

\$718,456,091 Government National Mortgage Association GINNIE MAE®

Guaranteed REMIC Pass-Through Securities and MX Securities Ginnie Mae REMIC Trust 2019-111

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 September 30, 2019.

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 B(1)	\$ 7,637,625 6,074,645	(5) 5.0%	SC/PT NTL(SC/PT)	WAC/DLY FIX/IO	38381YTP9 38381YTQ7	March 2045 March 2045
Security Group 2 M(1)	8,182,628	4.0	SC/PT	SC/PT FIX 38381YL		November 2048
DA	20,428,000 5,805,083 6,809,333	2.0 3.5 4.5	SC/PAC/AD SC/SUP NTL(SC/PAC/AD)	FIX FIX/Z FIX/IO	38381YLB8 38381YLC6 38381YLD4	April 2048 April 2048 April 2048
Security Group 4 LA(1) LP LZ	38,870,000 280,000 10,850,000	3.5 3.5 3.5	PAC/AD PAC/AD SUP	PAC/AD FIX 38381YLF9		August 2049 September 2049 September 2049
Security Group 5	27,050,881	5.0	NTL(SC/PT)	FIX/IO	38381YLH5	April 2049
Security Group 6 FA PA PZ SA ZP	33,907,416 84,000,000 2,600,000 33,907,416 15,122,249	(5) 2.5 2.5 (5) 2.5	PT PAC/AD PAC/AD NTL(PT) SUP	FLT FIX FIX/Z INV/IO FIX/Z	38381YLJ1 38381YLK8 38381YLL6 38381YLM4 38381YLN2	September 2049 November 2048 September 2049 September 2049 September 2049
Security Group 7 KF	130,000,000 58,288,614 71,711,386	(5) (5) (5)	PT NTL(PT) NTL(PT)	FLT INV/IO INV/IO	38381YLP7 38381YLQ5 38381YLR3	September 2049 September 2049 September 2049
Security Group 8	23,912,894	3.0	NTL(SC/PT)	FIX/IO	38381YLS1	July 2046
Security Group 9 IB(1)	29,925,121 11,529,188	3.5 3.5	NTL(SC/PT) NTL(SC/PT)	FIX/IO FIX/IO	38381YLT9 38381YLU6	February 2048 January 2048
Security Group 10 IE	17,165,697	4.0	NTL(SC/PT)	FIX/IO	38381YLV4	May 2049
Security Group 11	12,902,437	3.5	NTL(SC/PT)	FIX/IO	38381YLW2	May 2045
Security Group 12 FT IT ST ST T(1) TP TQ TZ ZT ZT TO TO TT TT TT	18,047,607 131,776 18,047,607 9,046,548 439,254 1,316,763 25,000 1,000	(5) 5.0 (5) 2.5 2.5 2.0 2.5 2.0	PT NTL(SUP) NTL(PT) PAC/AD SUP SUP/AD PAC SUP	FLT FIX/IO INV/IO FIX FIX FIX FIX/Z FIX/Z	38381YLX0 38381YLY8 38381YLZ5 38381YMA9 38381YMB7 38381YMC5 38381YMD3 38381YME1	September 2049 September 2049 September 2049 September 2049 January 2048 September 2049 September 2049 September 2049
Security Group 13 FH HL(1) SH U(1) UL(1) WA WF WI WK WK WS ZW	44,050,682 716,079 44,050,682 34,337,992 2,090,165 2,071,933 1,090,414 537,168 2,107,477 1,635,622 1,000	(5) 2.5 (5) 2.5 2.5 2.5 (5) 4.5 2.0 (5) 2.0	PT PAC NTL(PT) PAC PAC SUP SUP/AD NTL(SUP) SUP/AD SUP/AD SUP/AD SUP/AD SUP/AD	FLT FIX INV/IO FIX FIX FIX FIX FLT FIX/IO FIX INV FIX/Z	38381YMF8 38381YMG6 38381YMH4 38381YMJ0 38381YMK7 38381YML5 38381YML3 38381YMM3 38381YMP6 38381YMP6 38381YMP4 38381YMP2	September 2049 September 2049 September 2049 November 2048 July 2049 February 2048 September 2049 September 2049 September 2049 September 2049 September 2049 September 2049

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Wells Fargo Securities

Tribal Capital Markets

Class of REMIC Securities	Original Principal Balance(2)	Interest Rate	Principal Type(3)	Interest Type(3)	CUSIP Number	Final Distribution Date(4)	
Security Group 14							
FJ(1)	\$ 17.041.147	(5)	SC/PT	FLT 38381YMS0		November 2032	
JA(1)	4,097,040	3.0%	SC/PT	FIX	38381YMT8	September 2036	
JB(1)	2,840,192	3.0	SC/PT	FIX	38381YMU5	November 2032	
JF(1)	24,582,251	(5)	SC/PT	FLT	38381YMV3	September 2036	
JS	24,582,251	(5)	NTL(SC/PT)	INV/IO	38381YMW1	September 2036	
SJ	17,041,147	(5)	NTL(SC/PT)	INV/IO	38381YMX9	November 2032	
Security Group 15							
BA(1)	5,247,796	3.0	SC/PAC/AD	FIX	38381YMY7	April 2049	
BL(1)	23,184,323	3.0	SC/PAC/AD	FIX	38381YMZ4	April 2049	
BZ	6,754,489	3.0	SC/SUP	FIX/Z	38381YNA8	April 2049	
Security Group 16							
AB	55,290,478	2.0	SC/PT	FIX	38381YNB6	January 2049	
AF	27,645,239	(5)	SC/PT	FLT	38381YNC4	January 2049	
AS	27,645,239	(5)	NTL(SC/PT)	INV/IO	38381YND2	January 2049	
Security Group 17							
AP	32,277,000	3.5	PAC/AD	FIX	38381YNE0	September 2049	
FB	18,795,312	(5)	PT	FLT	38381YNF7	September 2049	
SB	18,795,312	(5)	NTL(PT)	INV/IO	38381YNG5	September 2049	
ZB	5,313,625	3.5	SUP	FIX/Z	38381YNH3	September 2049	
Security Group 18							
NA(1)	16,596,000	3.5	SC/SCH/AD	FIX	38381YNJ9	May 2048	
ZN	4,130,662	3.5	SC/SUP	FIX/Z	38381YNK6	May 2048	
Residual					İ		
RR	0	0.0	NPR	NPR	38381YNL4	September 2049	

- (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.
- $(4) \quad See \ ``Yield, Maturity \ and \ Prepayment \ Considerations -- Final \ Distribution \ Date" \ in this \ Supplement.$
- (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 1, 2, 3, 5, 8, 9, 10, 11, 14, 15, 16 and 18 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.

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.

TABLE OF CONTENTS

Page		Page
S-3	ERISA Matters	S-47
S-11	Legal Investment Considerations	S-47
S-14	Plan of Distribution	S-48
S-16	Increase in Size	S-48
S-16	Legal Matters	S-48
	Schedule I: Available Combinations	S-I-1
S-21	Schedule II: Scheduled Principal	
	Balances	S-II-1
S-44	Exhibit A: Underlying Certificates	A-1
	S-11 S-14 S-16 S-16 S-21	S-3 ERISA Matters S-11 Legal Investment Considerations S-14 Plan of Distribution S-16 Increase in Size S-16 Legal Matters Schedule I: Available Combinations S-21 Schedule II: Scheduled Principal Balances

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: Wells Fargo Bank, N.A.

Co-Sponsor: Tribal Capital Markets, LLC **Trustee:** U.S. Bank National Association

Tax Administrator: The Trustee **Closing Date:** September 30, 2019

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 October 2019.

Trust Assets:

Trust Asset Group or Subgroup ⁽²⁾	Trust Asset Type	Certificate Rate	Original Term To Maturity (in years)
1A	Underlying Certificates	(1)	(1)
1B	Underlying Certificate	(1)	(1)
2	Underlying Certificates	(1)	(1)
3	Underlying Certificate	(1)	(1)
4	Ginnie Mae II	3.5%	30
5	Underlying Certificates	(1)	(1)
6	Ginnie Mae II	3.5%	30
7A	Ginnie Mae II	4.0%	30
7B	Ginnie Mae II	4.0%	30
8	Underlying Certificates	(1)	(1)
9A	Underlying Certificates	(1)	(1)
9B	Underlying Certificates	(1)	(1)
10	Underlying Certificates	(1)	(1)
11	Underlying Certificates	(1)	(1)
12	Ginnie Mae II	5.0%	30
13	Ginnie Mae II	4.5%	30
14A	Underlying Certificates	(1)	(1)
14B	Underlying Certificates	(1)	(1)
15	Underlying Certificates	(1)	(1)
16	Underlying Certificate	(1)	(1)
17A	Ginnie Mae I	4.5%	30
17B	Ginnie Mae II	4.5%	30
18	Underlying Certificate	(1)	(1)

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

⁽²⁾ The Group 1, 7, 9, 14 and 17 Trust Assets consist of subgroups, Subgroup 1A, Subgroup 1B, Subgroup 7A, Subgroup 7B, Subgroup 9A, Subgroup 9B, Subgroup 14A, Subgroup 14B, Subgroup 17A and Subgroup 17B (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 4, 6, 7, 12, 13 and 17 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 4 Trust Assets \$ 50,000,000 ⁽³⁾	357	2	3.991%
Group 6 Trust Assets \$135,629,665	353	3	3.994%
Subgroup 7A Trust Assets \$ 71,711,386	358	2	4.430%
Subgroup 7B Trust Assets \$ 58,288,614	358	2	4.510%
Group 12 Trust Assets \$ 28,876,172	359	1	5.335%
Group 13 Trust Assets \$ 88,101,364	359	1	4.915%
Subgroup 17A Trust Assets \$ 3,354,845	333	26	5.000%
\$ 31,138,305 \$ 21,892,787	350 325	7 32	4.962% 4.882%
\$ 53,031,092 			

⁽¹⁾ As of September 1, 2019.

The actual remaining terms to maturity, loan ages and, in the case of the Group 4, 6, 7, 12 and 13 and Subgroup 17B Trust Assets, Mortgage Rates of many of the Mortgage Loans underlying the Group 4, 6, 7, 12, 13 and 17 Trust Assets will differ from the weighted averages shown above, perhaps significantly. See "The Trust Assets — The Mortgage Loans" in this Supplement.

Characteristics of the Mortgage Loans Underlying the Group 1, 2, 3, 5, 8, 9, 10, 11, 14, 15, 16 and 18 Trust Assets: See Exhibit A to this Supplement for certain information regarding the characteristics of the Mortgage Loans included in the related Underlying Trusts.

⁽²⁾ The Mortgage Loans underlying the Group 4, 6, 7, 12 and 13 and Subgroup 17B Trust Assets may bear interest at rates ranging from 0.25% to 1.50% per annum above the related Certificate Rate.

⁽³⁾ More than 10% of the Mortgage Loans underlying the Group 4 Trust Assets may be higher balance Mortgage Loans. *See "Risk Factors" in this Supplement.*

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

Modification and Exchange: If you own exchangeable Securities you will be able, upon notice and payment of an exchange fee, to exchange them for a proportionate interest in the related Securities shown on Schedule I to this Supplement. Under certain circumstances, Class A 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: Class A and each Class that constitutes an Interest Only or Inverse Floating Rate Class. *See "Description of the Securities — Form of Securities" in this Supplement.*

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

The Floating Rate and Inverse Floating Rate Classes will bear interest at per annum rates based on 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
AF	LIBOR + 0.35%	2.64800000%	0.35%	6.50000000%	0	0.00%
AS	6.15% - LIBOR	3.852000000%	0.00%	6.15000000%	0	6.15%
FA	LIBOR + 0.45%	2.50700000%	0.45%	6.500000000%	0	0.00%
FB	LIBOR + 0.45%	2.48000000%	0.45%	6.500000000%	0	0.00%
FH	LIBOR + 0.45%	2.48500000%	0.45%	6.500000000%	0	0.00%
FJ	LIBOR + 0.40%	2.60000000%	0.40%	6.500000000%	0	0.00%
FK	LIBOR + 0.40%	2.60000000%	0.40%	6.500000000%	0	0.00%
FT	LIBOR + 0.45%	2.48900000%	0.45%	6.500000000%	0	0.00%
JF	LIBOR + 0.40%	2.60000000%	0.40%	6.500000000%	0	0.00%
JS	6.10% - LIBOR	3.900000000%	0.00%	6.100000000%	0	6.10%
KF	LIBOR + 0.57%	2.62725000%	0.57%	4.00000000%	0	0.00%
KS	3.43% - LIBOR	1.37275000%	0.00%	3.430000000%	0	3.43%
SA	6.05% - LIBOR	3.99300000%	0.00%	6.05000000%	0	6.05%
SB	6.05% - LIBOR	4.02000000%	0.00%	6.050000000%	0	6.05%
SH	6.05% - LIBOR	4.01500000%	0.00%	6.050000000%	0	6.05%
SJ	6.10% - LIBOR	3.900000000%	0.00%	6.10000000%	0	6.10%
SK	3.43% - LIBOR	1.37275000%	0.00%	3.430000000%	0	3.43%
ST	6.05% - LIBOR	4.01100000%	0.00%	6.05000000%	0	6.05%
WF	LIBOR + 0.85%	2.88500000%	0.85%	5.00000000%	0	0.00%
WS	$2.76666619\% - (LIBOR \times 0.66666626)$	1.41000035%	0.00%	2.76666619%	0	4.15%

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

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

Each of Classes A and B is a Weighted Average Coupon Class. Class A 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 set forth under "Description of Securities — Modification and Exchange" in this Supplement. The approximate initial Interest Rate for Class A, which will be in effect for the first Accrual Period, is 5.80327%.

