0	0
October 2042	41	10	1	0	0	41	10	1	0	0	41	10	1	0	0
October 2043	36	8	1	0	0	36	8	1	0	0	36	8	1	0	0
October 2044	32	7	1	0	0	32	7	1	0	0	32	7	1	0	0
October 2045	27	5	0	0	0	27	5	0	0	0	27	5	0	0	0
October 2046	22	4	0	0	0	22	4	0	0	0	22	4	0	0	0
October 2047	17	3	0	0	0	17	3	0	0	0	17	3	0	0	0
October 2048	12	2	0	0	0	12	2	0	0	0	12	2	0	0	0
October 2049	6	1	0	0	0	6	1	0	0	0	6	1	0	0	0
October 2050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average															
Life (years)	18.3	10.4	6.1	4.3	3.6	18.3	10.4	6.1	4.3	3.6	18.3	10.4	6.1	4.3	3.6

Security Group 10 PSA Prepayment Assumption Rates

		-	Class II				Classe	s IM ar	d MD			(Class IN	Ī			(lass Kl	[
Distribution Date	0%	176%	270%	300%	600%	0%	176%	270%	300%	600%	0%	176%	270%	300%	600%	0%	176%	270%	300%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
October 2021	98	95	94	93	89	98	94	94	94	94	98	95	94	93	88	98	95	94	93	88
October 2022	97	86	82	80	66	96	83	83	83	79	97	86	81	80	65	97	86	81	80	65
October 2023	95	75	67	65	42	94	70	70	70	50	95	76	67	64	41	95	76	67	64	41
October 2024	93	65	55	52	26	92	59	59	59	31	93	66	55	52	26	93	66	55	52	26
October 2025	91	57	45	42	16	89	49	49	49	19	91	58	45	41	16	91	58	45	41	16
October 2026	89	49	37	34	10	87	40	40	40	12	89	50	37	33	10	89	50	37	33	10
October 2027	87	42	30	27	6	84	32	32	32	7	87	44	30	26	6	87	44	30	26	6
October 2028	84	37	24	21	4	82	25	25	25	4	85	38	24	21	4	85	38	24	21	4
October 2029	82	31	20	17	2	79	20	20	20	3	83	33	20	17	2	83	33	20	17	2
October 2030	80	27	16	13	1	76	16	16	16	2	80	28	16	13	1	80	28	16	13	1
October 2031	77	23	13	11	1	73	12	12	12	1	78	25	13	10	1	78	25	13	10	1
October 2032	74	20	10	8	1	69	10	10	10	0	75	21	10	8	1	75	21	10	8	1
October 2033	71	17	8	7	0	66	8	8	8	0	72	18	8	6	0	72	18	8	6	0
October 2034	69	14	7	5	0	63	6	6	6	0	69	15	7	5	0	69	15	7	5	0
October 2035	65	12	5	4	0	59	4	4	4	0	66	13	5	4	0	66	13	5	4	0
October 2036	62	10	4	3	0	55	3	3	3	0	63	11	4	3	0	63	11	4	3	0
October 2037	59	9	3	2	0	51	3	3	3	0	60	9	3	2	0	60	9	3	2	0
October 2038	55	7	3	2	0	47	2	2	2	0	56	8	3	2	0	56	8	3	2	0
October 2039	52	6	2	1	0	42	1	1	1	0	53	7	2	1	0	53	7	2	1	0
October 2040	48	5	2	1	0	38	1	1	1	0	49	5	2	1	0	49	5	2	1	0
October 2041	44	4	1	1	0	33	1	1	1	0	45	4	1	1	0	45	4	1	1	0
October 2042	39	3	1	1	0	28	0	0	0	0	41	4	1	1	0	41	4	1	1	0
October 2043	35	3	1	0	0	23	0	0	0	0	36	3	1	0	0	36	3	1	0	0
October 2044	30	2	0	0	0	17	0	0	0	0	32	2	0	0	0	32	2	0	0	0
October 2045	25	1	0	0	0	11	0	0	0	0	27	2	0	0	0	27	2	0	0	0
October 2046	20	1	0	0	0	5	0	0	0	0	22	1	0	0	0	22	1	0	0	0
October 2047	15	1	0	0	0	0	0	0	0	0	17	1	0	0	0	17	1	0	0	0
October 2048	10	0	0	0	0	0	0	0	0	0	12	0	0	0	0	12	0	0	0	0
October 2049	5	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	0	0	0	0
October 2050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average																				
Life (years)	18.0	7.5	5.8	5.4	3.2	16.1	5.9	5.9	5.9	3.5	18.3	7.8	5.8	5.4	3.1	18.3	7.8	5.8	5.4	3.1

Security Group 10 PSA Prepayment Assumption Rates

	Classe		IB, MC, II and M		G, MH,		C	lass MI	K			c	lass MU	J		Class MZ						
Distribution Date	0%	176%	270%	300%	600%	0%	176%	270%	300%	600%	0%	176%	270%	300%	600%	0%	176%	270%	300%	600%		
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
October 2021	98	94	94	94	94	100	100	89	89	89	100	100	93	87	21	102	102	102	102	102		
October 2022	95	83	83	83	76	100	100	66	66	0	100	100	79	59	0	103	103	103	103	0		
October 2023	93	71	70	70	48	100	100	39	39	0	100	100	64	30	0	105	105	105	105	0		
October 2024	91	59	58	58	30	100	100	20	20	0	100	100	55	12	0	106	106	106	106	0		
October 2025	88	49	47	47	18	100	100	8	8	0	100	100	50	3	0	108	108	108	108	0		
October 2026	85	40	38	38	11	100	100	1	1	0	100	100	48	0	0	109	109	109	109	0		
October 2027	82	32	30	30	7	100	100	0	0	0	100	100	47	0	0	111	111	0	0	0		
October 2028	79	25	24	24	4	100	95	0	0	0	100	100	44	0	0	113	113	0	0	0		
October 2029	76	19	19	19	3	100	88	0	0	0	100	100	40	0	0	114	114	0	0	0		
October 2030	73	15	15	15	1	100	77	0	0	0	100	100	36	0	0	116	116	0	0	0		
October 2031	70	12	12	12	1	100	65	0	0	0	100	100	32	0	0	118	118	0	0	0		
October 2032	66	9	9	9	0	100	53	0	0	0	100	100	28	0	0	120	120	0	0	0		
October 2033	62	7	7	7	0	100	40	0	0	0	100	100	25	0	0	122	122	0	0	0		
October 2034	59	6	6	6	0	100	28	0	0	0	100	100	21	0	0	123	123	0	0	0		
October 2035	55	4	4	4	0	100	16	0	0	0	100	100	18	0	0	125	125	0	0	0		
October 2036	50	3	3	3	0	100	4	0	0	0	100	100	15	0	0	127	127	0	0	0		
October 2037	46	2	2	2	0	100	0	0	0	0	100	91	13	0	0	129	0	0	0	0		
October 2038	42	2	2	2	0	100	0	0	0	0	100	79	10	0	0	131	0	0	0	0		
October 2039	37	1	1	1	0	100	0	0	0	0	100	67	9	0	0	133	0	0	0	0		
October 2040	32	1	1	1	0	100	0	0	0	0	100	57	_	0	0	135	0	0	0	0		
October 2041	27	1	1	1	0	100	0	0	0	0	100	47	5	0	0	137	0	0	0	0		
October 2042	21	0	0	0	0	100	0	0	0	0	100	39	4	0	0	139	0	0	0	0		
October 2043	16	0	0	0	0	100	0	0	0	0	100	31	3	0	0	141	0	0	0	0		
October 2044	10	0	0	0	0	100	0	0	0	0	100	24	2	0		143	0	0	0	0		
October 2045	4	0	0	0	0	100 100	0	0	0	0	100 100	19 13	2	0	0	145 148	0	0	0	0		
October 2047	0	0	0	0	0	94	0	0	0	0	100	15	1	0	0	150	0	0	0	0		
October 2047		0					0		0	0			1	-	-	150			0	0		
October 2049	0	0	0	0	0	39 0	0	0	0	0	100 77	5 2	0	0	0	152	0	0	0	0		
October 2050	0	0	0	0	0	0	0	0	0	0	77	0	0	0	0	0	0	0	0	0		
Weighted Average	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U		
Life (years)	15.1	5.9	5.8	5.8	3.4	27.8	12.2	2.7	2.7	1.4	29.4	21.4	8.1	2.4	0.7	28.7	16.4	6.6	6.6	1.7		

PSA Prepaymen	nt Assumption	Rates
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								Fe	assumpt	1011 Kat	cs									
		(Class N	I			(Class N	Z			(Class ZN	4			(Class ZI	•	
Distribution Date	0%	176%	270%	300%	600%	0%	176%	270%	300%	600%	0%	176%	270%	300%	600%	0%	176%	270%	300%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
October 2021	98	95	94	93	88	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102
October 2022	97	86	81	80	65	103	103	103	103	103	103	103	103	103	0	104	104	104	104	104
October 2023	95	76	67	64	41	105	105	105	105	105	105	105	105	105	0	106	106	106	106	106
October 2024	93	66	55	52	26	106	106	106	106	106	106	106	106	106	0	108	108	108	108	108
October 2025	91	58	45	41	16	108	108	108	108	108	108	108	108	108	0	111	111	111	111	111
October 2026	89	50	37	33	10	109	109	109	109	109	109	109	109	81	0	113	113	113	113	113
October 2027	87	44	30	26	6	111	111	111	111	111	111	111	111	48	0	115	115	115	115	115
October 2028	85	38	24	21	4	113	113	113	113	113	113	113	113	48	0	117	117	117	117	117
October 2029	83	33	20	17	2	114	114	114	114	114	114	114	114	48	0	120	120	120	120	120
October 2030	80	28	16	13	1	116	116	116	116	116	116	116	116	48	0	122	122	122	122	122
October 2031	78	25	13	10	1	118	118	118	118	118	118	118	118	48	0	125	125	125	125	125
October 2032	75	21	10	8	1	120	120	120	120	120	120	120	120	48	0	127	127	127	127	127
October 2033	72	18	8	6	0	122	122	122	122	122	122	122	122	48	0	130	130	130	130	130
October 2034	69	15	7	5	0	123	123	123	123	102	123	123	123	48	0	132	132	132	132	103
October 2035	66	13	5	4	0	125	125	125	125	62	125	125	125	48	0	135	135	135	135	63
October 2036	63	11	4	3	0	127	127	127	127	38	127	127	127	48	0	138	138	138	138	38
October 2037	60	9	3	2	0	129	129	129	129	23	129	129	129	48	0	140	140	140	140	23
October 2038	56	8	3	2	0	131	131	131	131	14	131	131	131	48	0	143	143	143	143	14
October 2039	53	7	2	1	0	133	133	133	133	8	133	133	133	48	0	146	146	146	146	8
October 2040	49	5	2	1	0	135	135	135	135	5	135	135	135	48	0	149	149	149	149	5
October 2041	45	4	1	1	0	137	137	137	137	3	137	137	137	48	0	152	152	152	152	3
October 2042	41	4	1	1	0	139	139	139	139	2	139	139	139	48	0	155	155	155	155	2
October 2043	36	3	1	0	0	141	141	141	141	1	141	141	141	48	0	158	158	158	158	1
October 2044	32	2	0	0	0	143	143	143	143	1	143	143	143	48	0	162	146	146	146	1
October 2045	27	2	0	0	0	145	99	99	99	0	145	145	145	48	0	165	100	100	100	0
October 2046	22	1	0	0	0	148	65	65	65	0	148	148	148	48	0	66	66	66	66	0
October 2047	17	1	0	0	0	40	40	40	40	0	150	150	150	48	0	40	40	40	40	0
October 2048	12	0	0	0	0	21	21	21	21	0	152	152	152	48	0	21	21	21	21	0
October 2049	6	0	0	0	0	7	7	7	7	0	154	154	154	48	0	7	7	7	7	0
October 2050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average	40 -				2.4	a= -	26:	ac :	ac :	/	20 -	20.5	20.5			26.1	05.0	0.5	05.	
Life (years)	18.3	7.8	5.8	5.4	3.1	27.2	26.1	26.1	26.1	15.6	30.0	29.7	29.7	16.6	1.1	26.4	25.9	25.9	25.9	15.5

Security Group 10 PSA Prepayment Assumption Rates Class ZU 176% 300% 600% Distribution Date 270% Initial Percent 100 100 100 100 100 92 72 50 October 2021 102 October 2022 104 61 October 2023 106 106 31 13 3 0 October 2024 108 October 2025 111 111 28 26 October 2026. 113 113 25 24 22 October 2027 October 2028 117 October 2029 . 0 120 114 107 99 October 2030 . October 2031 125 17 15 90 October 2032 0 October 2033. 13 11 0 October 2034 132 October 2035 135 10 0 57 49 0 October 2036. October 2037 140 October 2038 . 143 42 0 October 2039 0 October 2040 149 October 2041 . . 25 0 October 2042. 155 158 0 October 2043 October 2044 October 2045 0 October 2046 0 October 2047 October 2048 0 0 October 2049 . October 2050 Weighted Average Life (years)

Yield Considerations

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

16.5

5.5

2.5

1.0

- the anticipated yield of that Class resulting from its purchase price,
- the investor's own projection of Mortgage Loan prepayment rates under a variety of scenarios,
- in the case of the Group 2 and 6 Securities, the investor's own projection of payment rates on the Underlying Certificates under a variety of scenarios and
- in the case of a Floating Rate or an Inverse Floating Rate Class, the investor's own projection of levels of LIBOR under a variety of scenarios.

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

Prepayments: Effect on Yields

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

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

- In the case of Regular Securities or MX Securities purchased at a discount (especially the Principal Only Classes), slower than anticipated rates of principal payments could result in actual yields to investors that are lower than the anticipated yields.
- Investors in an MX Class that is subject to mandatory exchange should consider that differing rates of reduction in the related REMIC Securities may ultimately cause such a Class to become a Principal Only Class or to be exchanged for the related REMIC Securities (consisting primarily or exclusively of an Interest Only Class).

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

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

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

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

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

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

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

Low levels of LIBOR can reduce the yield of the Floating Rate Classes. High levels of LIBOR can reduce the yield of the Inverse Floating Rate Classes. In addition, the Floating Rate Classes will not benefit from a higher yield at high levels of LIBOR 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 and Delay Classes

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

Yield Tables

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

The Mortgage Loans will not prepay at any constant rate until maturity, and it is unlikely that LIBOR 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

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

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

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

SECURITY GROUP 1

Sensitivity of Class JI to Prepayments Assumed Price 6.45%*

PSA Prepayment Assumption Rates

250%	500%	750%	767%	1,000%
26.2%	13.7%	0.9%	0.0%	(12.3)%

SECURITY GROUP 2

Sensitivity of Class IP to Prepayments Assumed Price 11.0%*

PSA Prepayment Assumption Rates

388%	420%	525%	572%	900%
3.6%	3.6%	3.6%	0.0%	(31.2)%

SECURITY GROUP 3

Sensitivity of Class DI to Prepayments Assumed Price 10.0%*

PSA Prepayment Assumption Rates

100%	250%	400%	428%	500%
17.8%	9.8%	1.6%	0.0%	(4.0)%

SECURITY GROUP 4

Sensitivity of Class BS to Prepayments Assumed Price 9.4%*

	PSA Prepayment Assumption Rates			
LIBOR	100%	250%	400%	500%
0.10000%	27.5%	19.6%	11.5%	6.0%
0.14838%	26.9%	19.0%	10.9%	5.4%
1.67419%	8.3%	(0.1)%	(8.8)%	(14.8)%
3.20000% and above	**	**	**	**

Sensitivity of Class SB to Prepayments Assumed Price 9.9%*

	PSA Prepayment Assumption Rates			
LIBOR	100%	250%	400%	500%
0.10000%	25.6%	17.7%	9.5%	3.9%
0.14838%	25.1%	17.1%	8.9%	3.3%
1.67419%	7.4%	(1.1)%	(9.8)%	(15.9)%
3.20000% and above	**	**	**	**

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

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

SECURITY GROUP 5

Sensitivity of Class AI to Prepayments Assumed Price 11.4%*

PSA Prepayment Assumption Rates

100%	250%	369%	400%	500%
14.4%	6.5%	0.0%	(1.7)%	(7.2)%

SECURITY GROUP 6

Sensitivity of Class CI to Prepayments Assumed Price 4.25%*

PSA Prepayment Assumption Rates

100%	250%	400%	500%	1,564%
114.8%	105.1%	95.1%	88.3%	0.1%

Sensitivity of Class CW to Prepayments Assumed Price 95.0%*

PSA Prepayment Assumption Rates

100%	250%	400%	500%
3.1%	2.8%	3.8%	4.2%

Sensitivity of Class EI to Prepayments Assumed Price 32.5%*

PSA Prepayment Assumption Rates

100%	250%	400%	500%
7.9%	5.1%	0.0%	(4.3)%

Sensitivity of Class EO to Prepayments Assumed Price 81.0%

PSA Prepayment Assumption Rates

100%	250%	400%	500%
0.9%	1.3%	2.0%	2.4%

Sensitivity of Class IJ to Prepayments Assumed Price 30.5%*

100%	250%	400%	438%	500%
8.6%	6.3%	1.5%	0.0%	(2.7)%

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

Sensitivity of Class IQ to Prepayments Assumed Price 4.7%*

PSA Prepayment Assumption Rates

100%	250%	400%	500%	1,058%
86.4%	74.9%	62.7%	54.3%	0.1%

Sensitivity of Class JO to Prepayments Assumed Price 82.0%

PSA Prepayment Assumption Rates

100%	250%	400%	500%
0.8%	1.2%	1.8%	2.3%

Sensitivity of Class KO to Prepayments Assumed Price 94.0%

PSA Prepayment Assumption Rates

100%	250%	400%	500%
0.3%	0.5%	2.0%	3.9%

Sensitivity of Class OE to Prepayments Assumed Price 81.0%

PSA Prepayment Assumption Rates

	<u> </u>	*	
100%	250%	400%	500%
0.9%	1.3%	2.0%	2.4%

Sensitivity of Class PO to Prepayments Assumed Price 81.0%

PSA Prepayment Assumption Rates

100%	250%	400%	500%
0.9%	1.3%	2.0%	2.4%

Sensitivity of Class QI to Prepayments Assumed Price 4.9%*

100%	250%	400%	500%	1,043%
82.3%	71.0%	59.2%	51.0%	0.1%

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

Sensitivity of Class WC to Prepayments Assumed Price 94.0%*

PSA Prepayment Assumption Rates

100%	250%	400%	500%
4.2%	3.5%	3.4%	3.5%

SECURITY GROUP 7

Sensitivity of Class GI to Prepayments Assumed Price 11.75%*

PSA Prepayment Assumption Rates

200%	280%	365%	375%	600%
7.2%	3.7%	0.0%	(0.4)%	(12.7)%

Sensitivity of Class IG to Prepayments Assumed Price 11.75%*

PSA Prepayment Assumption Rates

200%	280%	354%	375%	600%
8.3%	4.1%	0.0%	(1.1)%	(13.8)%

Sensitivity of Class TI to Prepayments Assumed Price 11.75%*

PSA Prepayment Assumption Rates

200%	280%	375%	422%	600%
2.0%	2.0%	2.0%	0.0%	(9.0)%

SECURITY GROUP 8

Sensitivity of Class IY to Prepayments Assumed Price 10.0%*

PSA Prepayment Assumption Rates

230%	260%	380%	502%	600%
5.7%	5.7%	5.7%	0.0%	(5.1)%

Sensitivity of Class YI to Prepayments Assumed Price 10.0%*

230%	260%	380%	501%	600%
9.2%	9.2%	6.1%	0.0%	(5.2)%

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

Sensitivity of Class YS to Prepayments Assumed Price 13.0%*

	PSA Prepayment Assumption Rates			
LIBOR	230%	260%	380%	600%
0.1000%	14.8%	13.2%	6.9%	(4.9)%
0.1470%	14.4%	12.8%	6.5%	(5.4)%
1.9235%	(1.9)%	(3.6)%	(10.5)%	(23.6)%
3.7000% and above	**	**	**	**

SECURITY GROUP 9

Sensitivity of Class AS to Prepayments Assumed Price 28.0%*

	PS	A Prepaymen	t Assumption	Rates
LIBOR	100%	250%	400%	500%
0.10000%	15.0%	7.0%	(1.4)%	(7.1)%
0.14575%	14.8%	6.8%	(1.6)%	(7.3)%
3.22288%	1.9%	(6.5)%	(15.4)%	(21.4)%
6.30000% and above	**	**	**	**

Sensitivity of Class SA to Prepayments Assumed Price 28.0%*

	PS.	A Prepaymen	t Assumption	Rates
LIBOR	100%	250%	400%	500%
0.10000%	15.0%	7.0%	(1.4)%	(7.1)%
0.14575%	14.8%	6.8%	(1.6)%	(7.3)%
3.22288%	1.9%	(6.5)%	(15.4)%	(21.4)%
6.30000% and above	**	**	**	**

SECURITY GROUP 10

Sensitivity of Class IK to Prepayments Assumed Price 13.0%*

PSA Prepayment Assumption Rates

176%	270%	300%	397%	600%
11.4%	6.8%	5.3%	0.0%	(11.6)%

Sensitivity of Class IM to Prepayments Assumed Price 14.5%*

176%	270%	300%	393%	600%
4.5%	4.5%	4.5%	0.0%	(11.7)%

^{*} 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 IN to Prepayments Assumed Price 13.0%*

176%	270%	300%	390%	600%
11.8%	6.7%	5.0%	0.0%	(12.0)%

Sensitivity of Class KI to Prepayments Assumed Price 13.0%*

PSA Prepayment Assumption Rates

176%	270%	300%	390%	600%
11.8%	6.7%	5.0%	0.0%	(12.0)%

Sensitivity of Class MI to Prepayments Assumed Price 13.5%*

PSA Prepayment Assumption Rates

176%	270%	300%	419%	600%
6.2%	5.9%	5.9%	0.0%	(10.3)%

Sensitivity of Class NI to Prepayments Assumed Price 13.0%*

PSA Prepayment Assumption Rates

176%	270%	300%	390%	600%
11.8%	6.7%	5.0%	0.0%	(12.0)%

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

CERTAIN UNITED STATES FEDERAL INCOME TAX CONSEQUENCES

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

REMIC Elections

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

Regular Securities

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

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

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

Group(s)	PSA
1	500%
2	420%
3, 4, 5, 6 and 9	250%
7	280%
8	260%
10	270%

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

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

Residual Securities

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

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

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

MX Securities

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

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

ERISA MATTERS

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

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

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

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

See "ERISA Considerations" in the Base Offering Circular.

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

LEGAL INVESTMENT CONSIDERATIONS

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

other purposes, or about the permissibility of the purchase by particular investors of any Class under applicable legal investment restrictions.

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

See "Legal Investment Considerations" in the Base Offering Circular.