Class B will accrue interest during each Accrual Period at a per annum Interest Rate equal to the Weighted Average Certificate Rate ("WACR") of the Subgroup 1A Trust Assets for that Accrual Period. The approximate initial Interest Rate for Class B, which will be in effect for the first Accrual Period, is 1.82648%.

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

SECURITY GROUP 1

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

SECURITY GROUP 2

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

SECURITY GROUP 3

The Group 3 Principal Distribution Amount and the DZ Accrual Amount will be allocated in the following order of priority:

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

SECURITY GROUP 4

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

- 1. Sequentially, to LA and LP, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
 - 2. To LZ, until retired
- 3. Sequentially, to LA and LP, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired

SECURITY GROUP 6

The Group 6 Principal Distribution Amount, the PZ Accrual Amount and the ZP Accrual Amount will be allocated as follows:

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

- 2. To ZP, until retired
- The Group 6 Principal Distribution Amount, concurrently, as follows:
 - 1. 24.9999998157% to FA, until retired
 - 2. 75.0000001843% in the following order of priority:
 - a. Sequentially, to PA and PZ, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
 - b. To ZP, until retired
 - c. Sequentially, to PA and PZ, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired

SECURITY GROUP 7

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

SECURITY GROUP 12

The Group 12 Principal Distribution Amount, the TZ Accrual Amount and the ZT Accrual Amount will be allocated as follows:

- The TZ Accrual Amount, sequentially, to T and TZ, in that order, until retired
- The ZT Accrual Amount, sequentially, to TQ and ZT, in that order, until retired
- The Group 12 Principal Distribution Amount, concurrently, as follows:
 - 1. 62.4999982685% to FT, until retired
 - 2. 37.5000017315% in the following order of priority:
 - a. Sequentially, to T and TZ, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
 - b. Sequentially, to TP, TQ and ZT, in that order, until retired
 - c. Sequentially, to T and TZ, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired

SECURITY GROUP 13

The Group 13 Principal Distribution Amount and the ZW Accrual Amount will be allocated as follows:

- The ZW Accrual Amount in the following order of priority:
 - 1. Concurrently, to WF, WK and WS, pro rata, until retired
 - 2. To ZW, until retired
- The Group 13 Principal Distribution Amount, concurrently, as follows:
 - 1. 50% to FH, until retired
 - 2. 50% in the following order of priority:
 - a. Sequentially, to U, UL and HL, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date

- b. To WA, until retired
- c. Concurrently, to WF, WK and WS, pro rata, until retired
- d. To ZW, until retired
- e. Sequentially, to U, UL and HL, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired

SECURITY GROUP 14

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

- The Subgroup 14A Principal Distribution Amount, concurrently, to JA and JF, pro rata, until retired
- The Subgroup 14B Principal Distribution Amount, concurrently, to FJ and JB, pro rata, until retired

SECURITY GROUP 15

The Group 15 Principal Distribution Amount and the BZ Accrual Amount will be allocated in the following order of priority:

- 1. Sequentially, to BA and BL, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
 - 2. To BZ, until retired
- 3. Sequentially, to BA and BL, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired

SECURITY GROUP 16

The Group 16 Principal Distribution Amount will be allocated, concurrently, to AB and AF, pro rata, until retired

SECURITY GROUP 17

The Group 17 Principal Distribution Amount and the ZB Accrual Amount will be allocated as follows:

- The ZB Accrual Amount in the following order of priority:
 - 1. To AP, until reduced to its Scheduled Principal Balance for that Distribution Date
 - 2. To ZB, until retired
- The Group 17 Principal Distribution Amount, concurrently, as follows:
 - 1. 33.3333327422% to FB, until retired
 - 2. 66.666672578% in the following order of priority:
 - a. To AP, until reduced to its Scheduled Principal Balance for that Distribution Date
 - b. To ZB, until retired
 - c. To AP, without regard to its Scheduled Principal Balance, until retired

SECURITY GROUP 18

The Group 18 Principal Distribution Amount and the ZN Accrual Amount will be allocated in the following order of priority:

- 1. To NA, until reduced to its Scheduled Principal Balance for that Distribution Date
- 2. To ZN, until retired
- 3. To NA, without regard to its 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:

	Structuring Ranges
PAC Classes	
AP	200% PSA through 325% PSA
BA and BL (in the aggregate)	300% PSA through 525% PSA
DA	300% PSA through 500% PSA
HL, U and UL (in the aggregate)	225% PSA through 350% PSA
LA and LP (in the aggregate)	125% PSA through 300% PSA
PA and PZ (in the aggregate)	125% PSA through 225% PSA
T and TZ (in the aggregate)	250% PSA through 390% PSA
Scheduled Class	
NA	315% PSA through 465% PSA*

^{*} No initial Effective Range.

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 or Subgroup indicated:

Class	Original Class Notional Balance	Represents Approximately
AS	\$27,645,239	100% of AF (SC/PT Class)
BI	5,796,080	25% of BL (SC/PAC/AD Class)
HI	12,142,719	33.333333333% of U and UL (in the aggregate) (PAC Classes)
I	6,074,645	100% of the Subgroup 1B Trust Assets
IA	23,912,894	100% of the Group 8 Trust Assets
IB	29,925,121	100% of the Subgroup 9A Trust Assets
IC	41,454,309	100% of the Group 9 Trust Assets
ID	6,809,333	33.3333333333% of DA (SC/PAC/AD Class)
IE	17,165,697	100% of the Group 10 Trust Assets
IG	12,902,437	100% of the Group 11 Trust Assets

	Outstant Class	
Class	Original Class Notional Balance	Represents Approximately
IO	\$27,050,881	100% of the Group 5 Trust Assets
IP	11,529,188	100% of the Subgroup 9B Trust Assets
IT	\$ 131,676	10% of TQ (SUP/AD Class)
	100	10% of ZT (SUP Class)
	\$ 131,776	
JS	\$24,582,251	100% of JF (SC/PT Class)
KS	58,288,614	100% of the Subgroup 7B Trust Assets
LI	16,658,571	42.8571428571% of LA (PAC/AD Class)
	3,068,485	37.5% of M (SC/PT Class)
NI	5,532,000	33.3333333333% of NA (SC/SCH/AD Class)
SA	33,907,416	100% of FA (PT Class)
SB	18,795,312	100% of FB (PT Class)
SH	44,050,682	100% of FH (PT Class)
SJ	17,041,147	100% of FJ (SC/PT Class)
SK	71,711,386	100% of the Subgroup 7A Trust Assets
ST	18,047,607	100% of FT (PT Class)
TI	2,713,964	30% of T (PAC/AD Class)
UI	11,445,997	33.33333333333% of U (PAC Class)
WI		11.1111111111% of WF, WK and WS (in the aggregate) (SUP/AD Classes)
	111	11.111111111111 of ZW (SUP Class)
	\$ 537,168	
	Ψ /3/,100	

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

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

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

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

• you bought your securities at a discount and principal payments are slower than you expected.

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

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

The level 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 your securities may be lower than you expect. Lower levels of LIBOR will generally reduce the yield on 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 and scheduled classes, the related support class or 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 related PAC and scheduled classes for that distribution date, this excess will be distributed to the related support class or classes.

The rate of payments on the underlying certificates will directly affect the rate of payments on the group 1, 2, 3, 5, 8, 9, 10, 11, 14, 15, 16 and 18 securities. The underlying certificates will be sensitive in varying degrees to:

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

As described in the related underlying certificate disclosure documents, certain of the underlying

certificates included in trust asset groups 1 and 2 are not entitled to distributions of principal (other than from any applicable accrual amount) until certain classes of the related underlying series have been retired and, accordingly, distributions of principal of the related mortgage loans for extended periods may be applied to the distribution of principal of such classes of certificates having priority over these underlying certificates. Accordingly, these underlying certificates may receive no principal distributions for extended periods of time.

In addition, the principal entitlements of and the reductions in notional balance of certain of the underlying certificates included in trust asset groups 1, 2, 3, 5, 8, 9, 14, 15 and 16 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 certain of the underlying certificates included in trust asset groups 1, 8, 9, 11, 14 and 18 are also previously issued certificates that represent beneficial ownership interests in separate trusts. 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 1, 8, 9, 11, 14 and 18 securities. You should read the related underlying certificate disclosure documents, including the risk factors contained therein, to understand the payments on and related risks of the previously issued certificates backing these underlying certificates.

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

Up to 10% of the mortgage loans underlying the group 1, 3, 5, 6, 7, 12, 13, 14, 16, 17 and 18 trust assets and up to 100% of the mortgage loans underlying the group 2, 4, 8, 9, 10, 11 and 15 trust assets may be bigber 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 vields 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, or elimination of, LIBOR could adversely affect your investment in the securities. On July 27, 2017, the U.K.-based Financial Conduct Authority (the announced its intention to cease sustaining LIBOR after 2021. The FCA indicated that it does not intend to sustain LIBOR through using its influence or legal powers beyond that date. It is possible that the ICE Benchmark Administration ("IBA") and the reference banks could continue to produce LIBOR on the current basis after 2021, if they are willing and able to do so, but it cannot be assured that LIBOR will survive in its current form, or at all. In the event IBA ceases to set or publish a rate for LIBOR, the Trustee shall propose a new index for approval by Ginnie Mae based upon comparable information and methodology. The Trustee shall propose an

alternative index only if it receives an opinion of counsel that the selection of such alternative index will not cause the related Trust REMIC or REMICs to lose their classification as REMICs for United States federal income tax purposes. The effect of the FCA's decision not to sustain LIBOR, or, if changes are ultimately made to LIBOR, the effect of those changes, cannot be predicted. In addition, it cannot be predicted what alternative index would be chosen should this occur. If LIBOR in its current form does not survive or if an alternative index is chosen, the market value and/or liquidity of securities with distributions or interest rates based on LIBOR could be adversely affected.

The securities may not be a suitable investment for you. The securities, especially the group 1, 2, 3, 5, 8, 9, 10, 11, 14, 15, 16 and 18 securities and, in particular, class A and the support, interest only, inverse floating rate, accrual and residual classes, are not suitable investments for all investors.

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

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

The secondary markets for mortgage-related securities have experienced periods of illiquidity

and can be expected to do so in the future. Illiquidity can have a severely adverse effect on the prices of classes that are especially sensitive to prepayment or interest rate risk or that have been structured to meet the investment requirements of limited categories of investors.

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

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

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

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

THE TRUST ASSETS

General

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

The Trust MBS (Groups 4, 6, 7, 12, 13 and 17)

The Subgroup 17A Trust Assets are either:

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

Each Mortgage Loan underlying a Ginnie Mae I MBS Certificate bears interest at a Mortgage Rate 0.50% per annum greater than the related Certificate Rate. The difference between the Mortgage Rate and the Certificate Rate is used to pay the related servicers of the Mortgage Loans a monthly servicing fee and Ginnie Mae a fee for its guaranty of the Ginnie Mae I MBS Certificate of 0.44% per annum and 0.06% per annum, respectively, of the outstanding principal balance of the Mortgage Loan.