PLAN OF DISTRIBUTION

Subject to the terms and conditions of the Sponsor Agreement, the Sponsor has agreed to purchase all of the Securities if any are sold and purchased. The Sponsor proposes to offer the Regular and MX Classes to the public from time to time for sale in negotiated transactions at varying prices to be determined at the time of sale, plus accrued interest, if any, from (1) October 1, 2020 on the Fixed Rate and Delay Classes and (2) October 20, 2020 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)

REMIC Securities	rities			W	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	Final Distribution Date(4)
Security Group 6								
Combination 1								
CI	\$15,250,000	CW(5)	\$14,000,000	SC/PT	9)	WAC/DLY	38382KB69	September 2050
Oſ	4,075,853							ı
KC	4,398,148							
KO	2,299,999							
PO	3,226,000							
Combination 2								
EO	\$ 4,000,000	WC(5)	\$ 4,000,000	SC/PT	9	WAC/DLY	38382KB77	November 2049
ÒI	4,483,568							
ĨÒ	3,315,880							
Security Group 7								
Combination 3								
IG	\$17,395,322	GI	\$22,412,132	NTL(PT/PAC I)	2.50%	FIX/IO	38382KB85	October 2050
II	5,016,810							
Security Group 8								
Combination 4								
YB	\$25,429,705	Y	\$30,870,308	PT	1.50%	FIX	38382KB93	October 2050
YL	91,679							
YW	5,348,924							
Combination $5(7)$								
YB	\$25,429,705	IX	\$10,171,882	NTL(PAC)	2.50%	FIX/IO	38382KC27	October 2050
		YC	25,429,705	PAC	1.25	FIX	38382KC35	October 2050
		YD	25,429,705	PAC	1.00	FIX	38382KC43	October 2050
		YE	25,429,705	PAC	0.75	FIX	38382KC50	October 2050
		YG	25,429,705	PAC	0.50	FIX	38382KC68	October 2050

REMIC Securities	rities			MX	MX Securities			
Class	Original Class Principal Balance or Class Notional Balance	Related MX Class	Maximum Original Class Principal Balance or Class Notional Balance(2)	Principal Type(3)	Interest Rate	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
Security Group 10 Combination 6								
IM	\$ 8,333,333	IK	\$73,631,218	NTL(PT/PAC I/AD)	3.00%	FIX/IO	38382KC76	October 2050
N	46,165,148							
N	19,132,737							
Combination 7								
N	\$46,165,148	KI	\$65,297,885	NTL(PT)	3.00%	FIX/IO	38382KC84	October 2050
N	19,132,737							
Combination 8(7)								
MJ	\$89,557,000	MA	\$89,557,000	PAC/AD	0.50%	FIX	38382KC92	October 2050
		MB	89,557,000	PAC/AD	0.75	FIX	38382KD26	October 2050
		MC	89,557,000	PAC/AD	1.00	FIX	38382KD34	October 2050
		ME	89,557,000	PAC/AD	1.25	FIX	38382KD42	October 2050
		MG	89,557,000	PAC/AD	1.50	FIX	38382KD59	October 2050
		MH	89,557,000	PAC/AD	1.75	FIX	38382KD67	October 2050
		MI	44,778,500	NTL(PAC/AD)	3.00	FIX/IO	38382KD75	October 2050

1) All exchanges must comply with minimum denomination restrictions.

The amount shown for each MX Class represents the maximum Original Class Principal Balance (or original Class Notional Balance) of that Class, assuming it were to be issued on the Closing Date. 3

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

See "Yield, Maturity and Prepayment Considerations— Final Distribution Date" in this Supplement. 4

on the last Business Day of the calendar month immediately preceding the related Distribution Date in the first case, and prior to the related Distribution Date on which the Class Principal Balance of this MX Class would be reduced to zero in the second case, effect a In the event that either (1) the Interest Rate of this MX Class will equal or exceed 1,200% per annum for any Accrual Period or (2) the Class Principal Balance of this MX Class will be reduced to zero on any Distribution Date, the Trustee will, prior to the close of business mandatory exchange of this MX Class for its related REMIC Securities and, thereafter, no further exchanges of such REMIC Securities will be permitted. (5)

The Interest Rate will be calculated as described under "Terms Sheet — Interest Rates" in this Supplement.

In the case of Combinations 5 and 8, various subcombinations are permitted. See "Description of the Securities — Modification and Exchange" in the Base Offering Circular for a discussion of subcombinations. 6

Schedule II

SCHEDULED PRINCIPAL BALANCES

Distribution Date	Class GB	Classes GC and GL (in the aggregate)	Class GD
Initial Balance	\$10,000,000.00	\$25,084,053.00	\$2,213,000.00
November 2020	9,971,279.21	25,005,960.08	2,207,666.31
December 2020	9,938,623.43	24,917,167.79	2,199,668.40
January 2021	9,902,049.77	24,817,722.61	2,189,014.47
February 2021	9,861,579.32	24,707,681.94	2,175,718.82
March 2021	9,817,237.23	24,587,114.11	2,159,801.83
April 2021	9,769,052.60	24,456,098.29	2,141,289.97
May 2021	9,717,058.54	24,314,724.46	2,120,215.78
June 2021	9,661,292.07	24,163,093.33	2,096,617.82
July 2021	9,601,794.15	24,001,316.23	2,070,540.66
August 2021	9,538,609.59	23,829,515.01	2,042,034.74
September 2021	9,471,787.00	23,647,821.87	2,011,156.36
October 2021	9,401,378.79	23,456,379.28	1,977,967.48
November 2021	9,327,441.03	23,255,339.71	1,942,535.70
December 2021	9,250,033.44	23,044,865.55	1,904,934.01
January 2022	9,169,219.29	22,825,128.80	1,865,240.75
February 2022	9,085,065.30	22,596,310.93	1,823,539.31
March 2022	8,997,641.61	22,358,602.59	1,779,918.05
April 2022	8,907,021.60	22,112,203.38	1,734,470.00
May 2022	8,813,281.89	21,857,321.55	1,687,292.74
June 2022	8,716,502.14	21,594,173.75	1,638,488.04
July 2022	8,616,765.00	21,322,984.69	1,588,161.74
August 2022	8,514,155.96	21,043,986.83	1,536,423.40
September 2022	8,408,763.26	20,757,420.08	1,483,386.04
October 2022	8,300,677.72	20,463,531.41	1,429,165.89
November 2022	8,189,992.65	20,162,574.51	1,373,882.04
December 2022	8,076,803.69	19,854,809.45	1,317,656.17
January 2023	7,961,208.68	19,540,502.24	1,260,612.25
February 2023	7,843,307.51	19,219,924.51	1,202,876.13
March 2023	7,723,201.99	18,893,353.03	1,144,575.34
April 2023	7,604,524.96	18,570,665.72	1,088,115.82
May 2023	7,487,260.04	18,251,817.94	1,033,459.14
June 2023	7,371,390.97	17,936,765.57	980,567.52
July 2023	7,256,901.73	17,625,465.00	929,403.86
August 2023	7,143,776.45	17,317,873.07	879,931.75
September 2023	7,031,999.44	17,013,947.14	832,115.40
October 2023	6,921,555.18	16,713,645.04	785,919.66
November 2023	6,812,428.36	16,416,925.06	741,310.04
December 2023	6,704,603.79	16,123,745.99	698,252.62
January 2024	6,598,066.49	15,834,067.05	656,714.13
February 2024	6,492,801.64	15,547,847.93	616,661.88
March 2024	6,388,794.58	15,265,048.79	578,063.77
April 2024	6,286,030.81	14,985,630.21	540,888.29
May 2024	6,184,496.00	14,709,553.24	505,104.48
June 2024	6,084,176.00	14,436,779.34	470,681.97

Distribution Date	Class GB	Classes GC and GL (in the aggregate)	Class GD
July 2024	\$ 5,985,056.78	\$14,167,270.45	\$ 437,590.90
August 2024	5,887,124.51	13,900,988.88	405,802.00
September 2024	5,790,365.47	13,637,897.40	375,286.50
October 2024	5,694,766.14	13,377,959.20	346,016.15
November 2024	5,600,313.13	13,121,137.88	317,963.24
December 2024	5,506,993.19	12,867,397.44	291,100.55
January 2025	5,414,793.24	12,616,702.29	265,401.38
February 2025	5,323,700.34	12,369,017.26	240,839.48
March 2025	5,233,701.70	12,124,307.54	217,389.13
April 2025	5,144,784.66	11,882,538.75	195,025.05
May 2025	5,056,936.72	11,643,676.88	173,722.43
June 2025	4,970,145.51	11,407,688.29	153,456.96
July 2025	4,884,398.81	11,174,539.76	134,204.70
August 2025	4,799,684.52	10,944,198.39	115,942.24
September 2025	4,715,990.69	10,716,631.70	98,646.56
October 2025	4,633,305.50	10,491,807.56	82,295.05
November 2025	4,551,617.28	10,269,694.19	66,865.58
December 2025	4,470,914.46	10,050,260.18	52,336.39
January 2026	4,391,185.64	9,833,474.47	38,686.15
February 2026	4,312,419.50	9,619,306.37	25,893.90
March 2026	4,234,604.89	9,407,725.51	13,939.11
April 2026	4,157,730.78	9,198,701.88	2,801.62
May 2026	4,081,786.24	8,992,205.80	0.00
June 2026	4,006,760.48	8,788,207.93	0.00
July 2026	3,932,642.84	8,586,679.27	0.00
August 2026	3,859,422.78	8,387,591.13	0.00
September 2026	3,787,089.85	8,191,141.56	0.00
October 2026	3,715,633.75	7,999,196.41	0.00
November 2026	3,645,044.28	7,811,654.01	0.00
December 2026	3,575,311.37	7,628,414.96	0.00
January 2027	3,506,425.06	7,449,382.09	0.00
February 2027	3,438,375.49	7,274,460.37	0.00
March 2027	3,371,361.13	7,103,556.92	0.00
April 2027	3,305,611.10	6,936,580.92	0.00
May 2027	3,241,102.07	6,773,443.56	0.00
June 2027	3,177,811.15	6,614,058.05	0.00
July 2027	3,115,715.85	6,458,339.50	0.00
August 2027	3,054,794.11	6,306,204.94	0.00
September 2027	2,995,024.24	6,157,573.25	0.00
October 2027	2,936,384.97	6,012,365.13	0.00
November 2027	2,878,855.40	5,870,503.02	0.00
December 2027	2,822,415.02	5,731,911.14	0.00
January 2028	2,767,043.70	5,596,515.37	0.00
February 2028	2,712,721.65	5,464,243.27	0.00
March 2028	2,659,429.46	5,335,024.00	0.00
April 2028	2,607,148.06	5,208,788.32	0.00
May 2028	2,555,858.76	5,085,468.54	0.00
June 2028	2,505,543.16	4,964,998.47	0.00

Distribution Date		Class GB	Classes GC and GL (in the aggregate)	_	Class GD
July 2028	\$ 2,	,456,183.23	\$ 4,847,313.43	\$	0.00
August 2028	2,	,407,761.25	4,732,350.16		0.00
September 2028	2,	,360,259.85	4,620,046.84		0.00
October 2028	2,	,313,661.93	4,510,343.01		0.00
November 2028	2,	,267,950.76	4,403,179.60		0.00
December 2028	2,	,223,109.86	4,298,498.84		0.00
January 2029	2,	,179,123.08	4,196,244.25		0.00
February 2029	2,	,135,974.56	4,096,360.64		0.00
March 2029	2,	,093,648.73	3,998,794.04		0.00
April 2029	2,	,052,130.29	3,903,491.70		0.00
May 2029	2,	,011,404.25	3,810,402.05		0.00
June 2029	1,	,971,455.86	3,719,474.68		0.00
July 2029	1,	,932,270.66	3,630,660.31		0.00
August 2029	1,	,893,834.44	3,543,910.77		0.00
September 2029	1,	,856,133.27	3,459,178.98		0.00
October 2029	1,	,819,153.45	3,376,418.90		0.00
November 2029	1,	,782,881.54	3,295,585.53		0.00
December 2029	1,	,747,304.36	3,216,634.90		0.00
January 2030	1,	,712,408.95	3,139,524.01		0.00
February 2030	1,	,678,182.60	3,064,210.83		0.00
March 2030	1,	,644,612.83	2,990,654.29		0.00
April 2030	1,	,611,687.38	2,918,814.22		0.00
May 2030	1,	,579,394.22	2,848,651.38		0.00
June 2030	1,	,547,721.54	2,780,127.39		0.00
July 2030	1,	,516,657.76	2,713,204.76		0.00
August 2030	1,	,486,191.48	2,647,846.83		0.00
September 2030	1,	,456,311.55	2,584,017.76		0.00
October 2030	1,	,427,006.98	2,521,682.53		0.00
November 2030	1,	,398,267.02	2,460,806.91		0.00
December 2030	1,	,370,081.10	2,401,357.44		0.00
January 2031	1,	,342,438.84	2,343,301.40		0.00
February 2031	1,	,315,330.06	2,286,606.84		0.00
March 2031	1,	,288,744.76	2,231,242.51		0.00
April 2031	1,	,262,673.12	2,177,177.86		0.00
May 2031	1,	,237,105.51	2,124,383.05		0.00
June 2031	1,	,212,032.48	2,072,828.89		0.00
July 2031	1,	,187,444.74	2,022,486.88		0.00
August 2031	1,	,163,333.17	1,973,329.15		0.00
September 2031	1,	,139,688.85	1,925,328.44		0.00
October 2031	1,	,116,502.97	1,878,458.14		0.00
November 2031	1,	,093,766.93	1,832,692.23		0.00
December 2031	1,	,071,472.26	1,788,005.26		0.00
January 2032	1,	,049,610.66	1,744,372.39		0.00
February 2032	1,	,028,173.97	1,701,769.32		0.00
March 2032	1,	,007,154.20	1,660,172.30		0.00
April 2032		986,543.50	1,619,558.14		0.00
May 2032		966,334.14	1,579,904.15		0.00
June 2032		946,518.56	1,541,188.16		0.00