The Group 4, 6, 7, 12 and 13 and Subgroup 17B Trust Assets are either:

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

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

The Underlying Certificates (Groups 1, 2, 3, 5, 8, 9, 10, 11, 14, 15, 16 and 18)

The Group 1, 2, 3, 5, 8, 9, 10, 11, 14, 15, 16 and 18 Trust Assets are Underlying Certificates that represent beneficial ownership interests in one or more separate trusts, the assets of which evidence direct or indirect beneficial ownership interests in certain Ginnie Mae Certificates. Each Underlying Certificate constitutes all or a portion of a class of a separate Series of certificates described in the related Underlying Certificate Disclosure Document. Each Underlying Certificate Disclosure Document may be obtained from the Information Agent as described under "Available Information" in this Supplement. 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 table also sets forth information regarding approximate weighted average remaining terms to maturity, loan ages and mortgage rates of the Mortgage Loans underlying the related Ginnie Mae Certificates.

The Mortgage Loans

The Mortgage Loans underlying the Group 4, 6, 7, 12, 13 and 17 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 4, 6, 7, 12, 13 and 17 Trust Assets" and the general characteristics described in the Base Offering Circular. The Mortgage Loans underlying the Underlying Certificates are expected to have, on a weighted average basis, the characteristics set forth in Exhibit A to this Supplement. 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, in the case of the Group 4, 6, 7, 12 and 13 and Subgroup 17B Trust Assets, Mortgage Rates of the Mortgage Loans underlying the Trust MBS. However, the actual remaining terms to maturity, loan ages and, in the case of the Group 4, 6, 7, 12 and 13 and Subgroup 17B Trust Assets, 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	From the 20th day of the month preceding the month of the related Distribution
Inverse Floating Rate Classes	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 — ICE 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.

Weighted Average Coupon Classes

The Weighted Average Coupon Classes will bear interest at per annum Interest Rates 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 from Ginnie Mae's website or by calling the Information Agent at (800) 234-GNMA.

Accrual Classes

Each of Classes BZ, DZ, LZ, PZ, TZ, ZB, ZN, ZP, ZT and ZW 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 Ginnie Mae's website.

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 2, 3, 5, 7, 8, 12 and 13, 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 2, 3, 5, 7, 8, 12 and 13, 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 Combination 1, Class A 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 such MX Class will equal or exceed 1,200% per annum for any Accrual Period, or (2) the Class Principal Balance of 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 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.

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, Massachusetts, 02110, Attention: Ginnie Mae REMIC Trust 2019-111. 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 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 1, 2, 3, 5, 8, 9, 10, 11, 14, 15, 16 and 18 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 1, 2, 3, 5, 8, 9, 10, 11, 14, 15, 16 and 18 securities*" in this Supplement.

Accretion Directed Classes

Classes AP, BA, BL, DA, LA, LP, NA, PA, PZ, T, TQ, WF, WK and WS are Accretion Directed Classes. The related Accrual Amounts will be applied to making principal distributions on those Classes as described in this Supplement. Class ID is a Notional Class whose Class Notional Balance is determined by reference to the Class Principal Balance of Class DA shown under "Terms Sheet — Notional Classes" in this Supplement.

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

Securities that Receive Principal on the Basis of Schedules

As described in this Supplement, each PAC and Scheduled 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:

	Initial Effective Ranges
PAC Classes	
AP	200% PSA through 325% PSA
BA and BL (in the aggregate)	300% PSA through 525% PSA
DA	300% PSA through 500% PSA
HL, U and UL (in the aggregate)	225% PSA through 350% PSA
LA and LP (in the aggregate)	125% PSA through 300% PSA
PA and PZ (in the aggregate)	125% PSA through 225% PSA
T and TZ (in the aggregate)	250% PSA through 390% PSA
Scheduled Class	
NA	None

• The principal payment stability of the PAC Classes will be supported by the related Support Class or Classes.

• The principal payment stability of the Scheduled Class will be supported by the related Support Class.

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 or Scheduled 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 4, 6, 7, 12, 13 and 17 Trust Assets have the assumed characteristics shown under "Assumed Characteristics of the Mortgage Loans Underlying the Group 4, 6,

- 7, 12, 13 and 17 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 4, 6, 7, 12, 13 or 17 Trust Asset is assumed to have an original and a remaining term to maturity of 360 months and each Mortgage Loan underlying a Group 4, 6, 7, 12 or 13 or Subgroup 17B Trust Asset is assumed to have 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 October 2019.
 - 4. A termination of the Trust or the Underlying Trusts does not occur.
 - 5. The Closing Date for the Securities is September 30, 2019.
- 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 out-

standing 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

		Cla	sses A an	d B				Class I		
Distribution Date	0%	100%	250%	350%	500%	0%	100%	250%	350%	500%
Initial Percent	100	100	100	100	100	10	0 100	100	100	100
September 2020	99	98	97	97	95	9	8 90	79	72	61
September 2021	98	97	95	94	86	9	5 79	56	42	22
September 2022	98	96	93	84	69	9	2 68	36	18	0
September 2023	97	94	85	72	57	8	9 57	19	0	0
September 2024	96	93	75	62	38	8	6 48	5	0	0
September 2025	95	92	67	45	24	8	3 39	0	0	0
September 2026	94	88	56	32	13	8	0 30	0	0	0
September 2027	93	82	43	22	8	7	6 22	0	0	0
September 2028	91	76	33	15	5	7	2 15	0	0	0
September 2029	90	71	25	11	3	6	8 8	0	0	0
September 2030	89	60	18	8	1	6	4 1	0	0	0
September 2031	87	51	13	5	1		9 0	0	0	0
September 2032	83	42	9	3	0	5	5 0	0	0	0
September 2033	80	35	6	2	0	5	0 0	0	0	0
September 2034	75	28	4	1	0	4	4 0	0	0	0
September 2035	70	20	3	1	0		9 0	0	0	0
September 2036	59	15	2	1	0	3	3 0	0	0	0
September 2037	47	10	1	0	0	2		0	0	0
September 2038	35	6	1	0	0	2	0 0	0	0	0
September 2039	20	4	1	0	0	1	3 0	0	0	0
September 2040	8	2	0	0	0		6 0	0	0	0
September 2041	3	1	0	0	0		0 0	0	0	0
September 2042	0	0	0	0	0		0 0	0	0	0
September 2043	0	0	0	0	0		0 0	0	0	0
September 2044	0	0	0	0	0		0 0	0	0	0
September 2045	0	0	0	0	0		0 0	0	0	0
Weighted Average										
Life (years)	16.6	12.1	7.8	6.1	4.5	13.	0 5.1	2.4	1.8	1.3

Security Group 2 PSA Prepayment Assumption Rates

		Classes M, MA	, MI, MK, MT	T, MU and M	w
Distribution Date	0%	100%	250%	350%	500%
Initial Percent	100	100	100	100	100
September 2020	97	97	97	97	97
September 2021	95	95	95	95	95
September 2022	92	92	92	92	92
September 2023	89	89	89	89	84
September 2024	86	86	86	86	69
September 2025	83	83	83	66	56
September 2026	80	80	77	63	28
September 2027	76	76	59	59	19
September 2028	73	73	56	37	13
September 2029	69	69	52	28	9
September 2030	65	65	48	21	6
September 2031	60	60	38	16	4
September 2032	57	46	31	12	3 2
September 2033	53	44	25	9 7	
September 2034	48	44	20		1
September 2035	44	44	16	5	1
September 2036	44	44	13	4	1
September 2037	44	44	10	3	0
September 2038	44	44	8	2	0
September 2039	44	44	6	2	0
September 2040	44	39	5	1	0
September 2041	44	32	4	1	0
September 2042	44	26	3	1	0
September 2043	44	21	2	0	0
September 2044	44	16	1	0	0
September 2045	44	11	1	0	0
September 2046	35	7	0	0	0
September 2047	15	3	0	0	0
September 2048	0	0	0	0	0
September 2049	0	0	0	0	0
Weighted Average					
Life (years)	17.1	15.3	10.7	8.5	6.3

Security Group 3 PSA Prepayment Assumption Rates

		Clas	ses DA an	d ID				Class DZ		
Distribution Date	0%	300%	400%	500%	800%	0%	300%	400%	500%	800%
Initial Percent	100	100	100	100	100	100	100	100	100	100
September 2020	97	87	87	87	87	104	104	88	72	25
September 2021	93	64	64	64	48	107	107	71	37	0
September 2022	89	42	42	42	20	111	111	63	20	0
September 2023	85	25	25	25	5	115	115	61	17	0
September 2024	81	12	12	12	0	119	113	59	18	0
September 2025	77	4	4	4	0	123	106	55	18	0
September 2026	72	0	0	0	0	128	87	41	10	0
September 2027	68	0	0	0	0	132	63	21	0	0
September 2028	63	0	0	0	0	137	43	6	0	0
September 2029	58	0	0	0	0	142	27	0	0	0
September 2030	52	0	0	0	0	147	14	0	0	0
September 2031	47	0	0	0	0	152	4	0	0	0
September 2032	41	0	0	0	0	158	0	0	0	0
September 2033	35	0	0	0	0	163	0	0	0	0
September 2034	28	0	0	0	0	169	0	0	0	0
September 2035	22	0	0	0	0	175	0	0	0	0
September 2036	15	0	0	0	0	181	0	0	0	0
September 2037	7	0	0	0	0	188	0	0	0	0
September 2038	0	0	0	0	0	192	0	0	0	0
September 2039	0	0	0	0	0	171	0	0	0	0
September 2040	0	0	0	0	0	148	0	0	0	0
September 2041	0	0	0	0	0	124	0	0	0	0
September 2042	0	0	0	0	0	99	0	0	0	0
September 2043	0	0	0	0	0	73	0	0	0	0
September 2044	0	0	0	0	0	46	0	0	0	0
September 2045	0	0	0	0	0	17	0	0	0	0
September 2046	0	0	0	0	0	0	0	0	0	0
September 2047	0	0	0	0	0	0	0	0	0	0
September 2048	0	0	0	0	0	0	0	0	0	0
Weighted Average										
Life (years)	10.8	2.8	2.8	2.8	2.1	23.0	8.5	5.1	2.5	0.8

Security Group 4 PSA Prepayment Assumption Rates

	Clas	sses LA, I L	LB, LC, LI K and LI		s, LI,			Class LP	•		Class LZ 0% 125% 250% 300% 5				
Distribution Date	0%	125%	250%	300%	500%	0%	125%	250%	300%	500%	0%	125%	250%	300%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
September 2020	97	94	94	94	94	100	100	100	100	100	104	104	94	90	74
September 2021	94	84	84	84	84	100	100	100	100	100	107	107	76	64	17
September 2022	91	73	73	73	61	100	100	100	100	100	111	111	55	35	0
September 2023	88	62	62	62	42	100	100	100	100	100	115	115	41	15	0
September 2024	84	52	52	52	28	100	100	100	100	100	119	119	33	4	0
September 2025	81	42	42	42	19	100	100	100	100	100	123	123	30	0	0
September 2026	77	33	33	33	13	100	100	100	100	100	128	127	29	0	0
September 2027	73	27	27	27	9	100	100	100	100	100	132	126	27	0	0
September 2028	69	21	21	21	6	100	100	100	100	100	137	123	25	0	0
September 2029	64	17	17	17	4	100	100	100	100	100	142	118	23	0	0
September 2030	60	13	13	13	2	100	100	100	100	100	147	112	21	0	0
September 2031	55	10	10	10	1	100	100	100	100	100	152	105	18	0	0
September 2032	50	8	8	8	1	100	100	100	100	100	158	97	16	0	0
September 2033	45	6	6	6	0	100	100	100	100	100	163	89	14	0	0
September 2034	39	4	4	4	0	100	100	100	100	81	169	81	12	0	0
September 2035	34	3	3	3	0	100	100	100	100	54	175	73	10	0	0
September 2036	28	2	2	2	0	100	100	100	100	36	181	65	9	0	0
September 2037	22	2	2	2	Ŏ	100	100	100	100	23	188	58	Ź	Ŏ	Õ
September 2038	15	1	1	1	0	100	100	100	100	15	194	51	6	0	0
September 2039	8	1	1	1	0	100	100	100	100	10	201	44	5	0	0
September 2040	ĩ	0	0	0	Ŏ	100	100	100	100	6	208	38	4	Ŏ	Õ
September 2041	0	0	0	0	0	100	100	100	100	4	193	32	3	0	0
September 2042	0	0	0	0	0	78	78	78	78	2	173	26	2	0	0
September 2043	0	0	0	0	0	56	56	56	56	2	152	21	2	0	0
September 2044	0	0	0	0	0	39	39	39	39	1	130	17	1	0	0
September 2045	0	0	0	0	0	25	25	25	25	1	107	13	1	0	0
September 2046	0	0	0	0	0	16	16	16	16	0	82	9	1	0	0
September 2047	0	0	0	0	0	8	8	8	8	0	56	5	0	0	0
September 2048	Õ	Ö	Õ	0	Ö	3	3	3	3	Õ	29	2	0	0	0
September 2049	ŏ	ŏ	ŏ	ŏ	ŏ	ő	ŏ	ő	ő	ŏ	-ó	0	Ŏ	Ŏ	ŏ
Weighted Average															
Life (years)	12.3	6.1	6.1	6.1	4.2	24.8	24.8	24.8	24.8	16.9	25.9	17.8	6.2	2.6	1.4

Security Group 5 PSA Prepayment Assumption Rates

	Class IO									
Distribution Date	0%	300%	645%	950%	1,300%					
Initial Percent	100	100	100	100	100					
September 2020	98	92	91	87	75					
September 2021	96	79	62	40	23					
September 2022	94	66	33	15	3					
September 2023	92	54	19	5	0					
September 2024	90	41	10	1	0					
September 2025	87	31	5	0	0					
September 2026	85	24	2	0	0					
September 2027	82	19	1	0	0					
September 2028	79	14	0	0	0					
September 2029	76	11	0	0	0					
September 2030	73	8	0	0	0					
September 2031	70	6	0	0	0					
September 2032	66	4	0	0	0					
September 2033	63	3	0	0	0					
September 2034	59	2	0	0	0					
September 2035	54	1	0	0	0					
September 2036	50	1	0	0	0					
September 2037	45	0	0	0	0					
September 2038	41	0	0	0	0					
September 2039	35	0	0	0	0					
September 2040	30	0	0	0	0					
September 2041	25	0	0	0	0					
September 2042	20	0	0	0	0					
September 2043	15	0	0	0	0					
September 2044	10	0	0	0	0					
September 2045	4	0	0	0	0					
September 2046	0	0	0	0	0					
September 2047	0	0	0	0	0					
September 2048	0	0	0	0	0					
September 2049	0	0	0	0	0					
Weighted Average										
Life (years)	15.9	5.1	2.7	2.0	1.5					

Security Group 6 PSA Prepayment Assumption Rates

		Class	es FA aı	nd SA		Class PA					-	Class P2	<u>.</u>			-	Class ZI	•		
Distribution Date	0%	125%	175%	225%	400%	0%	125%	175%	225%	400%	0%	125%	175%	225%	400%	0%	125%	175%	225%	400%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
September 2020	99	96	95	94	91	98	94	94	94	94	103	103	103	103	103	103	103	96	90	68
September 2021	97	89	86	83	74	95	86	86	86	86	105	105	105	105	105	105	105	86	67	2
September 2022	95	81	76	71	55	93	75	75	75	63	108	108	108	108	108	108	108	73	40	0
September 2023	94	73	66	60	41	90	65	65	65	46	111	111	111	111	111	111	111	64	22	0
September 2024	92	66	58	50	30	87	56	56	56	33	113	113	113	113	113	113	113	59	9	0
September 2025	90	59	50	43	22	84	48	48	48	24	116	116	116	116	116	116	116	56	3	0
September 2026	88	54	44	36	17	81	40	40	40	16	119	119	119	119	119	119	119	55	0	0
September 2027	86	48	38	30	12	78	33	33	33	11	122	122	122	122	122	122	121	54	0	0
September 2028	84	43	33	25	9	75	27	27	27	7	125	125	125	125	125	125	120	53	0	0
September 2029	81	39	29	21	7	71	22	22	22	4	128	128	128	128	128	128	118	51	0	0
September 2030	79	35	25	18	5	68	17	17	17	2	132	132	132	132	132	132	113	48	0	0
September 2031	76	31	21	15	4	64	14	14	14	0	135	135	135	135	135	135	108	45	0	0
September 2032	74	27	18	12	3	60	11	11	11	0	138	138	138	138	102	138	101	41	0	0
September 2033	71	24	16	10	2	56	8	8	8	0	142	142	142	142	74	142	94	38	0	0
September 2034	68	21	13	8	1	52	6	6	6	0	145	145	145	145	54	145	87	34	0	0
September 2035	65	19	11	7	1	47	4	4	4	0	149	149	149	149	39	149	79	31	0	0
September 2036	61	16	10	6	1	42	2	2	2	0	153	153	153	153	28	153	72	27	0	0
September 2037	58	14	8	5	1	37	1	1	1	0	157	157	157	157	20	157	64	24	0	0
September 2038	54	12	7	4	0	32	0	0	0	0	161	142	142	142	14	161	57	21	0	0
September 2039	51	10	6	3	0	27	0	0	0	0	165	113	113	113	10	165	50	18	0	0
September 2040	47	9	4	2	0	21	0	0	0	0	169	89	89	89	7	169	43	15	0	0
September 2041	42	7	4	2	0	15	0	0	0	0	173	69	69	69	5	173	37	12	0	0
September 2042	38	6	3	1	0	9	0	0	0	0	178	53	53	53	3	178	30	10	0	0
September 2043	33	5	2	1	0	2	0	0	0	0	182	39	39	39	2	182	25	8	0	0
September 2044	28	4	2	1	0	0	0	0	0	0	28	28	28	28	1	187	19	6	0	0
September 2045	23	3	1	0	0	0	0	0	0	0	19	19	19	19	1	153	14	4	0	0
September 2046	18	2	1	0	0	0	0	0	0	0	12	12	12	12	0	118	10	3	0	0
September 2047	12	1	0	0	0	0	0	0	0	0	6	6	6	6	0	81	5	2	0	0
September 2048	6	0	0	0	0	0	0	0	0	0	2	2	2	2	0	42	2	0	0	0
September 2049	Ö	0	0	0	Õ	0	0	0	0	Ö	0	0	0	0	0	0	0	Õ	0	0
Weighted Average																				
Life (years)	18.6	9.4	7.8	6.6	4.3	14.3	6.6	6.6	6.6	4.4	25.0	22.1	22.1	22.1	15.1	27.6	18.8	10.9	2.8	1.3

Security Group 7
PSA Prepayment Assumption Rates

			Class KF					Class KS	;			Class SK 100% 200% 300%			
Distribution Date	0%	100%	200%	300%	400%	0%	100%	200%	300%	400%	0%	100%	200%	300%	400%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
September 2020	99	97	95	93	92	99	97	95	93	92	99	97	95	93	92
September 2021	97	91	86	80	75	97	91	86	80	75	97	91	86	80	75
September 2022	96	84	74	65	56	96	84	74	65	56	96	84	74	65	56
September 2023	94	78	64	52	42	94	78	64	52	42	94	77	64	52	42
September 2024	92	71	55	42	31	92	71	55	42	31	92	71	55	42	31
September 2025	91	66	47	34	23	91	66	47	34	23	91	66	47	34	23
September 2026	89	60	41	27	17	89	60	41	27	17	89	60	41	27	17
September 2027	87	55	35	21	13	87	55	35	21	13	87	55	35	21	13
September 2028	85	50	30	17	9	85	50	30	17	9	85	50	30	17	9
September 2029	83	46	26	14	7	83	46	26	14	7	83	46	25	14	7
September 2030	80	42	22	11	5	80	42	22	11	5	80	42	22	11	5
September 2031	78	38	18	9	4	78	38	18	9	4	78	38	18	9	4
September 2032	75	34	16	7	3	75	34	16	7	3	75	34	16	7	3
September 2033	72	31	13	5	2	72	31	13	5	2	72	31	13	5	2
September 2034	69	28	11	4	1	69	28	11	4	1	69	28	11	4	1
September 2035	66	25	9	3	1	66	25	9	3	1	66	25	9	3	1
September 2036	63	22	8	3	1	63	22	8	3	1	63	22	8	3	1
September 2037	60	20	6	2	1	60	20	6	2	1	60	19	6	2	1
September 2038	56	17	5	1	0	56	17	5	1	0	56	17	5	1	0
September 2039	52	15	4	1	0	52	15	4	1	0	52	15	4	1	0
September 2040	48	13	3	1	0	48	13	3	1	0	48	13	3	1	0
September 2041	44	11	3	1	0	44	11	3	1	0	44	11	3	1	0
September 2042	40	9	2	0	0	40	9	2	0	0	40	9	2	0	0
September 2043	35	8	2	0	0	35	8	2	0	0	35	8	2	0	0
September 2044	30	6	1	0	0	30	6	1	0	0	30	6	1	0	0
September 2045	24	5	1	0	0	24	5	1	0	0	24	5	1	0	0
September 2046	19	3	1	0	0	19	3	1	0	0	19	3	1	0	0
September 2047	13	2	0	0	0	13	2	0	0	0	13	2	0	0	0
September 2048	7	1	0	0	0	7	1	0	0	0	7	1	0	0	0
September 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average															
Life (years)	19.0	10.8	7.3	5.5	4.4	19.0	10.8	7.3	5.5	4.4	19.0	10.8	7.3	5.4	4.4

Security Group 8
PSA Prepayment Assumption Rates
Class IA

			Class IA		
Distribution Date	0%	150%	318%	500%	700%
Initial Percent	100	100	100	100	100
September 2020	97	85	80	66	50
September 2021	93	71	58	37	17
September 2022	89	58	40	17	8
September 2023	85	47	26	10	3
September 2024	81	37	16	6	1
September 2025	77	28	12	3	0
September 2026	73	19	8	1	0
September 2027	68	14	6	0	0
September 2028	64	11	4	0	0
September 2029	59	9	2	0	0
September 2030	54	6	1	0	0
September 2031	49	4	0	0	0
September 2032	44	2	0	0	0
September 2033	39	1	0	0	0
September 2034	33	1	0	0	0
September 2035	27	0	0	0	0
September 2036	21	0	0	0	0
September 2037	15	0	0	0	0
September 2038	12	0	0	0	0
September 2039	9	0	0	0	0
September 2040	6	0	0	0	0
September 2041	3	0	0	0	0
September 2042	2	0	0	0	0
September 2043	0	0	0	0	0
September 2044	0	0	0	0	0
September 2045	0	0	0	0	0
September 2046	0	0	0	0	0
Weighted Average					
Life (years)	11.5	4.4	3.0	1.9	1.3

Security Group 9 PSA Prepayment Assumption Rates

			Class IB					Class IC			Class IP				
Distribution Date	0%	100%	257%	450%	600%	0%	100%	257%	450%	600%	0%	100%	257%	450%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
September 2020	98	92	84	73	65	98	92	83	73	65	98	92	83	72	65
September 2021	96	85	69	52	41	96	85	69	52	41	95	84	68	52	41
September 2022	93	78	57	37	25	93	78	57	37	25	93	77	56	37	25
September 2023	91	71	47	26	16	91	71	46	26	16	90	70	46	26	16
September 2024	89	65	38	19	10	88	65	38	19	10	88	64	37	18	10
September 2025	86	59	31	13	6	86	59	31	13	6	85	58	30	13	6
September 2026	83	54	26	9	4	83	54	25	9	4	82	53	24	9	4
September 2027	81	49	21	7	2	80	49	20	7	2	79	48	19	6	2
September 2028	78	44	17	5	1	77	44	16	5	1	76	43	15	5	1
September 2029	75	40	14	3	1	74	40	13	3	1	73	38	12	3	1
September 2030	72	36	11	2	0	71	36	10	2	0	70	34	9	2	1
September 2031	68	32	9	1	0	68	32	8	1	0	66	30	7	2	0
September 2032	65	29	7	1	0	64	28	6	1	0	63	27	6	1	0
September 2033	62	25	5	1	0	61	25	5	1	0	59	23	4	1	0
September 2034	58	22	4	0	0	57	22	4	0	0	55	20	3	0	0
September 2035	54	20	3	0	0	53	19	3	0	0	51	17	3	0	0
September 2036	50	17	2	0	0	49	16	2	0	0	47	15	2	0	0
September 2037	46	14	2	0	0	45	14	2	0	0	42	12	2	0	0
September 2038	42	12	1	0	0	41	11	1	0	0	38	10	1	0	0
September 2039	37	10	1	0	0	36	9	1	0	0	33	7	1	0	0
September 2040	33	8	1	0	0	32	8	1	0	0	28	6	1	0	0
September 2041	28	6	1	0	0	27	6	1	0	0	23	5	0	0	0
September 2042	23	5	0	0	0	22	4	0	0	0	18	3	0	0	0
September 2043	18	4	0	0	0	17	3	0	0	0	12	2	0	0	0
September 2044	13	3	0	0	0	11	2	0	0	0	7	1	0	0	0
September 2045	8	2	0	0	0	7	1	0	0	0	3	1	0	0	0
September 2046	4	1	0	0	0	3	1	0	0	0	í	0	0	0	0
September 2047	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
September 2048	Õ	Ő	Õ	Õ	Õ	Õ	Ŏ	Õ	Õ	Ŏ	Ö	Õ	Õ	Õ	Ŏ
Weighted Average	-														
Life (years)	16.0	9.4	5.0	3.0	2.2	15.8	9.2	5.0	3.0	2.2	15.3	8.9	4.8	3.0	2.2