Distribution Date	Class GB	Classes GC and GL (in the aggregate)	Class GD
July 2032	\$ 927,089.34	\$ 1,503,388.51	\$ 0.00
August 2032	908,039.19	1,466,484.04	0.00
September 2032	889,360.94	1,430,454.05	0.00
October 2032	871,047.57	1,395,278.33	0.00
November 2032	853,092.19	1,360,937.10	0.00
December 2032	835,488.04	1,327,411.07	0.00
January 2033	818,228.46	1,294,681.34	0.00
February 2033	801,306.94	1,262,729.50	0.00
March 2033	784,717.08	1,231,537.49	0.00
April 2033	768,452.60	1,201,087.72	0.00
May 2033	752,507.33	1,171,362.97	0.00
June 2033	736,875.23	1,142,346.42	0.00
July 2033	721,550.35	1,114,021.62	0.00
August 2033	706,526.86	1,086,372.52	0.00
September 2033	691,799.05	1,059,383.41	0.00
October 2033	677,361.30	1,033,038.95	0.00
November 2033	663,208.10	1,007,324.16	0.00
December 2033	649,334.04	982,224.38	0.00
January 2034	635,733.81	957,725.31	0.00
February 2034	622,402.21	933,812.94	0.00
March 2034	609,334.11	910,473.62	0.00
April 2034	596,524.50	887,693.99	0.00
May 2034	583,968.46	865,460.99	0.00
June 2034	571,661.15	843,761.87	0.00
July 2034	559,597.83	822,584.18	0.00
August 2034	547,773.84	801,915.73	0.00
September 2034	536,184.62	781,744.63	0.00
October 2034	524,825.67	762,059.25	0.00
November 2034	513,692.61	742,848.24	0.00
December 2034	502,781.10	724,100.49	0.00
January 2035	492,086.92	705,805.15	0.00
February 2035	481,605.89	687,951.64	0.00
March 2035	471,333.95	670,529.60	0.00
April 2035	461,267.08	653,528.92	0.00
May 2035	451,401.36	636,939.70	0.00
June 2035	441,732.92	620,752.30	0.00
July 2035	432,257.98	604,957.28	0.00
August 2035	422,972.82	589,545.41	0.00
September 2035	413,873.81	574,507.70	0.00
October 2035	404,957.35	559,835.35	0.00
November 2035	396,219.95	545,519.75	0.00
December 2035	387,658.15	531,552.51	0.00
January 2036	379,268.57	517,925.42	0.00
February 2036	371,047.91	504,630.47	0.00
March 2036	362,992.89	491,659.82	0.00
April 2036	355,100.33	479,005.82	0.00
May 2036	347,367.10	466,661.00	0.00
June 2036	339,790.11	454,618.05	0.00

Distribution Date	 Class GB	sses GC and GL the aggregate)	 Class GD
July 2036	\$ 332,366.35	\$ 442,869.83	\$ 0.00
August 2036	325,092.85	431,409.39	0.00
September 2036	317,966.72	420,229.90	0.00
October 2036	310,985.09	409,324.72	0.00
November 2036	304,145.18	398,687.35	0.00
December 2036	297,444.24	388,311.44	0.00
January 2037	290,879.56	378,190.79	0.00
February 2037	284,448.52	368,319.35	0.00
March 2037	278,148.51	358,691.19	0.00
April 2037	271,976.99	349,300.53	0.00
May 2037	265,931.46	340,141.74	0.00
June 2037	260,009.48	331,209.29	0.00
July 2037	254,208.64	322,497.79	0.00
August 2037	248,526.58	314,001.99	0.00
September 2037	242,960.99	305,716.74	0.00
October 2037	237,509.60	297,637.02	0.00
November 2037	232,170.17	289,757.93	0.00
December 2037	226,940.54	282,074.67	0.00
January 2038	221,818.54	274,582.58	0.00
February 2038	216,802.08	267,277.07	0.00
March 2038	211,889.10	260,153.68	0.00
April 2038	207,077.56	253,208.06	0.00
May 2038	202,365.48	246,435.94	0.00
June 2038	197,750.92	239,833.16	0.00
July 2038	193,231.96	233,395.67	0.00
August 2038	188,806.73	227,119.49	0.00
September 2038	184,473.38	221,000.76	0.00
October 2038	180,230.11	215,035.68	0.00
November 2038	176,075.15	209,220.56	0.00
December 2038	172,006.76	203,551.79	0.00
January 2039	168,023.23	198,025.84	0.00
February 2039	164,122.90	192,639.28	0.00
March 2039	160,304.13	187,388.73	0.00
April 2039	156,565.30	182,270.92	0.00
May 2039	152,904.84	177,282.64	0.00
June 2039	149,321.19	172,420.76	0.00
July 2039	145,812.84	167,682.22	0.00
August 2039	142,378.31	163,064.03	0.00
September 2039	139,016.11	158,563.28	0.00
October 2039	135,724.84	154,177.12	0.00
November 2039	132,503.07	149,902.76	0.00
December 2039	129,349.42	145,737.50	0.00
January 2040	126,262.55	141,678.68	0.00
February 2040	123,241.13	137,723.72	0.00
March 2040	120,283.85	133,870.07	0.00
April 2040	117,389.44	130,115.29	0.00
May 2040	114,556.64	126,456.95	0.00
June 2040	111,784.23	122,892.70	0.00

Distribution Date	Class GB	sses GC and GL the aggregate)	Class GD
July 2040	\$ 109,071.00	\$ 119,420.24	\$ 0.00
August 2040	106,415.77	116,037.34	0.00
September 2040	103,817.38	112,741.79	0.00
October 2040	101,274.69	109,531.47	0.00
November 2040	98,786.58	106,404.28	0.00
December 2040	96,351.97	103,358.18	0.00
January 2041	93,969.78	100,391.18	0.00
February 2041	91,638.96	97,501.35	0.00
March 2041	89,358.47	94,686.77	0.00
April 2041	87,127.31	91,945.61	0.00
May 2041	84,944.47	89,276.04	0.00
June 2041	82,808.99	86,676.32	0.00
July 2041	80,719.92	84,144.70	0.00
August 2041	78,676.31	81,679.52	0.00
September 2041	76,677.25	79,279.12	0.00
October 2041	74,721.83	76,941.90	0.00
November 2041	72,809.18	74,666.31	0.00
December 2041	70,938.43	72,450.81	0.00
January 2042	69,108.73	70,293.90	0.00
February 2042	67,319.24	68,194.14	0.00
March 2042	65,569.15	66,150.10	0.00
April 2042	63,857.66	64,160.40	0.00
May 2042	62,183.98	62,223.68	0.00
June 2042	60,547.34	60,338.63	0.00
July 2042	58,946.99	58,503.94	0.00
August 2042	57,382.19	56,718.36	0.00
September 2042	55,852.21	54,980.67	0.00
October 2042	54,356.34	53,289.66	0.00
November 2042	52,893.88	51,644.17	0.00
December 2042	51,464.14	50,043.04	0.00
January 2043	50,066.46	48,485.18	0.00
February 2043	48,700.17	46,969.48	0.00
March 2043	47,364.64	45,494.88	0.00
April 2043	46,059.22	44,060.36	0.00
May 2043	44,783.30	42,664.90	0.00
June 2043	43,536.28	41,307.50	0.00
July 2043	42,317.54	39,987.22	0.00
August 2043	41,126.52	38,703.11	0.00
September 2043	39,962.63	37,454.24	0.00
October 2043	38,825.32	36,239.74	0.00
November 2043	37,714.03	35,058.72	0.00
December 2043	36,628.22	33,910.33	0.00
January 2044	35,567.36	32,793.75	0.00
February 2044	34,530.94	31,708.15	0.00
March 2044	33,518.45	30,652.75	0.00
April 2044	32,529.38	29,626.78	0.00
May 2044	31,563.25	28,629.48	0.00
June 2044	30,619.58	27,660.12	0.00

Distribution Date	 Class GB	ses GC and GL the aggregate)	 Class GD
July 2044	\$ 29,697.90	\$ 26,717.98	\$ 0.00
August 2044	28,797.74	25,802.36	0.00
September 2044	27,918.66	24,912.58	0.00
October 2044	27,060.22	24,047.97	0.00
November 2044	26,221.97	23,207.89	0.00
December 2044	25,403.50	22,391.69	0.00
January 2045	24,604.38	21,598.77	0.00
February 2045	23,824.22	20,828.51	0.00
March 2045	23,062.60	20,080.33	0.00
April 2045	22,319.14	19,353.66	0.00
May 2045	21,593.45	18,647.94	0.00
June 2045	20,885.16	17,962.61	0.00
July 2045	20,193.89	17,297.16	0.00
August 2045	19,519.28	16,651.05	0.00
September 2045	18,860.98	16,023.78	0.00
October 2045	18,218.64	15,414.87	0.00
November 2045	17,591.91	14,823.82	0.00
December 2045	16,980.47	14,250.16	0.00
January 2046	16,383.99	13,693.45	0.00
February 2046	15,802.15	13,153.22	0.00
March 2046	15,234.62	12,629.05	0.00
April 2046	14,681.11	12,120.51	0.00
May 2046	14,141.31	11,627.19	0.00
June 2046	13,614.93	11,148.68	0.00
July 2046	13,101.67	10,684.58	0.00
August 2046	12,601.25	10,234.52	0.00
September 2046	12,113.39	9,798.12	0.00
October 2046	11,637.83	9,375.01	0.00
November 2046	11,174.29	8,964.84	0.00
December 2046	10,722.51	8,567.26	0.00
January 2047	10,282.23	8,181.93	0.00
February 2047	9,853.20	7,808.52	0.00
March 2047	9,435.19	7,446.72	0.00
April 2047	9,027.93	7,096.19	0.00
May 2047	8,631.21	6,756.65	0.00
June 2047	8,244.78	6,427.79	0.00
July 2047	7,868.43	6,109.33	0.00
August 2047	7,501.92	5,800.97	0.00
September 2047	7,145.04	5,502.44	0.00
October 2047	6,797.57	5,213.48	0.00
November 2047	6,459.32	4,933.81	0.00
December 2047	6,130.07	4,663.20	0.00
January 2048	5,809.62	4,401.38	0.00
February 2048	5,497.77	4,148.11	0.00
March 2048	5,194.34	3,903.16	0.00
April 2048	4,899.14	3,666.30	0.00
May 2048	4,611.97	3,437.30	0.00
June 2048	4,332.66	3,215.94	0.00

Distribution Date	Class GB	Classes GC and GL (in the aggregate)	Class GD	
July 2048	4,061.04	\$ 3,002.01	\$ 0.00	
August 2048	3,796.92	2,795.30	0.00	
September 2048	3,540.15	2,595.61	0.00	
October 2048	3,290.55	2,402.74	0.00	
November 2048	3,047.95	2,216.51	0.00	
December 2048	2,812.21	2,036.71	0.00	
January 2049	2,583.16	1,863.17	0.00	
February 2049	2,360.65	1,695.72	0.00	
March 2049	2,144.53	1,534.17	0.00	
April 2049	1,934.66	1,378.37	0.00	
May 2049	1,730.89	1,228.14	0.00	
June 2049	1,533.07	1,083.33	0.00	
July 2049	1,341.08	943.77	0.00	
August 2049	1,154.78	809.33	0.00	
September 2049	974.03	679.84	0.00	
October 2049	798.71	555.17	0.00	
November 2049	628.68	435.18	0.00	
December 2049	463.83	319.72	0.00	
January 2050	304.04	208.67	0.00	
February 2050	149.18	101.90	0.00	
March 2050 and thereafter	0.00	0.00	0.00	