Security Group 10 PSA Prepayment Assumption Rates

			Class IE		
Distribution Date	0%	250%	539%	850%	1,100%
Initial Percent	100	100	100	100	100
September 2020	98	90	80	70	61
September 2021	96	77	56	38	25
September 2022	95	64	37	18	8
September 2023	93	53	25	9	3
September 2024	91	44	16	4	1
September 2025	88	37	11	2	0
September 2026	86	30	7	1	0
September 2027	84	25	5	0	0
September 2028	81	21	5 3	0	0
September 2029	79	17	2	0	0
September 2030	76	14	1	0	0
September 2031	73	11	1	0	0
September 2032	70	9	1	0	0
September 2033	67	8	0	0	0
September 2034	64	6	0	0	0
September 2035	61	5	0	0	0
September 2036	57	4	0	0	0
September 2037	54	3	0	0	0
September 2038	50	2	0	0	0
September 2039	46	2	0	0	0
September 2040	42	2	0	0	0
September 2041	37	1	0	0	0
September 2042	33	1	0	0	0
September 2043	28	1	0	0	0
September 2044	23	0	0	0	0
September 2045	17	0	0	0	0
September 2046	12	0	0	0	0
September 2047	6	0	0	0	0
September 2048	1	0	0	0	0
September 2049	0	0	0	0	0
Weighted Average					
Life (years)	17.6	5.8	3.0	1.9	1.5

Security Group 11 PSA Prepayment Assumption Rates

			Class IG		
Distribution Date	0%	150%	296%	450%	600%
Initial Percent	100	100	100	100	100
September 2020	95	79	64	48	33
September 2021	89	60	35	13	2
September 2022	83	43	14	2	1
September 2023	77	28	2	1	1
September 2024	71	17	1	1	0
September 2025	64	8	1	1	0
September 2026	57	2	1	0	0
September 2027	50	2	1	0	0
September 2028	44	1	1	0	0
September 2029	38	1	0	0	0
September 2030	33	1	0	0	0
September 2031	27	1	0	0	0
September 2032	20	1	0	0	0
September 2033	15	1	0	0	0
September 2034	12	1	0	0	0
September 2035	8	0	0	0	0
September 2036	5	0	0	0	0
September 2037	2	0	0	0	0
September 2038	1	0	0	0	0
September 2039	1	0	0	0	0
September 2040	1	0	0	0	0
September 2041	1	0	0	0	0
September 2042	0	0	0	0	0
September 2043	0	0	0	0	0
September 2044	0	0	0	0	0
September 2045	0	0	0	0	0
Weighted Average					
Life (years)	8.5	3.0	1.7	1.1	0.8

Security Group 12 PSA Prepayment Assumption Rates

		Class	es FT a	nd ST		Class IT							, TB, TC TJ, TK					Class TI	•	
Distribution Date	0%	250%	350%	390%	700%	0%	250%	350%	390%	700%	0%	250%	350%	390%	700%	0%	250%	350%	390%	700%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
September 2020	99	95	93	93	88	100	100	100	100	78	99	94	94	94	94	100	100	63	48	0
September 2021	98	84	79	77	63	100	100	93	77	0	97	81	81	81	75	100	100	0	0	0
September 2022	96	71	62	59	37	100	100	62	35	0	96	65	65	65	44	100	100	0	0	0
September 2023	95	59	48	44	21	100	100	43	11	0	94	51	51	51	25	100	100	0	0	0
September 2024	94	49	37	33	12	100	100	35	1	0	92	39	39	39	14	100	100	0	0	0
September 2025	92	41	29	25	7	100	100	33	0	0	90	30	30	30	8	100	98	0	0	0
September 2026	90	34	22	19	4	100	100	30	0	0	88	22	22	22	4	100	82	0	0	0
September 2027	89	28	17	14	2	100	100	27	0	0	86	16	16	16	2	100	55	0	0	0
September 2028	87	24	13	10	1	100	100	23	0	0	84	12	12	12	1	100	23	0	0	0
September 2029	85	20	10	8	1	100	96	20	0	0	82	9	9	9	0	100	0	0	0	0
September 2030	83	16	8	6	0	100	85	17	0	0	79	7	7	7	0	100	0	0	0	0
September 2031	80	13	6	4	0	100	73	14	0	0	76	5	5	5	0	100	0	0	0	0
September 2032	78	11	5	3	0	100	63	11	0	0	73	3	3	3	0	100	0	0	0	0
September 2033	75	9	3	2	0	100	54	9	0	0	70	2	2	2	0	100	0	0	0	0
September 2034	73	7	3	2	0	100	45	8	0	0	67	2	2	2	0	100	0	0	0	0
September 2035	70	6	2	1	0	100	38	6	0	0	63	1	1	1	0	100	0	0	0	0
September 2036	66	5	1	1	0	100	32	5	0	0	60	1	1	1	0	100	0	0	0	0
September 2037	63	4	1	1	0	100	26	4	0	0	56	0	0	0	0	100	0	0	0	0
September 2038	59	3	1	0	0	100	21	3	0	0	51	0	0	0	0	100	0	0	0	0
September 2039	56	2	1	0	0	100	17	2	0	0	47	0	0	0	0	100	0	0	0	0
September 2040	52	2	0	0	0	100	14	2	0	0	42	0	0	0	0	100	0	0	0	0
September 2041	47	1	0	0	0	100	11	1	0	0	37	0	0	0	0	100	0	0	0	0
September 2042	43	1	0	0	0	100	8	1	0	0	31	0	0	0	0	100	0	0	0	0
September 2043	38	1	0	0	0	100	6	1	0	0	25	0	0	0	0	100	0	0	0	0
September 2044	32	1	0	0	0	100	5	0	0	0	19	0	0	0	0	100	0	0	0	0
September 2045	27	0	0	0	0	100	3	0	0	0	12	0	0	0	0	100	0	0	0	0
September 2046	21	0	0	0	0	100	2	0	0	0	5	0	0	0	0	100	0	0	0	0
September 2047	14	0	0	0	0	100	1	0	0	0	0	0	0	0	0	50	0	0	0	0
September 2048	7	0	0	0	0	60	1	0	0	0	0	0	0	0	0	0	0	0	0	0
September 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average																				
Life (years)	19.6	6.4	5.0	4.6	2.9	29.2	15.5	6.0	2.8	1.3	17.7	4.9	4.9	4.9	3.2	28.0	8.1	1.1	0.9	0.5

Security Group 12 PSA Prepayment Assumption Rates

			Class TQ	!				Class TZ	:			Class ZT			
Distribution Date	0%	250%	350%	390%	700%	0%	250%	350%	390%	700%	0%	250%	350%	390%	700%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
September 2020	100	100	100	100	78	103	103	103	103	103	102	102	102	102	102
September 2021	100	100	93	77	0	105	105	105	105	105	104	104	104	104	0
September 2022	100	100	62	35	0	108	108	108	108	108	106	106	106	106	0
September 2023	100	100	43	11	0	111	111	111	111	111	108	108	108	108	0
September 2024	100	100	35	1	0	113	113	113	113	113	111	111	111	111	0
September 2025	100	100	33	0	0	116	116	116	116	116	113	113	113	1	0
September 2026	100	100	30	0	0	119	119	119	119	119	115	115	115	1	0
September 2027	100	100	27	0	0	122	122	122	122	122	117	117	117	1	0
September 2028	100	100	23	0	0	125	125	125	125	125	120	120	120	1	0
September 2029	100	96	20	0	0	128	128	128	128	128	122	122	122	1	0
September 2030	100	84	17	0	0	132	132	132	132	132	125	125	125	1	0
September 2031	100	73	14	0	0	135	135	135	135	95	127	127	127	1	0
September 2032	100	63	11	0	0	138	138	138	138	53	130	130	130	1	0
September 2033	100	54	9	0	0	142	142	142	142	30	132	132	132	1	0
September 2034	100	45	7	0	0	145	145	145	145	17	135	135	135	1	0
September 2035	100	38	6	0	0	149	149	149	149	9	138	138	138	1	0
September 2036	100	31	5	0	0	153	153	153	153	5	140	140	140	1	0
September 2037	100	26	4	0	0	157	157	157	157	3	143	143	143	1	0
September 2038	100	21	3	0	0	161	161	161	161	2	146	146	146	1	0
September 2039	100	17	2	0	0	165	148	148	148	1	149	149	149	1	0
September 2040	100	13	2	0	0	169	104	104	104	0	152	152	152	1	0
September 2041	100	11	1	0	0	173	73	73	73	0	155	155	155	1	0
September 2042	100	8	1	0	0	178	50	50	50	0	158	158	158	1	0
September 2043	100	6	1	0	0	182	33	33	33	0	162	162	162	1	0
September 2044	100	4	0	0	0	187	22	22	22	0	165	165	165	1	0
September 2045	100	3	0	0	0	191	14	14	14	0	168	168	168	1	0
September 2046	100	2	0	0	0	196	8	8	8	0	172	172	172	1	0
September 2047	100	1	0	0	0	4	4	4	4	0	175	175	134	1	0
September 2048	60	0	0	0	0	2	2	2	2	0	179	179	54	1	0
September 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average															
Life (years)	29.2	15.5	6.0	2.8	1.3	27.7	22.3	22.3	22.3	13.2	30.0	29.8	28.6	5.7	1.7