Distribution Date	Classes LA and LZ (in the aggregate)	Class YA	Classes YB and YL (in the aggregate)
Initial Balance	\$150,271,911.00	\$8,000,000.00	\$25,521,384.00
November 2020	146,267,361.85	7,977,676.79	25,444,195.13
December 2020	142,353,741.33	7,952,223.00	25,355,065.54
January 2021	138,528,978.04	7,923,651.69	25,254,043.28
February 2021	134,791,047.30	7,891,979.12	25,141,190.39
March 2021	131,137,970.09	7,857,224.76	25,016,582.91
April 2021	127,567,812.01	7,819,411.23	24,880,310.77
May 2021	124,078,682.32	7,778,564.33	24,732,477.81
June 2021	120,668,732.93	7,734,712.99	24,573,201.63
July 2021	117,336,157.45	7,687,889.25	24,402,613.48
August 2021	114,079,190.26	7,638,128.24	24,220,858.13
September 2021	110,896,105.60	7,585,468.12	24,028,093.68
October 2021	107,785,216.66	7,529,950.05	23,824,491.36
November 2021	104,744,874.72	7,471,618.14	23,610,235.29
December 2021	101,773,468.30	7,410,519.40	23,385,522.25
January 2022	98,869,422.31	7,346,703.67	23,150,561.39
February 2022	96,031,197.23	7,280,223.55	22,905,573.89
March 2022	93,257,288.35	7,211,134.34	22,650,792.69
April 2022	90,546,224.94	7,139,493.99	22,386,462.07
May 2022	87,896,569.52	7,065,362.97	22,112,837.32
June 2022	85,306,917.09	6,988,804.23	21,830,184.29
July 2022	82,775,894.42	6,909,883.10	21,538,779.02
August 2022	80,302,159.34	6,828,667.17	21,238,907.26
September 2022	77,884,400.01	6,745,226.23	20,930,863.98
October 2022	75,521,334.29	6,659,632.17	20,614,952.93
November 2022	73,211,709.03	6,571,958.85	20,291,486.14
December 2022	70,954,299.42	6,482,282.01	19,960,783.35
January 2023	68,747,908.39	6,390,679.14	19,623,171.50
February 2023	66,591,365.96	6,297,229.41	19,278,984.21
March 2023	64,483,528.62	6,202,013.50	18,928,561.15
April 2023	62,423,278.76	6,107,926.20	18,582,916.20
May 2023	60,409,524.08	6,014,954.59	18,241,985.96
June 2023	58,441,197.01	5,923,085.88	17,905,707.89
July 2023	56,520,842.83	5,832,307.41	17,574,020.25
August 2023	54,662,974.38	5,742,606.69	17,246,862.11
September 2023	52,865,574.19	5,653,971.35	16,924,173.31
October 2023	51,126,689.57	5,566,389.17	16,605,894.49
November 2023	49,444,430.47	5,479,848.05	16,291,967.09
December 2023	47,816,967.50	5,394,336.05	15,982,333.26
January 2024	46,242,530.00	5,309,841.35	15,676,935.95
February 2024	44,719,404.17	5,226,352.26	15,375,718.82
March 2024	43,245,931.22	5,143,857.24	15,078,626.29
April 2024	41,820,505.67	5,062,344.84	14,785,603.49
May 2024	40,441,573.57	4,981,803.78	14,496,596.27
June 2024	39,107,630.94	4,902,222.90	14,211,551.19
July 2024	37,817,222.09	4,823,591.13	13,930,415.50
August 2024	36,568,938.16	4,745,897.58	13,653,137.13
September 2024	35,361,415.55	4,669,131.43	13,379,664.73

Distribution Date	Classes LA and LZ (in the aggregate)	Class YA	Classes YB and YL (in the aggregate)
October 2024	\$ 34,193,334.50	\$4,593,282.01	\$13,109,947.56
November 2024	33,063,417.70	4,518,338.78	12,843,935.60
December 2024	31,970,428.93	4,444,291.28	12,581,579.44
January 2025	30,913,171.73	4,371,129.21	12,322,830.34
February 2025	29,890,488.14	4,298,842.35	12,067,640.18
March 2025	28,901,257.46	4,227,420.62	11,815,961.50
April 2025	27,944,395.07	4,156,854.05	11,567,747.41
May 2025	27,018,851.26	4,087,132.77	11,322,951.69
June 2025	26,123,610.13	4,018,247.03	11,081,528.67
July 2025	25,257,688.49	3,950,187.19	10,843,433.32
August 2025	24,420,134.82	3,882,943.71	10,608,621.17
September 2025	23,610,028.27	3,816,507.18	10,377,048.36
October 2025	22,826,477.65	3,750,868.26	10,148,671.57
November 2025	22,068,620.50	3,686,017.75	9,923,448.07
December 2025	21,335,622.15	3,621,946.54	9,701,335.69
January 2026	20,626,674.88	3,558,645.61	9,482,292.79
February 2026	19,940,996.98	3,496,106.06	9,266,278.31
March 2026	19,277,831.97	3,434,319.08	9,053,251.70
April 2026	18,636,447.77	3,373,275.97	8,843,172.95
May 2026	18,016,135.95	3,312,968.12	8,636,002.57
June 2026	17,416,210.91	3,253,387.02	8,432,001.49
July 2026	16,836,009.21	3,194,524.25	8,232,726.22
August 2026	16,274,888.82	3,136,371.49	8,038,068.89
September 2026	15,732,228.44	3,078,920.51	7,847,924.02
October 2026	15,207,426.86	3,022,163.19	7,662,188.57
November 2026	14,699,902.28	2,966,091.47	7,480,761.78
December 2026	14,209,091.70	2,910,697.42	7,303,545.19
January 2027	13,734,450.33	2,855,973.16	7,130,442.56
February 2027	13,275,450.99	2,801,910.93	6,961,359.81
March 2027	12,831,583.54	2,748,503.04	6,796,205.00
April 2027	12,402,354.35	2,695,961.97	6,634,888.28
May 2027	11,987,285.75	2,644,393.11	6,477,321.81
June 2027	11,585,915.55	2,593,778.88	6,323,419.74
July 2027	11,197,796.49	2,544,102.00	6,173,098.18
August 2027	10,822,495.80	2,495,345.49	6,026,275.11
September 2027	10,459,594.74	2,447,492.71	5,882,870.39
October 2027	10,108,688.11	2,400,527.26	5,742,805.67
November 2027	9,769,383.84	2,354,433.09	5,606,004.41
December 2027	9,441,302.59	2,309,194.39	5,472,391.77
January 2028	9,124,077.29	2,264,795.66	5,341,894.61
February 2028	8,817,352.77	2,221,221.67	5,214,441.47
March 2028	8,520,785.38	2,178,457.45	5,089,962.48
April 2028	8,234,042.62	2,136,488.31	4,968,389.36
May 2028	7,956,802.78	2,095,299.81	4,849,655.41
June 2028	7,688,754.59	2,054,877.78	4,733,695.39
July 2028	7,429,596.87	2,015,208.30	4,620,445.58
August 2028	7,179,038.22	1,976,277.70	4,509,843.69
September 2028	6,936,796.73	1,938,072.54	4,401,828.85

Distribution Date	asses LA and LZ n the aggregate)	Class YA	Classes YB and YL (in the aggregate)
October 2028	\$ 6,702,599.60	\$1,900,579.64	\$ 4,296,341.56
November 2028	6,476,182.93	1,863,786.03	4,193,323.67
December 2028	6,257,291.40	1,827,679.01	4,092,718.37
January 2029	6,045,677.95	1,792,246.07	3,994,470.13
February 2029	5,841,103.58	1,757,474.94	3,898,524.67
March 2029	5,643,337.08	1,723,353.57	3,804,828.96
April 2029	5,452,154.72	1,689,870.13	3,713,331.16
May 2029	5,267,340.08	1,657,012.98	3,623,980.63
June 2029	5,088,683.78	1,624,770.71	3,536,727.86
July 2029	4,915,983.25	1,593,132.10	3,451,524.47
August 2029	4,749,042.51	1,562,086.16	3,368,323.19
September 2029	4,587,671.98	1,531,622.05	3,287,077.82
October 2029	4,431,688.25	1,501,729.16	3,207,743.21
November 2029	4,280,913.88	1,472,397.06	3,130,275.24
December 2029	4,135,177.23	1,443,615.51	3,054,630.80
January 2030	3,994,312.24	1,415,374.44	2,980,767.76
February 2030	3,858,158.28	1,387,663.97	2,908,644.93
March 2030	3,726,559.96	1,360,474.40	2,838,222.09
April 2030	3,599,366.95	1,333,796.21	2,769,459.91
May 2030	3,476,433.84	1,307,620.03	2,702,319.99
June 2030	3,357,619.96	1,281,936.67	2,636,764.76
July 2030	3,242,789.23	1,256,737.12	2,572,757.54
August 2030	3,131,810.04	1,232,012.50	2,510,262.49
September 2030	3,024,555.05	1,207,754.12	2,449,244.56
October 2030	2,920,901.11	1,183,953.42	2,389,669.53
November 2030	2,820,729.08	1,160,602.01	2,331,503.94
December 2030	2,723,923.72	1,137,691.66	2,274,715.11
January 2031	2,630,373.57	1,115,214.25	2,219,271.09
February 2031	2,539,970.81	1,093,161.86	2,165,140.67
March 2031	2,452,611.15	1,071,526.67	2,112,293.37
April 2031	2,368,193.72	1,050,301.01	2,060,699.37
May 2031	2,286,620.94	1,029,477.36	2,010,329.56
June 2031	2,207,798.46	1,009,048.32	1,961,155.49
July 2031	2,131,635.00	989,006.64	1,913,149.35
August 2031	2,058,042.26	969,345.19	1,866,283.99
September 2031	1,986,934.86	950,056.97	1,820,532.86
October 2031	1,918,230.22	931,135.10	1,775,870.03
November 2031	1,851,848.46	912,572.84	1,732,270.15
December 2031	1,787,712.33	894,363.55	1,689,708.47
January 2032	1,725,747.11	876,500.74	1,648,160.80
February 2032	1,665,880.55	858,978.00	1,607,603.49
March 2032	1,608,042.75	841,789.07	1,568,013.46
April 2032	1,552,166.13	824,927.78	1,529,368.13
May 2032	1,498,185.32	808,388.08	1,491,645.47
June 2032	1,446,037.11	792,164.03	1,454,823.92
July 2032	1,395,660.37	776,249.80	1,418,882.45
August 2032	1,346,995.97	760,639.65	1,383,800.49
September 2032	1,299,986.74	745,327.96	1,349,557.95

Distribution Date	asses LA and LZ a the aggregate)	Class YA	Classes YB and YL (in the aggregate)
October 2032	\$ 1,254,577.38	\$ 730,309.21	\$ 1,316,135.21
November 2032	1,210,714.43	715,577.98	1,283,513.08
December 2032	1,168,346.19	701,128.93	1,251,672.82
January 2033	1,127,422.65	686,956.84	1,220,596.14
February 2033	1,087,895.46	673,056.58	1,190,265.15
March 2033	1,049,717.86	659,423.11	1,160,662.38
April 2033	1,012,844.65	646,051.47	1,131,770.75
May 2033	977,232.10	632,936.80	1,103,573.60
June 2033	942,837.95	620,074.34	1,076,054.62
July 2033	909,621.31	607,459.39	1,049,197.90
August 2033	877,542.65	595,087.36	1,022,987.89
September 2033	846,563.77	582,953.74	997,409.40
October 2033	816,647.70	571,054.07	972,447.59
November 2033	787,758.73	559,384.02	948,087.96
December 2033	759,862.29	547,939.31	924,316.35
January 2034	732,924.99	536,715.73	901,118.91
February 2034	706,914.54	525,709.17	878,482.14
March 2034	681,799.71	514,915.57	856,392.82
April 2034	657,550.30	504,330.98	834,838.06
May 2034	634,137.14	493,951.48	813,805.26
June 2034	611,532.01	483,773.26	793,282.10
July 2034	589,707.61	473,792.53	773,256.56
August 2034	568,637.59	464,005.63	753,716.90
September 2034	548,296.44	454,408.92	734,651.64
October 2034	528,659.50	444,998.84	716,049.57
November 2034	509,702.96	435,771.90	697,899.74
December 2034	491,403.77	426,724.68	680,191.46
January 2035	473,739.66	417,853.80	662,914.28
February 2035	456,689.11	409,155.96	646,057.99
March 2035	440,231.30	400,627.92	629,612.63
April 2035	424,346.11	392,266.48	613,568.45
May 2035	409,014.11	384,068.53	597,915.96
June 2035	394,216.48	376,030.98	582,645.85
July 2035	379,935.07	368,150.84	567,749.05
August 2035	366,152.30	360,425.13	553,216.71
September 2035	352,851.21	352,850.95	539,040.16
October 2035	340,015.38	345,425.45	525,210.94
November 2035	327,628.95	338,145.83	511,720.81
December 2035	315,676.60	331,009.35	498,561.68
January 2036	304,143.50	324,013.30	485,725.69
February 2036	293,015.35	317,155.04	473,205.14
March 2036	282,278.28	310,431.96	460,992.51
April 2036	271,918.94	303,841.52	449,080.45
May 2036	261,924.40	297,381.20	437,461.81
June 2036	252,282.15	291,048.55	426,129.58
July 2036	242,980.13	284,841.16	415,076.91
August 2036	234,006.67	278,756.65	404,297.14
September 2036	225,350.49	272,792.69	393,783.73