Security Group 13 PSA Prepayment Assumption Rates

		Classe	es FH a	nd SH		Classes H, HA, HB, HC, HD, HE, HG, HI, HJ, HK, HM and HN							Classes U, UA, UB, UC, UD, UE, UG, UI, UJ, UK, UM and UN							
Distribution Date	0%	225%	300%	350%	600%	0%	225%	300%	350%	600%	0%	225%	300%	350%	600%	0%	225%	300%	350%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
September 2020	99	95	94	93	90	99	94	94	94	94	100	100	100	100	100	98	94	94	94	94
September 2021	97	85	82	79	67	97	82	82	82	80	100	100	100	100	100	97	81	81	81	78
September 2022	96	73	66	62	43	95	67	67	67	50	100	100	100	100	100	95	65	65	65	47
September 2023	95	62	53	48	27	93	54	54	54	31	100	100	100	100	100	93	51	51	51	27
September 2024	93	53	43	37	17	92	43	43	43	19	100	100	100	100	100	91	39	39	39	14
September 2025	91	44	34	29	11	90	33	33	33	11	100	100	100	100	100	89	29	29	29	5
September 2026	90	38	28	22	7	87	25	25	25	6	100	100	100	100	100	87	20	20	20	0
September 2027	88	32	22	17	4	85	19	19	19	3	100	100	100	100	100	84	14	14	14	0
September 2028	86	27	18	13	3	83	14	14	14	1	100	100	100	100	100	82	9	9	9	0
September 2029	84	22	14	10	2	80	10	10	10	0	100	100	100	100	99	79	5	5	5	0
September 2030	81	19	11	8	1	78	7	7	7	0	100	100	100	100	61	76	2	2	2	0
September 2031	79	16	9	6	1	75	5	5	5	0	100	100	100	100	38	73	0	0	0	0
September 2032	77	13	7	5	0	72	3	3	3	0	100	100	100	100	23	70	0	0	0	0
September 2033	74	11	6	3	0	68	2	2	2	0	100	100	100	100	14	67	0	0	0	0
September 2034	71	9	4	3	0	65	1	1	1	0	100	100	100	100	9	63	0	0	0	0
September 2035	68	7	3	2	0	61	0	0	0	0	100	100	100	100	5	59	0	0	0	0
September 2036	65	6	3	1	0	57	0	0	0	0	100	90	90	90	3	55	0	0	0	0
September 2037	61	5	2	1	0	53	0	0	0	0	100	67	67	67	2	51	0	0	0	0
September 2038	58	4	2	1	0	49	0	0	0	0	100	50	50	50	1	46	0	0	0	0
September 2039	54	3	1	1	0	44	0	0	0	0	100	36	36	36	1	41	0	0	0	0
September 2040	50	3	1	0	0	39	0	0	0	0	100	26	26	26	0	36	0	0	0	0
September 2041	46	2	1	0	0	34	0	0	0	0	100	19	19	19	0	30	0	0	0	0
September 2042	41	2	0	0	0	29	0	0	0	0	100	13	13	13	0	24	0	0	0	0
September 2043	36	1	0	0	0	23	0	0	0	0	100	9	9	9	0	18	0	0	0	0
September 2044	31 26	1	0	0	0	17 10	0	0	0	0	100 100	6	6	6	0	11	0	0	0	0
September 2045	20	1	0	0	0		0	0	0	0	100	4	4	4	0	4		0	0	0
September 2046	20 14	0	0	0	0	3	0	0	0	0	100	2		2	0	0	0	0	0	0
September 2047 September 2048	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
September 2049	0	0	0	0	0	0	0	0	0	0	0	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)	19.3	6.9	5.6	4.9	3.2	17.3	5.1	5.1	5.1	3.5	27.6	19.8	19.8	19.8	12.1	16.7	4.6	4.6	4.6	3.2

Security Group 13 PSA Prepayment Assumption Rates

			Class UI				(Class WA	1		Classes WF, WK and WS						
Distribution Date	0%	225%	300%	350%	600%	0%	225%	300%	350%	600%	0%	225%	300%	350%	600%		
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
September 2020	100	100	100	100	100	100	100	76	60	0	100	100	100	100	92		
September 2021	100	100	100	100	100	100	100	21	0	0	100	100	100	87	0		
September 2022	100	100	100	100	100	100	100	0	0	0	100	100	82	43	0		
September 2023	100	100	100	100	100	100	100	0	0	0	100	100	64	17	0		
September 2024	100	100	100	100	100	100	100	0	0	0	100	100	55	4	0		
September 2025	100	100	100	100	100	100	100	0	0	0	100	100	51	0	0		
September 2026	100	100	100	100	100	100	93	0	0	0	100	100	49	0	0		
September 2027	100	100	100	100	53	100	77	0	0	0	100	100	45	0	0		
September 2028	100	100	100	100	20	100	55	0	0	0	100	100	40	0	0		
September 2029	100	100	100	100	0	100	29	0	0	0	100	100	36	0	0		
September 2030	100	100	100	100	0	100	3	0	0	0	100	100	31	0	0		
September 2031	100	91	91	91	0	100	0	0	0	0	100	90	27	0	0		
September 2032	100	61	61	61	0	100	0	0	0	0	100	79	23	0	0		
September 2033	100	38	38	38	0	100	0	0	0	0	100	68	19	0	0		
September 2034	100	20	20	20	0	100	0	0	0	0	100	59	16	0	0		
September 2035	100	7	7	7	0	100	0	0	0	0	100	50	13	0	0		
September 2036	100	0	0	0	0	100	0	0	0	0	100	42	11	0	0		
September 2037	100	0	0	0	0	100	0	0	0	0	100	36	9	0	0		
September 2038	100	0	0	0	0	100	0	0	0	0	100	30	7	0	0		
September 2039	100	0	0	0	0	100	0	0	0	0	100	24	5	0	0		
September 2040	100	0	0	0	0	100	0	0	0	0	100	20	4	0	0		
September 2041	100	0	0	0	0	100	0	0	0	0	100	16	3	0	0		
September 2042	100	0	0	0	0	100	0	0	0	0	100	12	2	0	0		
September 2043	100	0	0	0	0	100	0	0	0	0	100	9	2	0	0		
September 2044	100	0	0	0	0	100	0	0	0	0	100	7	1	0	0		
September 2045	100	0	0	0	0	100	0	0	0	0	100	5	1	0	0		
September 2046	51	0	0	0	0	100	0	0	0	0	100	3	1	0	0		
September 2047	0	0	0	0	0	54	0	0	0	0	100	2	0	0	0		
September 2048	0	0	0	0	0	0	0	0	0	0	63	1	0	0	0		
September 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Weighted Average Life (years)	27.0	13.7	13.7	13.7	8.2	28.0	9.1	1.5	1.1	0.6	29.2	17.0	8.5	3.0	1.4		

PSA	Prepayment	Assumption	Rates

			Class WI					Class WI	L			Class ZW						
Distribution Date	0%	225%	300%	350%	600%	0%	225%	300%	350%	600%	0%	225%	300%	350%	600%			
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100			
September 2020	100	100	100	100	92	100	100	100	100	100	102	102	102	102	102			
September 2021	100	100	100	87	0	100	100	100	100	100	104	104	104	104	0			
September 2022	100	100	82	43	0	100	100	100	100	100	106	106	106	106	0			
September 2023	100	100	64	17	0	100	100	100	100	100	108	108	108	108	0			
September 2024	100	100	55	4	0	100	100	100	100	100	111	111	111	111	0			
September 2025	100	100	51	0	0	100	100	100	100	100	113	113	113	0	0			
September 2026	100	100	49	0	0	100	100	100	100	100	115	115	115	0	0			
September 2027	100	100	45	0	0	100	100	100	100	65	117	117	117	0	0			
September 2028	100	100	40	0	0	100	100	100	100	41	120	120	120	0	0			
September 2029	100	100	36	0	0	100	100	100	100	25	122	122	122	0	0			
September 2030	100	100	31	0	0	100	100	100	100	16	125	125	125	0	0			
September 2031	100	90	27	0	0	100	93	93	93	10	127	127	127	0	0			
September 2032	100	79	23	0	0	100	71	71	71	6	130	130	130	0	0			
September 2033	100	68	19	0	0	100	54	54	54	4	132	132	132	0	0			
September 2034	100	59	16	0	0	100	41	41	41	2	135	135	135	0	0			
September 2035	100	50	13	0	0	100	31	31	31	1	138	138	138	0	0			
September 2036	100	43	11	0	0	100	23	23	23	1	140	140	140	0	0			
September 2037	100	36	9	0	0	100	17	17	17	1	143	143	143	0	0			
September 2038	100	30	7	0	0	100	13	13	13	0	146	146	146	0	0			
September 2039	100	24	5	0	0	100	9	9	9	0	149	149	149	0	0			
September 2040	100	20	4	0	0	100	7	7	7	0	152	152	152	0	0			
September 2041	100	16	3	0	0	100	5	5	5	0	155	155	155	0	0			
September 2042	100	12	2	0	0	100	3	3	3	0	158	158	158	0	0			
September 2043	100	9	2	0	0	100	2	2	2	0	162	162	162	0	0			
September 2044	100	7	1	0	0	100	2	2	2	0	165	165	165	0	0			
September 2045	100	5	1	0	0	100	1	1	1	0	168	168	168	0	0			
September 2046	100	3	1	0	0	63	1	1	1	0	172	172	172	0	0			
September 2047	100	2	0	0	0	0	0	0	0	0	175	175	175	0	0			
September 2048	63	1	0	0	0	0	0	0	0	0	179	179	179	0	0			
September 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Weighted Average																		
Life (years)	29.2	17.0	8.5	3.0	1.4	27.2	15.2	15.2	15.2	9.2	30.0	29.9	29.8	5.9	1.8			

Security Group 14 PSA Prepayment Assumption Rates

	Classes FJ, JB and SJ					Class FK						Class JC								
Distribution Date	0%	150%	287%	450%	600%	0%	150%	287%	450%	600%	0%	150%	287%	450%	600%	0%	150%	287%	450%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
September 2020	94	86	78	69	60	95	86	78	69	61	95	87	79	70	61	95	86	78	69	61
September 2021	88	72	60	47	36	89	74	61	47	36	90	75	62	48	37	89	74	61	47	36
September 2022	81	61	46	31	21	83	63	47	32	22	85	64	48	33	22	83	63	47	32	22
September 2023	73	50	34	21	12	77	52	36	22	13	79	54	37	22	13	77	52	36	22	13
September 2024	65	41	25	14	7	70	43	27	14	7	73	45	28	15	8	70	43	27	14	7
September 2025	57	32	18	9	4	62	35	20	9	4	66	37	21	10	5	62	35	20	9	4
September 2026	48	25	13	5	2	54	28	14	6	2	59	30	16	6	3	54	28	14	6	2
September 2027	38	18	8	3	1	46	22	10	4	1	51	24	11	4	1	46	22	10	4	1
September 2028	28	12	5	2	1	37	16	7	2	1	43	18	8	3	1	37	16	7	2	1
September 2029	18	7	3	1	0	28	11	4	1	0	35	13	5	1	0	28	11	4	1	0
September 2030	7	2	1	0	0	18	6	2	1	0	26	9	3	1	0	18	6	2	1	0
September 2031	0	0	0	0	0	11	3	1	0	0	18	6	2	0	0	11	3	1	0	0
September 2032	0	0	0	0	0	8	2	1	0	0	13	4	1	0	0	8	2	1	0	0
September 2033	0	0	0	0	0	5	1	0	0	0	8	2	1	0	0	5	1	0	0	0
September 2034	0	0	0	0	0	2	0	0	0	0	3	1	0	0	0	2	0	0	0	0
September 2035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
September 2036	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average																				
Life (years)	6.5	4.6	3.4	2.5	1.9	7.3	4.9	3.6	2.6	2.0	7.9	5.2	3.7	2.6	2.0	7.3	4.9	3.6	2.6	2.0

Security Group 15 PSA Prepayment Assumption Rates

•	Class BA					Classes BC, BE, BG, BI, BJ and BL						(Class BZ						
Distribution Date	0%	300%	450%	525%	900%	0%	300%	450%	525%	900%	0%	300%	450%	525%	900%	0%	300%	450%	525%	900%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
September 2020	84	18	18	18	17	100	100	100	100	100	97	85	85	85	85	103	103	77	64	0
September 2021	68	0	0	0	0	100	79	79	79	51	94	64	64	64	41	106	106	49	23	0
September 2022	51	0	0	0	0	100	56	56	56	22	91	46	46	46	18	109	109	35	3	0
September 2023	34	0	0	0	0	100	38	38	38	9	88	31	31	31	8	113	112	32	0	0
September 2024	16	0	0	0	0	100	25	25	25	3	84	20	20	20	3	116	107	29	0	0
September 2025	0	0	0	0	0	99	16	16	16	1	81	13	13	13	1	120	98	24	0	0
September 2026	0	0	0	0	0	95	10	10	10	0	77	8	8	8	0	123	86	20	0	0
September 2027	0	0	0	0	0	90	6	6	6	0	73	5	5	5	0	127	74	16	0	0
September 2028	0	0	0	0	0	85	4	4	4	0	69	3	3	3	0	131	62	12	0	0
September 2029	0	0	0	0	0	80	2	2	2	0	65	2	2	2	0	135	52	10	0	0
September 2030	0	0	0	0	0	75	1	1	1	0	61	1	1	1	0	139	42	7	0	0
September 2031	0	0	0	0	0	69	1	1	1	0	56	0	0	0	0	143	33	4	0	0
September 2032	0	0	0	0	0	63	0	0	0	0	52	0	0	0	0	148	26	3	0	0
September 2033	0	0	0	0	0	57	0	0	0	0	47	0	0	0	0	152	20	2	0	0
September 2034	0	0	0	0	0	51	0	0	0	0	42	0	0	0	0	157	15	1	0	0
September 2035	0	0	0	0	0	45	0	0	0	0	36	0	0	0	0	162	10	0	0	0
September 2036	0	0	0	0	0	38	0	0	0	0	31	0	0	0	0	166	7	0	0	0
September 2037	0	0	0	0	0	31	0	0	0	0	25	0	0	0	0	171	4	0	0	0
September 2038	0	0	0	0	0	23	0	0	0	0	19	0	0	0	0	177	3	0	0	0
September 2039	0	0	0	0	0	15	0	0	0	0	13	0	0	0	0	182	2	0	0	0
September 2040	0	0	0	0	0	7	0	0	0	0	6	0	0	0	0	188	1	0	0	0
September 2041	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	190	0	0	0	0
September 2042	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	166	0	0	0	0
September 2043	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	141	0	0	0	0
September 2044	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	114	0	0	0	0
September 2045	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	86	0	0	0	0
September 2046	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	57	0	0	0	0
September 2047	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	0	0	0	0
September 2048	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
September 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average																				
Life (years)	3.0	0.7	0.7	0.7	0.6	14.8	3.9	3.9	3.9	2.4	12.6	3.3	3.3	3.3	2.0	25.6	10.3	3.7	1.4	0.5

Security Group 16 PSA Prepayment Assumption Rates

	Classes AB, AF and AS											
Distribution Date	0%	300%	566%	900%	1,200%							
Initial Percent	100	100	100	100	100							
September 2020	97	89	76	57	39							
September 2021	95	74	49	25	10							
September 2022	92	59	31	10	2							
September 2023	89	47	20	4	0							
September 2024	86	37	12	1	0							
September 2025	83	29	7	0	0							
September 2026	80	23	4	0	0							
September 2027	76	18	2	0	0							
September 2028	73	14	1	0	0							
September 2029	69	11	0	0	0							
September 2030	65	8	0	0	0							
September 2031	61	6	0	0	0							
September 2032	57	5	0	0	0							
September 2033	53	5 3 2	0	0	0							
September 2034	48	2	0	0	0							
September 2035	43	1	0	0	0							
September 2036	38	1	0	0	0							
September 2037	33	0	0	0	0							
September 2038	27	0	0	0	0							
September 2039	22	0	0	0	0							
September 2040	16	0	0	0	0							
September 2041	9	0	0	0	0							
September 2042	3	0	0	0	0							
September 2043	0	0	0	0	0							
September 2044	0	0	0	0	0							
September 2045	0	0	0	0	0							
September 2046	0	0	0	0	0							
September 2047	0	0	0	0	0							
September 2048	0	0	0	0	0							
September 2049	0	0	0	0	0							
Weighted Average												
Life (years)	13.7	4.8	2.5	1.5	1.0							

Security Group 17 PSA Prepayment Assumption Rates

			Class AF	,			Class	ses FB ar	nd SB		Class ZB						
Distribution Date	0%	200%	250%	325%	500%	0%	200%	250%	325%	500%	0%	200%	250%	325%	500%		
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
September 2020	98	88	88	88	88	99	90	88	85	78	104	104	89	67	16		
September 2021	96	74	74	74	65	97	79	75	69	56	107	107	78	35	0		
September 2022	94	61	61	61	44	96	68	62	54	38	111	111	70	13	0		
September 2023	91	49	49	49	30	95	59	52	43	26	115	115	67	2	0		
September 2024	89	39	39	39	21	93	50	43	34	18	119	119	67	0	0		
September 2025	86	31	31	31	14	91	43	36	26	12	123	120	66	0	0		
September 2026	83	24	24	24	10	90	37	30	21	8	128	116	63	0	0		
September 2027	80	19	19	19	7	88	32	25	16	6	132	110	58	0	0		
September 2028	77	15	15	15	5	86	27	20	13	4	137	103	53	0	0		
September 2029	74	12	12	12	3	84	23	17	10	3	142	94	48	0	0		
September 2030	71	9	9	9	2	81	20	14	8	2	147	85	42	0	0		
September 2031	67	7	7	7	1	79	17	11	6	1	152	76	37	0	0		
September 2032	63	5	5	5	1	76	14	9	5	1	158	67	32	0	0		
September 2033	59	4	4	4	1	74	12	Ź	4	1	163	59	27	0	0		
September 2034	55	3	3	3	0	71	10	6	3	0	169	51	23	0	0		
September 2035	50	2	2	2	0	68	8	5	2	0	175	44	19	0	0		
September 2036	45	2	2	2	0	65	7	4	2	0	181	37	16	0	0		
September 2037	40	1	1	1	0	61	6	3	1	0	188	31	13	0	0		
September 2038	35	1	1	1	0	58	5	2	1	0	194	26	11	0	0		
September 2039	30	1	1	1	0	54	4	2	1	0	201	21	9	0	0		
September 2040	24	1	1	1	0	50	3	1	0	0	208	17	7	0	0		
September 2041	17	0	0	0	0	45	2	1	0	0	216	14	5	0	0		
September 2042	11	0	0	0	0	41	2	1	0	0	223	10	4	0	0		
September 2043	4	0	0	0	0	36	1	1	0	0	231	8	3	0	0		
September 2044	0	0	0	0	0	31	1	0	0	0	218	5	2	0	0		
September 2045	0	0	0	0	0	25	1	0	0	0	179	3	1	0	0		
September 2046	0	0	0	0	0	20	0	0	0	0	138	2	1	0	0		
September 2047	0	0	0	0	0	13	0	0	0	0	95	1	0	0	0		
September 2048	0	0	0	0	0	7	0	0	0	0	49	0	0	0	0		
September 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Weighted Average																	
Life (years)	14.9	5.0	5.0	5.0	3.4	19.2	6.7	5.6	4.5	3.0	27.4	14.7	9.6	1.7	0.6		

Security Group 18 PSA Prepayment Assumption Rates

	Class	ses NA, NE	, NC, ND,	NE, NG at	nd NI			Class ZN		
Distribution Date	0%	315%	400%	465%	800%	0%	315%	400%	465%	8
Initial Percent	100	100	100	100	100	100	100	100	100	
September 2020	97	87	87	87	87	104	101	97	82	
September 2021	94	72	72	72	57	107	105	72	48	
September 2022	91	56	56	56	29	111	109	69	42	
September 2023	88	43	43	43	11	115	111	70	44	
September 2024	85	33	33	33	4	119	115	67	17	
September 2025	82	24	24	24	1	123	119	44	0	
September 2026	78	15	15	15	0	128	106	37	0	
September 2027	74	8	8	8	0	132	91	31	0	
September 2028	70	4	4	4	0	137	74	22	0	
September 2029	66	3	3	3	0	142	55	11	0	
September 2030	62	2	2	2	0	147	40	8	0	
September 2031	58	1	1	1	0	152	27	6	0	
September 2032	53	0	0	0	0	158	18	5	0	
September 2033	48	0	0	0	0	163	13	2	0	
September 2034	43	0	0	0	0	169	9	0	0	
September 2035	37	0	0	0	0	175	5	0	0	
September 2036	32	0	0	0	0	181	3	0	0	
September 2037	26	0	0	0	0	188	0	0	0	
September 2038	20	0	0	0	0	194	0	0	0	
September 2039	13	0	0	0	0	201	0	0	0	
September 2040	6	0	0	0	0	208	0	0	0	
September 2041	0	0	0	0	0	198	0	0	0	
September 2042	0	0	0	0	0	152	0	0	0	
September 2043	0	0	0	0	0	104	0	0	0	
September 2044	0	0	0	0	0	54	0	0	0	
September 2045	0	0	0	0	0	2	0	0	0	
September 2046	0	0	0	0	0	0	0	0	0	
September 2047	0	0	0	0	0	0	0	0	0	
September 2048	0	0	0	0	0	0	0	0	0	
Weighted Average										
Life (years)	12.8	4.0	4.0	4.0	2.4	23.9	10.0	5.7	2.8	

Yield Considerations

An investor seeking to maximize yield should make a decision whether to invest in any Regular or MX Class based on the anticipated yield of that Class resulting from its purchase price, the investor's own projection of Mortgage Loan prepayment rates under a variety of scenarios, in the case of the Group 1, 2, 3, 5, 8, 9, 10, 11, 14, 15, 16 and 18 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, slower than anticipated rates of principal payments could result in actual yields to investors that are lower than the anticipated yields.
- Investors in the MX Class that is subject to mandatory exchange should consider that differing rates of reduction in the related REMIC Securities may ultimately cause that Class 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 necessarily 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

1. determining the monthly discount rates that, when applied to the applicable assumed streams of cash flows to be paid on the applicable Class, would cause the discounted present value of

the assumed streams of cash flows to equal the assumed purchase price of that Class plus accrued interest, and

2. converting the monthly rates to corporate bond equivalent rates.

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

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

Sensitivity of Class I to Prepayments Assumed Price 10.5%*

	PSA	Prepar	vment	Assum	ption	Rates
--	------------	--------	-------	-------	-------	-------

100%	250%	289%	350%	500%
34.5%	7.9%	0.1%	(12.4)%	(43.1)%

SECURITY GROUP 2

Sensitivity of Class MI to Prepayments Assumed Price 23.0%*

PSA Prepayment Assumption Rates

100%	250%	350%	500%	543%
13.5%	11.1%	8.2%	2.1%	0.0%

SECURITY GROUP 3

Sensitivity of Class ID to Prepayments Assumed Price 11.625%*

PSA Prepayment Assumption Rates

300%	400%	500%	613%	800%
4.1%	4.1%	4.1%	0.0%	(15.2)%

SECURITY GROUP 4

Sensitivity of Class LI to Prepayments Assumed Price 18.0%*

PSA Prepayment Assumption Rates

125%	250%	300%	<u>374%</u>	500%
3.6%	3.6%	3.6%	0.0%	(7.1)%

SECURITY GROUP 5

Sensitivity of Class IO to Prepayments Assumed Price 13.0%*

300%	645%	672%	950%	1,300%
22.7%	1.9%	0.1%	(19.3)%	(44.2)%

^{*} 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 SA to Prepayments Assumed Price 19.25%*

	PSA Prepayment Assumption Rates				
LIBOR	125%	175%	225%	400%	
1.0000%	18.4%	15.7%	13.0%	3.3%	
2.0570%	12.1%	9.4%	6.6%	(3.3)%	
4.0535%	(0.2)%	(3.0)%	(5.9)%	(16.3)%	
6.0500% and above	**	**	**	**	

SECURITY GROUP 7

Sensitivity of Class KS to Prepayments Assumed Price 7.5%*

	PSA Prepayment Assumption Rates				
LIBOR	100%	200%	300%	400%	
1.000000%	27.1%	21.9%	16.7%	11.4%	
2.057250%	11.0%	5.5%	0.0%	(5.7)%	
2.743625%	(0.1)%	(5.7)%	(11.5)%	(17.5)%	
3.430000% and above	**	**	**	**	

Sensitivity of Class SK to Prepayments Assumed Price 7.5%*

	PSA Prepayment Assumption Rates				
LIBOR	100%	200%	300%	400%	
1.000000%	27.0%	21.9%	16.7%	11.4%	
2.057250%	11.0%	5.5%	(0.1)%	(5.8)%	
2.743625%	(0.1)%	(5.8)%	(11.6)%	(17.5)%	
3.430000% and above	**	**	**	**	