Distribution Date	sses LA and LZ the aggregate)	_	Class YA	sses YB and YL the aggregate)
October 2036	\$ 217,000.69	\$	266,947.01	\$ 383,530.32
November 2036	208,946.75		261,217.37	373,530.69
December 2036	201,178.48		255,601.55	363,778.75
January 2037	193,686.06		250,097.41	354,268.57
February 2037	186,459.98		244,702.82	344,994.37
March 2037	179,491.06		239,415.70	335,950.47
April 2037	172,770.43		234,234.00	327,131.35
May 2037	166,289.51		229,155.73	318,531.62
June 2037	160,040.03		224,178.91	310,146.00
July 2037	154,013.98		219,301.62	301,969.35
August 2037	148,203.63		214,521.95	293,996.64
September 2037	142,601.51		209,838.05	286,222.95
October 2037	137,200.39		205,248.08	278,643.51
November 2037	131,993.31		200,750.27	271,253.62
December 2037	126,973.53		196,342.83	264,048.71
January 2038	122,134.54		192,024.05	257,024.33
February 2038	117,470.06		187,792.24	250,176.11
March 2038	112,974.00		183,645.72	243,499.80
April 2038	108,640.50		179,582.87	236,991.24
May 2038	104,463.89		175,602.09	230,646.38
June 2038	100,438.70		171,701.79	224,461.25
July 2038	96,559.64		167,880.43	218,431.99
August 2038	92,821.59		164,136.51	212,554.81
September 2038	89,219.63		160,468.52	206,826.03
October 2038	85,748.98		156,875.02	201,242.05
November 2038	82,405.04		153,354.57	195,799.36
December 2038	79,183.37		149,905.77	190,494.51
January 2039	76,079.67		146,527.22	185,324.15
February 2039	73,089.78		143,217.59	180,285.03
March 2039	70,209.72		139,975.54	175,373.93
April 2039	67,435.60		136,799.76	170,587.74
May 2039	64,763.68		133,688.98	165,923.41
June 2039	62,190.37		130,641.94	161,377.98
July 2039	59,712.18		127,657.41	156,948.53
August 2039	57,325.73		124,734.17	152,632.24
September 2039	55,027.79		121,871.05	148,426.33
October 2039	52,815.22		119,066.87	144,328.11
November 2039	50,684.97		116,320.50	140,334.94
December 2039	48,634.14		113,630.80	136,444.25
January 2040	46,659.89		110,996.69	132,653.51
February 2040	44,759.50		108,417.07	128,960.28
March 2040	42,930.34		105,890.90	125,362.17
April 2040	41,169.85		103,417.12	121,856.83
May 2040	39,475.60		100,994.72	118,441.99
June 2040	37,845.21		98,622.69	115,115.41
July 2040	36,276.38		96,300.06	111,874.93
August 2040	34,766.92		94,025.86	108,718.41
September 2040	33,314.70		91,799.15	105,643.79

Distribution Date	Classes LA and LZ (in the aggregate)	Class YA	Classes YB and YL (in the aggregate)
October 2040	\$ 31,917.65	\$ 89,618.98	\$ 102,649.04
November 2040	30,573.78	87,484.46	99,732.20
December 2040	29,281.19	85,394.69	96,891.33
January 2041	28,038.03	83,348.79	94,124.55
February 2041	26,842.49	81,345.90	91,430.03
March 2041	25,692.87	79,385.18	88,805.97
April 2041	24,587.50	77,465.80	86,250.63
May 2041	23,524.78	75,586.94	83,762.30
June 2041	22,503.15	73,747.81	81,339.32
July 2041	21,521.11	71,947.62	78,980.05
August 2041	20,577.24	70,185.61	76,682.91
September 2041	19,670.13	68,461.02	74,446.36
October 2041	18,798.44	66,773.12	72,268.88
November 2041	17,960.87	65,121.18	70,148.99
December 2041	17,156.18	63,504.48	68,085.26
January 2042	16,383.16	61,922.34	66,076.28
February 2042	15,640.64	60,374.06	64,120.69
March 2042	14,927.51	58,858.97	62,217.14
April 2042	14,242.67	57,376.42	60,364.32
May 2042	13,585.08	55,925.76	58,560.97
June 2042	12,953.74	54,506.35	56,805.84
July 2042	12,347.67	53,117.57	55,097.72
August 2042	11,765.93	51,758.81	53,435.43
September 2042	11,207.62	50,429.47	51,817.80
October 2042	10,671.87	49,128.97	50,243.71
November 2042	10,157.83	47,856.73	48,712.07
December 2042	9,664.70	46,612.18	47,221.79
January 2043	9,191.68	45,394.77	45,771.84
February 2043	8,738.04	44,203.96	44,361.19
March 2043	8,303.02	43,039.20	42,988.84
April 2043	7,885.95	41,899.99	41,653.83
May 2043	7,486.13	40,785.80	40,355.20
June 2043	7,102.92	39,696.13	39,092.02
July 2043	6,735.69	38,630.48	37,863.40
August 2043	6,383.82	37,588.38	36,668.46
September 2043	6,046.75	36,569.35	35,506.32
October 2043	5,723.89	35,572.92	34,376.16
November 2043	5,414.72	34,598.64	33,277.16
December 2043	5,118.70	33,646.05	32,208.52
January 2044	4,835.33	32,714.71	31,169.46
February 2044	4,564.13	31,804.20	30,159.23
March 2044	4,304.63	30,914.10	29,177.07
April 2044	4,056.36	30,043.98	28,222.27
May 2044	3,818.91	29,193.44	27,294.12
June 2044	3,591.84	28,362.08	26,391.95
July 2044	3,374.77	27,549.51	25,515.06
August 2044	3,167.28	26,755.35	24,662.82
September 2044	2,969.02	25,979.22	23,834.58

Distribution Date	Classes LA and LZ (in the aggregate)	Class YA	Classes YB and YL (in the aggregate)
October 2044	\$ 2,779.61	\$ 25,220.75	\$ 23,029.73
November 2044	2,598.72	24,479.57	22,247.64
December 2044	2,426.00	23,755.35	21,487.75
January 2045	2,261.14	23,047.71	20,749.45
February 2045	2,103.81	22,356.33	20,032.20
March 2045	1,953.73	21,680.87	19,335.45
April 2045	1,810.60	21,021.00	18,658.65
May 2045	1,674.14	20,376.40	18,001.28
June 2045	1,544.09	19,746.76	17,362.85
July 2045	1,420.20	19,131.75	16,742.85
August 2045	1,302.20	18,531.09	16,140.79
September 2045	1,189.86	17,944.47	15,556.20
October 2045	1,082.96	17,371.60	14,988.63
November 2045	981.27	16,812.20	14,437.63
December 2045	884.58	16,265.98	13,902.75
January 2046	792.68	15,732.68	13,383.57
February 2046	705.38	15,212.01	12,879.68
March 2046	622.48	14,703.72	12,390.67
April 2046	543.81	14,207.54	11,916.14
May 2046	469.19	13,723.23	11,455.71
June 2046	398.44	13,250.53	11,009.00
July 2046	331.41	12,789.19	10,575.64
August 2046	267.94	12,338.99	10,155.29
September 2046	207.88	11,899.68	9,747.58
October 2046	151.08	11,471.04	9,352.18
November 2046	97.41	11,052.84	8,968.77
December 2046	46.73	10,644.85	8,597.01
January 2047	0.00	10,246.87	8,236.59
February 2047	0.00	9,858.67	7,887.21
March 2047	0.00	9,480.06	7,548.57
April 2047	0.00	9,110.82	7,220.37
May 2047	0.00	8,750.75	6,902.33
June 2047	0.00	8,399.67	6,594.18
July 2047	0.00	8,057.37	6,295.65
August 2047	0.00	7,723.68	6,006.47
September 2047	0.00	7,398.39	5,726.39
October 2047	0.00	7,081.34	5,455.15
November 2047	0.00	6,772.35	5,192.52
December 2047	0.00	6,471.24	4,938.26
January 2048	0.00	6,177.84	4,692.14
February 2048	0.00	5,891.98	4,453.92
March 2048	0.00	5,613.50	4,223.41
April 2048	0.00	5,342.25	4,000.37
May 2048	0.00	5,078.05	3,784.60
June 2048	0.00	4,820.77	3,575.90
July 2048	0.00	4,570.24	3,374.08
August 2048	0.00	4,326.32	3,178.93
September 2048	0.00	4,088.87	2,990.28

Distribution Date	Classes LA and LZ (in the aggregate)	Class YA	Classes YB and YL (in the aggregate)
October 2048	\$ 0.00	\$ 3,857.74	\$ 2,807.93
November 2048	0.00	3,632.80	2,631.72
December 2048	0.00	3,413.90	2,461.46
January 2049	0.00	3,200.91	2,296.99
February 2049	0.00	2,993.71	2,138.15
March 2049	0.00	2,792.16	1,984.78
April 2049	0.00	2,596.14	1,836.71
May 2049	0.00	2,405.52	1,693.81
June 2049	0.00	2,220.19	1,555.91
July 2049	0.00	2,040.02	1,422.87
August 2049	0.00	1,864.91	1,294.57
September 2049	0.00	1,694.73	1,170.85
October 2049	0.00	1,529.38	1,051.59
November 2049	0.00	1,368.74	936.66
December 2049	0.00	1,212.72	825.92
January 2050	0.00	1,061.20	719.27
February 2050	0.00	914.08	616.57
March 2050	0.00	771.27	517.72
April 2050	0.00	632.66	422.59
May 2050	0.00	498.16	331.08
June 2050	0.00	367.68	243.09
July 2050	0.00	241.12	158.50
August 2050	0.00	118.39	77.22
September 2050 and thereafter	0.00	0.00	0.00

Distribution Date	Classes MD and NZ (in the aggregate)	Classes MJ and ZP (in the aggregate)	Classes MK and MZ (in the aggregate)
Initial Balance	\$50,125,000.00	\$89,770,000.00	\$5,998,000.00
November 2020	49,973,745.50	89,480,321.40	5,978,354.40
December 2020	49,804,468.99	89,158,155.85	5,952,187.66
January 2021	49,617,256.93	88,803,658.99	5,919,531.17
February 2021	49,412,212.00	88,417,017.04	5,880,430.22
March 2021	49,189,453.12	87,998,446.69	5,834,943.89
April 2021	48,949,115.32	87,548,195.00	5,783,145.05
May 2021	48,691,349.63	87,066,539.13	5,725,120.35
June 2021	48,416,322.98	86,553,786.17	5,660,970.01
July 2021	48,124,218.04	86,010,272.81	5,590,807.72
August 2021	47,815,233.04	85,436,365.01	5,514,760.46
September 2021	47,489,581.55	84,832,457.59	5,432,968.27
October 2021	47,147,492.29	84,198,973.87	5,345,584.00
November 2021	46,789,208.85	83,536,365.10	5,252,773.00
December 2021	46,414,989.43	82,845,110.01	5,154,712.80
January 2022	46,025,106.55	82,125,714.19	5,051,592.74
February 2022	45,619,846.72	81,378,709.49	4,943,613.59
March 2022	45,199,510.12	80,604,653.40	4,830,987.07
April 2022	44,764,410.21	79,804,128.28	4,713,935.46
May 2022	44,314,873.39	78,977,740.69	4,592,691.00
June 2022	43,851,238.54	78,126,120.57	4,467,495.50
July 2022	43,373,856.65	77,249,920.42	4,338,599.67
August 2022	42,883,090.37	76,349,814.47	4,206,262.55
September 2022	42,379,313.53	75,426,497.77	4,070,750.98
October 2022	41,862,910.67	74,480,685.27	3,932,338.90
November 2022	41,334,276.55	73,513,110.86	3,791,306.73
December 2022	40,793,815.67	72,524,526.40	3,647,940.67
January 2023	40,241,941.69	71,515,700.67	3,502,532.05
February 2023	39,679,076.95	70,487,418.36	3,355,376.58
March 2023	39,122,008.99	69,469,888.70	3,212,435.21
April 2023	38,570,680.42	68,462,999.54	3,073,627.75
May 2023	38,025,034.36	67,466,639.87	2,938,875.34
June 2023	37,485,014.51	66,480,699.79	2,808,100.35
July 2023	36,950,565.12	65,505,070.53	2,681,226.45
August 2023	36,421,630.95	64,539,644.44	2,558,178.56
September 2023	35,898,157.32	63,584,314.91	2,438,882.80
October 2023	35,380,090.08	62,638,976.47	2,323,266.53
November 2023	34,867,375.59	61,703,524.69	2,211,258.26
December 2023	34,359,960.73	60,777,856.19	2,102,787.73
January 2024	33,857,792.91	59,861,868.68	1,997,785.78
February 2024	33,360,820.03	58,955,460.87	1,896,184.43
March 2024	32,868,990.51	58,058,532.51	1,797,916.78
April 2024	32,382,253.27	57,170,984.37	1,702,917.05
May 2024	31,900,557.71	56,292,718.25	1,611,120.57
June 2024	31,423,853.74	55,423,636.90	1,522,463.71
July 2024	30,952,091.73	54,563,644.10	1,436,883.91
August 2024	30,485,222.56	53,712,644.58	1,354,319.64
September 2024	30,023,197.57	52,870,544.07	1,274,710.39

Distribution Date	Classes MD and NZ (in the aggregate)	Classes MJ and ZP (in the aggregate)	Classes MK and MZ (in the aggregate)
October 2024	\$29,565,968.58	\$52,037,249.23	\$1,197,996.67
November 2024	29,113,487.86	51,212,667.68	1,124,119.99
December 2024	28,665,708.17	50,396,707.97	1,053,022.79
January 2025	28,222,582.70	49,589,279.61	984,648.52
February 2025	27,784,065.12	48,790,292.99	918,941.56
March 2025	27,350,109.53	47,999,659.43	855,847.23
April 2025	26,920,670.49	47,217,291.17	795,311.75
May 2025	26,495,702.99	46,443,101.31	737,282.27
June 2025	26,075,162.46	45,677,003.86	681,706.81
July 2025	25,659,004.78	44,918,913.69	628,534.26
August 2025	25,247,186.22	44,168,746.54	577,714.42
September 2025	24,839,663.52	43,426,419.03	529,197.88
October 2025	24,436,393.81	42,691,848.59	482,936.11
November 2025	24,430,393.81	41,964,953.52	438,881.40
December 2025		41,245,652.94	396,986.83
	23,642,443.99	, ,	
January 2026	23,251,680.22	40,533,866.80	357,206.31
February 2026	22,865,002.13	39,829,515.86	319,494.49
March 2026	22,482,368.89	39,132,521.70	283,806.86
April 2026	22,103,740.09	38,442,806.68	250,099.62
May 2026	21,729,075.68	37,760,293.97	218,329.75
June 2026	21,358,336.05	37,084,907.52	188,454.96
July 2026	20,991,481.93	36,416,572.03	160,433.68
August 2026	20,628,474.45	35,755,213.02	134,225.09
September 2026	20,269,275.13	35,100,756.71	109,789.03
October 2026	19,913,845.84	34,453,130.12	87,086.07
November 2026	19,562,148.84	33,812,260.98	66,137.60
December 2026	19,214,146.76	33,181,909.36	48,210.91
January 2027	18,869,802.57	32,562,924.06	33,224.65
February 2027	18,529,079.62	31,955,104.72	21,099.15
March 2027	18,191,941.62	31,358,254.45	11,756.42
April 2027	17,858,352.62	30,772,179.77	5,120.09
May 2027	17,528,277.04	30,196,690.58	1,115.38
June 2027	17,201,679.62	29,631,600.05	0.00
July 2027	16,879,565.94	29,076,724.63	0.00
August 2027	16,563,277.55	28,531,883.91	0.00
September 2027	16,252,711.58	27,996,900.66	0.00
October 2027	15,947,766.90	27,471,600.70	0.00
November 2027	15,648,344.17	26,955,812.88	0.00
December 2027	15,354,345.76	26,449,369.04	0.00
January 2028	15,065,675.73	25,952,103.91	0.00
February 2028	14,782,239.84	25,463,855.14	0.00
March 2028	14,503,945.44	24,984,463.15	0.00
April 2028	14,230,701.54	24,513,771.19	0.00
May 2028	13,962,418.71	24,051,625.19	0.00
June 2028	13,699,009.07	23,597,873.79	0.00
July 2028	13,440,386.28	23,152,368.25	0.00
August 2028	13,186,465.50	22,714,962.44	0.00
September 2028	12,937,163.38	22,285,512.74	0.00

Distribution Date	Classes MD and NZ (in the aggregate)	Classes MJ and ZP (in the aggregate)	Classes MK and MZ (in the aggregate)
October 2028	\$12,692,397.99	\$21,863,878.07	\$ 0.00
November 2028	12,452,088.85	21,449,919.78	0.00
December 2028	12,216,156.90	21,043,501.64	0.00
January 2029	11,984,524.41	20,644,489.80	0.00
February 2029	11,757,115.05	20,252,752.76	0.00
March 2029	11,533,853.81	19,868,161.27	0.00
April 2029	11,314,666.96	19,490,588.38	0.00
May 2029	11,099,482.09	19,119,909.33	0.00
June 2029	10,888,228.04	18,756,001.54	0.00
July 2029	10,680,834.89	18,398,744.57	0.00
August 2029	10,477,233.95	18,048,020.08	0.00
September 2029	10,277,357.73	17,703,711.81	0.00
October 2029	10,081,139.89	17,365,705.51	0.00
November 2029	9,888,515.29	17,033,888.95	0.00
December 2029	9,699,419.91	16,708,151.84	0.00
January 2030	9,513,790.84	16,388,385.83	0.00
February 2030	9,331,566.28	16,074,484.45	0.00
March 2030	9,152,685.51	15,766,343.11	0.00
April 2030	8,977,088.88	15,463,859.05	0.00
May 2030	8,804,717.76	15,166,931.28	0.00
June 2030	8,635,514.57	14,875,460.61	0.00
July 2030	8,469,422.73	14,589,349.58	0.00
August 2030	8,306,386.64	14,308,502.41	0.00
September 2030	8,146,351.70	14,032,825.03	0.00
October 2030	7,989,264.24	13,762,225.00	0.00
November 2030	7,835,071.54	13,496,611.51	0.00
December 2030	7,683,721.80	13,235,895.34	0.00
January 2031	7,535,164.15	12,979,988.82	0.00
February 2031	7,389,348.58	12,728,805.83	0.00
March 2031	7,246,225.97	12,482,261.77	0.00
April 2031	7,105,748.07	12,240,273.50	0.00
May 2031	6,967,867.47	12,002,759.36	0.00
June 2031	6,832,537.60	11,769,639.11	0.00
July 2031	6,699,712.69	11,540,833.94	0.00
August 2031	6,569,347.78	11,316,266.39	0.00
September 2031	6,441,398.72	11,095,860.39	0.00
October 2031	6,315,822.11	10,879,541.19	0.00
November 2031	6,192,575.33	10,667,235.37	0.00
December 2031	6,071,616.50	10,458,870.79	0.00
January 2032	5,952,904.48	10,254,376.58	0.00
February 2032	5,836,398.85	10,053,683.11	0.00
March 2032	5,722,059.90	9,856,722.00	0.00
April 2032	5,609,848.63	9,663,426.04	0.00
May 2032	5,499,726.73	9,473,729.22	0.00
June 2032	5,391,656.53	9,287,566.71	0.00
July 2032	5,285,601.07	9,104,874.79	0.00
August 2032	5,181,524.02	8,925,590.88	0.00
September 2032	5,079,389.68	8,749,653.50	0.00

Distribution Date	Classes MD and NZ (in the aggregate)	Classes MJ and ZP (in the aggregate)	Classes MK and MZ (in the aggregate)
October 2032	\$ 4,979,162.99	\$ 8,577,002.27	\$ 0.00
November 2032	4,880,809.51	8,407,577.84	0.00
December 2032	4,784,295.41	8,241,321.93	0.00
January 2033	4,689,587.45	8,078,177.30	0.00
February 2033	4,596,652.98	7,918,087.69	0.00
March 2033	4,505,459.93	7,760,997.87	0.00
April 2033	4,415,976.79	7,606,853.54	0.00
May 2033	4,328,172.60	7,455,601.40	0.00
June 2033	4,242,016.97	7,307,189.08	0.00
July 2033	4,157,480.03	7,161,565.12	0.00
August 2033	4,074,532.45	7,018,678.99	0.00
September 2033	3,993,145.39	6,878,481.05	0.00
October 2033	3,913,290.57	6,740,922.53	0.00
November 2033	3,834,940.15	6,605,955.53	0.00
December 2033	3,758,066.85	6,473,533.00	0.00
January 2034	3,682,643.81	6,343,608.71	0.00
February 2034	3,608,644.68	6,216,137.27	0.00
March 2034	3,536,043.59	6,091,074.09	0.00
April 2034	3,464,815.08	5,968,375.34	0.00
May 2034	3,394,934.20	5,847,998.01	0.00
June 2034	3,326,376.40	5,729,899.83	0.00
July 2034	3,259,117.58	5,614,039.29	0.00
August 2034	3,193,134.06	5,500,375.60	0.00
September 2034	3,128,402.61	5,388,868.71	0.00
October 2034	3,064,900.37	5,279,479.29	0.00
November 2034	3,002,604.92	5,172,168.68	0.00
December 2034	2,941,494.21	5,066,898.93	0.00
January 2035	2,881,546.62	4,963,632.75	0.00
February 2035	2,822,740.87	4,862,333.54	0.00
March 2035	2,765,056.10	4,762,965.32	0.00
April 2035	2,708,471.78	4,665,492.76	0.00
May 2035	2,652,967.79	4,569,881.17	0.00
June 2035	2,598,524.33	4,476,096.47	0.00
July 2035	2,545,121.98	4,384,105.18	0.00
August 2035	2,492,741.65	4,293,874.43	0.00
September 2035	2,441,364.59	4,205,371.92	0.00
October 2035	2,390,972.39	4,118,565.96	0.00
November 2035	2,341,546.98	4,033,425.38	0.00
December 2035	2,293,070.59	3,949,919.59	0.00
January 2036	2,245,525.78	3,868,018.55	0.00
February 2036	2,198,895.43	3,787,692.75	0.00
March 2036	2,153,162.69	3,708,913.20	0.00
April 2036	2,108,311.06	3,631,651.45	0.00
May 2036	2,064,324.30	3,555,879.54	0.00
June 2036	2,021,186.48	3,481,570.01	0.00
July 2036	1,978,881.94	3,408,695.89	0.00
August 2036	1,937,395.31	3,337,230.71	0.00
September 2036	1,896,711.49	3,267,148.47	0.00

Distribution Date	Classes MD and NZ (in the aggregate)	Classes MJ and ZP (in the aggregate)	Classes MK and MZ (in the aggregate)
October 2036	\$ 1,856,815.66	\$ 3,198,423.61	\$ 0.00
November 2036	1,817,693.25	3,131,031.06	0.00
December 2036	1,779,329.96	3,064,946.17	0.00
January 2037	1,741,711.76	3,000,144.77	0.00
February 2037	1,704,824.84	2,936,603.09	0.00
March 2037	1,668,655.66	2,874,297.80	0.00
April 2037	1,633,190.93	2,813,205.99	0.00
May 2037	1,598,417.57	2,753,305.15	0.00
June 2037	1,564,322.77	2,694,573.19	0.00
July 2037	1,530,893.92	2,636,988.41	0.00
August 2037	1,498,118.66	2,580,529.50	0.00
September 2037	1,465,984.83	2,525,175.53	0.00
October 2037	1,434,480.51	2,470,905.95	0.00
November 2037	1,403,593.99	2,417,700.59	0.00
December 2037	1,373,313.75	2,365,539.63	0.00
January 2038	1,343,628.50	2,314,403.61	0.00
February 2038	1,314,527.16	2,264,273.41	0.00
March 2038	1,285,998.82	2,215,130.28	0.00
April 2038	1,258,032.79	2,166,955.80	0.00
May 2038	1,230,618.57	2,119,731.86	0.00
June 2038	1,203,745.84	2,073,440.70	0.00
July 2038	1,177,404.49	2,028,064.88	0.00
	1,177,404.49		0.00
August 2038	, , , , , , , , , , , , , , , , , , ,	1,983,587.27	
September 2038	1,126,276.27	1,939,991.04	0.00
October 2038	1,101,470.06	1,897,259.68	0.00
November 2038	1,077,156.51	1,855,376.98	0.00
December 2038	1,053,326.37	1,814,327.00	0.00
January 2039	1,029,970.57	1,774,094.12	0.00
February 2039	1,007,080.19	1,734,662.98	0.00
March 2039	984,646.48	1,696,018.51	0.00
April 2039	962,660.85	1,658,145.91	0.00
May 2039	941,114.87	1,621,030.64	0.00
June 2039	920,000.25	1,584,658.43	0.00
July 2039	899,308.86	1,549,015.29	0.00
August 2039	879,032.71	1,514,087.45	0.00
September 2039	859,163.97	1,479,861.40	0.00
October 2039	839,694.93	1,446,323.90	0.00
November 2039	820,618.05	1,413,461.91	0.00
December 2039	801,925.89	1,381,262.67	0.00
January 2040	783,611.18	1,349,713.62	0.00
February 2040	765,666.77	1,318,802.43	0.00
		1,288,517.03	0.00
March 2040	748,085.62	-,,	
	730,860.86	1,258,845.52	0.00
March 2040			
April 2040	730,860.86	1,258,845.52	0.00
April 2040	730,860.86 713,985.71 697,453.53	1,258,845.52 1,229,776.26 1,201,297.80	0.00 0.00
April 2040	730,860.86 713,985.71	1,258,845.52 1,229,776.26	0.00 0.00 0.00

Distribution Date	sses MD and NZ the aggregate)	Classes MJ and ZP (in the aggregate)	MK and MZ aggregate)
October 2040	\$ 634,625.78	\$ 1,093,070.25	\$ 0.00
November 2040	619,712.93	1,067,381.28	0.00
December 2040	605,105.67	1,042,218.70	0.00
January 2041	590,798.14	1,017,572.44	0.00
February 2041	576,784.61	993,432.64	0.00
March 2041	563,059.47	969,789.59	0.00
April 2041	549,617.17	946,633.80	0.00
May 2041	536,452.31	923,955.91	0.00
June 2041	523,559.55	901,746.75	0.00
July 2041	510,933.68	879,997.33	0.00
August 2041	498,569.56	858,698.81	0.00
September 2041	486,462.16	837,842.52	0.00
October 2041	474,606.54	817,419.94	0.00
November 2041	462,997.85	797,422.71	0.00
December 2041	451,631.32	777,842.65	0.00
January 2042	440,502.28	758,671.68	0.00
February 2042	429,606.15	739,901.92	0.00
March 2042	418,938.41	721,525.60	0.00
April 2042	408,494.66	703,535.11	0.00
May 2042	398,270.54	685,922.97	0.00
June 2042	388,261.81	668,681.86	0.00
July 2042	378,464.29	651,804.57	0.00
August 2042	368,873.86	635,284.03	0.00
September 2042	359,486.51	619,113.31	0.00
October 2042	350,298.28	603,285.61	0.00
November 2042	341,305.30	587,794.23	0.00
December 2042	332,503.76	572,632.63	0.00
January 2043	323,889.92	557,794.37	0.00
February 2043	315,460.12	543,273.13	0.00
March 2043	307,210.76	529,062.72	0.00
April 2043	299,138.30	515,157.04	0.00
May 2043	291,239.29	501,550.14	0.00
June 2043	283,510.31	488,236.15	0.00
July 2043	275,948.03	475,209.31	0.00
August 2043	268,549.18	462,464.00	0.00
September 2043	261,310.55	449,994.67	0.00
October 2043	254,228.96	437,795.88	0.00
November 2043	247,301.34	425,862.31	0.00
December 2043	240,524.64	414,188.72	0.00
January 2044	233,895.88	402,769.97	0.00
February 2044	227,412.14	391,601.03	0.00
March 2044	221,070.54	380,676.94	0.00
April 2044	214,868.27	369,992.87	0.00
May 2044	208,802.57	359,544.04	0.00
June 2044	202,870.71	349,325.78	0.00
July 2044	197,070.05	339,333.51	0.00
August 2044	191,397.96	329,562.73	0.00
September 2044	185,851.89	320,009.03	0.00

Distribution Date	sses MD and NZ the aggregate)	Clas	sses MJ and ZP the aggregate)	MK and MZ aggregate)
October 2044	\$ 180,429.32	\$	310,668.07	\$ 0.00
November 2044	175,127.79		301,535.61	0.00
December 2044	169,944.87		292,607.48	0.00
January 2045	164,878.19		283,879.58	0.00
February 2045	159,925.42		275,347.90	0.00
March 2045	155,084.27		267,008.50	0.00
April 2045	150,352.50		258,857.52	0.00
May 2045	145,727.92		250,891.17	0.00
June 2045	141,208.35		243,105.73	0.00
July 2045	136,791.68		235,497.55	0.00
August 2045	132,475.84		228,063.06	0.00
September 2045	128,258.79		220,798.73	0.00
October 2045	124,138.52		213,701.12	0.00
November 2045	120,113.08		206,766.86	0.00
December 2045	116,180.53		199,992.63	0.00
January 2046	112,339.00		193,375.17	0.00
February 2046	108,586.62		186,911.30	0.00
March 2046	104,921.59		180,597.89	0.00
April 2046	101,342.11		174,431.85	0.00
May 2046	97,846.44		168,410.20	0.00
June 2046	94,432.87		162,529.95	0.00
July 2046	91,099.72		156,788.23	0.00
August 2046	87,845.32		151,182.19	0.00
September 2046	84,668.08		145,709.04	0.00
October 2046	81,566.38		140,366.04	0.00
November 2046	78,538.69		135,150.51	0.00
December 2046	75,583.47		130,059.83	0.00
January 2047	72,699.22		125,091.40	0.00
February 2047	69,884.48		120,242.71	0.00
March 2047	67,137.80		115,511.26	0.00
April 2047	64,457.77		110,894.62	0.00
1	61,843.01		106,390.41	
May 2047	59,292.15		,	0.00
June 2047			101,996.28	0.00
July 2047	56,803.86		97,709.94	0.00
August 2047	54,376.84		93,529.13	0.00
September 2047	52,009.80		89,451.65	0.00
October 2047	49,701.48		85,475.33	0.00
November 2047	47,450.66		81,598.04	0.00
December 2047	45,256.11		77,817.70	0.00
January 2048	43,116.66		74,132.27	0.00
February 2048	41,031.15		70,539.75	0.00
March 2048	38,998.43		67,038.17	0.00
April 2048	37,017.38		63,625.61	0.00
May 2048	35,086.92		60,300.17	0.00
June 2048	33,205.96		57,060.01	0.00
July 2048	31,373.45		53,903.31	0.00
August 2048	29,588.35		50,828.30	0.00
September 2048	27,849.66		47,833.22	0.00

Distribution Date	Classes MD and NZ (in the aggregate)	Classes MJ and ZP (in the aggregate)	Classes MK and MZ (in the aggregate)
October 2048	\$ 26,156.38	\$ 44,916.36	\$ 0.00
November 2048	24,507.54	42,076.05	0.00
December 2048	22,902.18	39,310.64	0.00
January 2049	21,339.36	36,618.52	0.00
February 2049	19,818.17	33,998.11	0.00
March 2049	18,337.71	31,447.86	0.00
April 2049	16,897.09	28,966.25	0.00
May 2049	15,495.46	26,551.78	0.00
June 2049	14,131.96	24,203.01	0.00
July 2049	12,805.77	21,918.49	0.00
August 2049	11,516.06	19,696.83	0.00
September 2049	10,262.04	17,536.65	0.00
October 2049	9,042.93	15,436.61	0.00
November 2049	7,857.96	13,395.37	0.00
December 2049	6,706.38	11,411.65	0.00
January 2050	5,587.45	9,484.17	0.00
February 2050	4,500.45	7,611.70	0.00
March 2050	3,444.68	5,793.01	0.00
April 2050	2,419.43	4,026.91	0.00
May 2050	1,424.03	2,312.23	0.00
June 2050	457.81	647.81	0.00
July 2050 and thereafter	0.00	0.00	0.00

Underlying Certificates

Ginnie Mae I or II	l =	П	п	п	п	П	П	п
Percentage of Class in Trust	65.0521693567%	43.3450334149	100.0000000000	100.0000000000	100.0000000000	23.9363775441	37.5523876216	41.5718221312
Principal or Notional Balance in Trust	\$169,309,106	9,563,379	4,483,568	3,315,880	4,075,853	4,398,148	2,299,999	15,250,000
Underlying Certificate Factor(2)	0.36352310	1.00000000	0.33029602	0.44769064	1.00000000	0.99999995	0.99999995	0.71576324
Original Principal or Notional Balance of Class	\$715,956,308	22,063,379	13,574,396	7,406,634	4,075,853	18,374,330	6,124,777	51,250,888
Principal Type(1)	PT	SEQ	NTL(SC/PT)	NTL(SC/PT)	PACI	SUP/AD	SUP/AD	NTL(PAC/AD)
Final Distribution Date	February 2048	November 2049	August 2049	August 2049	June 2049	September 2050	September 2050	March 2050
Interest Type(1)	FIX	FIX	FIX/IO	FIX/IO	FIX	FIX	PO	FIX/IO
Interest Rate	3.00%	3.00	4.00	4.00	3.00	1.00	0.00	4.50
CUSIP	38380K2V6	38382A7N9	38382AIZ9	38382AKB0	38381WGG7	38382J3E4	38382JT48	38382DTP4
Issue Date	February 28, 2018	November 29, 2019	October 30, 2019	October 30, 2019	June 28, 2019	September 30, 2020	September 30, 2020	March 30, 2020
Class	PT	EL(3)	GI(4)	NI(5)(6)	Y	KC(3)	KO	CI(3)(5)
Series	2018-021	2019-136	2019-123	2019-123	2019-071	2020-138	2020-138	2020-032
Issuer	Ginnie Mae	Ginnie Mae	Ginnie Mae	Ginnie Mae	Ginnie Mae	Ginnie Mae	Ginnie Mae	Ginnie Mae
Trust Asset Group or Subgroup	2	6A	(B) (C	Q9	(E	6F	99

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

Underlying Certificate Factors are as of October 2020. <u>3</u> 2 2

MX Class.

Class GI is backed by a previously issued Ginnie Mae REMIC certificate, as outlined below:

• REMIC Class GI from 2019-103

More than 10% of the Mortgage Loans underlying this Underlying Certificate may be higher balance Mortgage Loans. See "Risk Factors" in this Supplement. Θ

Class NI is backed by a previously issued Ginnie Mae REMIC certificate, as outlined below: 9

• REMIC Class NI from 2019-103



\$1,339,862,766

Government National Mortgage Association

GINNIE MAE®

Guaranteed REMIC
Pass-Through Securities
and MX Securities
Ginnie Mae REMIC Trust 2020-148

OFFERING CIRCULAR SUPPLEMENT October 26, 2020

Citigroup Great Pacific Securities