SECURITY GROUP 8

Sensitivity of Class IA to Prepayments Assumed Price 7.75%*

150%	318%	367%	500%	700%
18.5%	5.9%	0.1%	(16.6)%	(44.1)%

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

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

Sensitivity of Class IB to Prepayments Assumed Price 10.0%*

PSA Prepayment Assumption Rates

100%	257%	450%	464%	600%
27.0%	15.6%	1.2%	0.0%	(11.3)%

Sensitivity of Class IC to Prepayments Assumed Price 9.7219%*

PSA Prepayment Assumption Rates

100%	257%	450%	476%	600%
28.0%	16.4%	2.1%	0.1%	(10.3)%

Sensitivity of Class IP to Prepayments Assumed Price 9.0%*

PSA Prepayment Assumption Rates

100%	257%	450%	512%	600%
30.9%	18.9%	4.6%	0.1%	(7.4)%

SECURITY GROUP 10

Sensitivity of Class IE to Prepayments Assumed Price 8.0%*

PSA Prepayment Assumption Rates

250%	539%	792%	850%	1,100%
36.4%	17.8%	0.1%	(4.2)%	(23.6)%

SECURITY GROUP 11

Sensitivity of Class IG to Prepayments Assumed Price 5.5%*

PSA Prepayment Assumption Rates

150%	296%	311%	450%	600%
34.9%	3.2%	0.0%	(23.4)%	(39.9)%

SECURITY GROUP 12

Sensitivity of Class IT to Prepayments Assumed Price 15.0%*

250%	350%	386%	390%	700%
34.5%	19.1%	0.2%	(6.1)%	(85.3)%

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

Sensitivity of Class ST to Prepayments Assumed Price 15.0%*

	PSA Prepayment Assumption Rates				
LIBOR	250%	350%	390%	700%	
1.0000%	21.6%	16.6%	14.5%	(1.8)%	
2.0390%	13.4%	8.1%	6.0%	(11.0)%	
4.0445%	(2.7)%	(8.4)%	(10.7)%	(29.6)%	
6.0500% and above	**	**	**	**	

Sensitivity of Class TI to Prepayments Assumed Price 15.0%*

PSA Prepayment Assumption Rates

250%	350%	390%	700%	740%
16.2%	16.2%	16.2%	2.1%	0.0%

SECURITY GROUP 13

Sensitivity of Class HI to Prepayments Assumed Price 18.0%*

PSA Prepayment Assumption Rates

225%	300%	350%	485%	600%
6.9%	6.9%	6.9%	0.0%	(6.6)%

Sensitivity of Class SH to Prepayments Assumed Price 15.0%*

	PSA Prepayment Assumption Rates				
LIBOR	225%	300%	350%	600%	
1.0000%	22.8%	19.0%	16.4%	3.4%	
2.0350%	14.6%	10.7%	8.0%	(5.5)%	
4.0425%	(1.4)%	(5.6)%	(8.5)%	(23.4)%	
6.0500% and above	**	**	**	**	

Sensitivity of Class UI to Prepayments Assumed Price 16.5%*

225%	300%	350%	479%	600%
7.3%	7.3%	7.3%	0.0%	(7.7)%

^{*} 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 WI to Prepayments Assumed Price 13.5%*

PSA Prepayment Assumption Rates

225%	300%	349%	350%	600%
34.8%	26.0%	1.1%	(0.6)%	(72.1)%

Sensitivity of Class WS to Prepayments Assumed Price 95.0%*

	PSA P1	PSA Prepayment Assumption Rates			
LIBOR	225%	300%	350%	600%	
1.0000%	2.5%	2.8%	3.9%	5.8%	
2.0350%	1.8%	2.1%	3.2%	5.1%	
3.0925%	1.0%	1.4%	2.5%	4.4%	
4.1500% and above	0.3%	0.6%	1.7%	3.7%	

SECURITY GROUP 14

Sensitivity of Class JS to Prepayments Assumed Price 12.0%*

	PS	A Prepayment	Assumption R	ates
LIBOR	150%	287%	450%	600%
1.00%	27.6%	17.4%	4.4%	(8.3)%
2.20%	16.1%	6.4%	(6.0)%	(18.1)%
4.15%	(3.7)%	(12.7)%	(24.0)%	(35.0)%
6.10% and above	**	**	**	**

Sensitivity of Class SJ to Prepayments Assumed Price 11.5%*

	PS	A Prepayment	Assumption R	ates
LIBOR	150%	287%	450%	600%
1.00%	27.4%	17.2%	4.3%	(8.4)%
2.20%	15.1%	5.4%	(6.9)%	(18.9)%
4.15%	(6.6)%	(15.4)%	(26.5)%	(37.4)%
6.10% and above	**	**	3(c3)c	4040

SECURITY GROUP 15

Sensitivity of Class BI to Prepayments Assumed Price 10.0%*

300%	450%	525%	829%	900%
19.4%	19.4%	19.4%	0.0%	(5.3)%

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

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

Sensitivity of Class AS to Prepayments Assumed Price 9.75%*

	PS	A Prepayment	Assumption R	ates
LIBOR	300%	566%	900%	1,200%
1.000%	38.1%	16.1%	(18.9)%	(58.4)%
2.298%	22.3%	0.2%	(34.9)%	(74.0)%
4.224%	(1.1)%	(24.6)%	(61.3)%	**
6.150% and above	**	aje aje	**	**

SECURITY GROUP 17

Sensitivity of Class SB to Prepayments Assumed Price 18.5%*

	PS	A Prepaymen	t Assumption l	Rates
LIBOR	200%	250%	325%	500%
1.00%	13.8%	10.6%	5.7%	(6.3)%
2.03%	7.7%	4.5%	(0.4)%	(12.3)%
4.04%	(4.8)%	(7.9)%	(12.7)%	(24.4)%
6.05% and above	**	**	**	alcalc

SECURITY GROUP 18

Sensitivity of Class NI to Prepayments Assumed Price 15.25%*

	PSA Pre	payment Assum	ption Rates	
315%	400%	465%	571%	800%
5.1%	5.1%	5.1%	0.0%	(19.7)%

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

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 K&L Gates 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.

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

Regular Securities

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

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

The prepayment assumption that should be used in determining the rates of accrual of OID, if any, on the Regular Securities is 250% PSA in the case of the Group 1, 2, 4 and 17 Securities, 400% PSA in the case of the Group 3 and 18 Securities, 645% PSA in the case of the Group 5 Securities, 175% PSA in the case of the Group 6 Securities, 200% PSA in the case of the Group 7 Securities, 318% PSA in the case of the Group 8 Securities, 257% PSA in the case of the Group 9 Securities, 539% PSA in the case of the Group 10 Securities, 296% PSA in the case of the Group 11 Securities, 350% PSA in the case of the Group 12 Securities, 300% PSA in the case of the Group 13 Securities, 287% PSA in the case of the Group 14 Securities, 450% PSA in the case of the Group 15 Securities and 566% PSA in the case of the Group 16 Securities (as described in "Yield, Maturity and Prepayment Considerations" in this Supplement). In the case of the Floating Rate and Inverse 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.

Under Code Section 451(b), taxpayers using an accrual method of accounting for tax purposes generally will be required to include certain amounts in income no later than the time such amounts are reflected on certain financial statements. Under proposed Treasury regulations on which taxpayers generally may rely, the timing of inclusion of market discount and original issue discount (including de minimis market discount and original issue discount) generally would not be affected by Code Section 451(b). Prospective investors in Regular Securities that use an accrual method of accounting for tax purposes are urged to consult with their tax advisors regarding the potential applicability of Code Section 451(b) and the proposed Treasury regulations to their particular situation.

In the case of any Trust REMIC that is considered to be a "single-class REMIC" under temporary Treasury regulations, certain fees and expenses of the single-class REMIC would be allocated proportionately among the Regular Securities and Residual Securities of such Trust REMIC. An individual, trust or estate that holds Regular Securities in a single-class REMIC (directly or indirectly through a grantor trust, a partnership, an S corporation, a common trust fund, or a nonpublicly offered RIC) generally will not be eligible to deduct its allocable share of fees or expenses of a single-class REMIC under Section 212 of the Code for any taxable year beginning before January 1, 2026. For a

discussion of single-class REMICs, see "Certain United States Federal Income Tax Consequences — Tax Treatment of Regular Securities — Single Class REMICs" in the Base Offering Circular, as modified by the previous sentence. Prospective investors in the Regular Securities are urged to consult with their tax advisors regarding the potential applicability of these rules to their particular situation.

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.

An individual, trust or estate that holds Residual Securities (directly or indirectly through a grantor trust, a partnership, an S corporation, a common trust fund, or a non-publicly offered RIC) generally will not be eligible to deduct its allocable share of the Trust REMICs' fees or expenses under Section 212 of the Code for any taxable year beginning before January 1, 2026. Prospective investors in Residual Securities are urged to consult with their tax advisors regarding the potential applicability of this legislation to their particular situation.

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.

In the case of certain Holders of MX Securities that use an accrual method of accounting, these tax consequences are modified by newly enacted legislation as described above for a Holder of Regular Securities. Prospective investors in MX Securities that use an accrual method of accounting for tax purposes are urged to consult with their tax advisors regarding the potential applicability of this legislation to their particular situation.

Foreign Account Tax Compliance Act

The Service has issued proposed regulations, on which taxpayers may rely, that exclude gross proceeds from the sale or other disposition of Regular or MX Securities from the application of the withholding tax imposed under FATCA and related administrative guidance. For a discussion of FATCA, see "Certain United States Federal Income Tax Consequences — 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.

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.

Fiduciaries of any such plans should consult with their counsel before purchasing any of the Securities. In addition, because the Sponsor or the Co-Sponsor or any of their respective affiliates may receive certain benefits in connection with the sale or holding of the Regular or MX Securities, the purchase of the Regular or MX Securities using Plan assets over which any of these parties or their affiliates has discretionary authority or control, or renders "investment advice" (within the meaning of a Department of Labor regulation) for a fee with respect to the assets of a Plan, or is the employer or other sponsor of the Plan, might be deemed to be a violation of a provision of Title I of ERISA or Section 4975 of the Code. Accordingly, the Regular or MX Securities may not be purchased using the assets of any Plan if the Sponsor or the Co-Sponsor or any of their respective affiliates has discretionary authority or control or renders investment advice for a fee with respect to the assets of the Plan, or is the employer or other sponsor of the Plan, unless an applicable prohibited transaction exemption is available to cover the purchase or holding of the Regular or MX Securities or the transaction is not otherwise prohibited.

Prospective Plan Investors should consult with their advisors, however, 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.

See "ERISA Considerations" in the Base Offering Circular.

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

LEGAL INVESTMENT CONSIDERATIONS

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

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

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

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

PLAN OF DISTRIBUTION

Subject to the terms and conditions of the Sponsor Agreement, the Sponsor has agreed to purchase all of the Securities if any are sold and purchased. The Sponsor proposes to offer the Regular and MX Classes to the public from time to time for sale in negotiated transactions at varying prices to be determined at the time of sale, plus accrued interest from (1) September 1, 2019 on the Fixed Rate and Delay Classes and (2) September 20, 2019 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 K&L Gates LLP, Charlotte, North Carolina, and Marcell Solomon & Associates, P.C., Bowie, Maryland, and for the Trustee by Nixon Peabody LLP.

Available Combinations(1)

REMIC Securities	ırities			M	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 1 Combination 1								
В	\$ 7,637,625 6,074,645	A(7)	\$ 7,637,625	SC/PT	(5)	WAC/DLY	38381YKZ6	March 2045
Security Group 2 Combination 2(6)								
M	\$ 8,182,628	MA	\$ 8,182,628	SC/PT	2.50%	FIX	38381YNM2	November 2048
		MI	3,068,485	NTL(SC/PT)	4.00	FIX/10	38381YNN0	November 2048
		MK	8,182,628	SC/PT	2.75	FIX	38381YNP5	November 2048
		MT	8,182,628	SC/PT	3.00	FIX	38381YNQ3	November 2048
		MU	8,182,628	SC/PT	3.25	FIX	38381YNR1	November 2048
		MM	8,182,628	SC/PT	3.50	FIX	38381YNS9	November 2048
Security Group 4								
LA	\$38,870,000	LB	\$38,870,000	PAC/AD	2.50%	FIX	38381YNT7	August 2049
		TC	38,870,000	PAC/AD	2.75	FIX	38381YNU4	August 2049
		CD	38,870,000	PAC/AD	3.00	FIX	38381YNV2	August 2049
		LE	38,870,000	PAC/AD	3.25	FIX	38381YNW0	August 2049
		TC	23,322,000	PAC/AD	4.50	FIX	38381YNX8	August 2049
		Π	16,658,571	NTL(PAC/AD)	3.50	FIX/IO	38381YNY6	August 2049
		LK	38,870,000	PAC/AD	2.25	FIX	38381YNZ3	August 2049
		ΓM	38,870,000	PAC/AD	2.00	FIX	38381YPA6	August 2049
Security Group 9 Combination 4								
IB IP	\$29,925,121 11,529,188	IC	\$41,454,309	NTL(SC/PT)	3.50%	FIX/IO	38381YPB4	February 2048

REMIC Securities	ırities			I	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 12			,					,
Combination 5(6)								
T	\$ 9,046,548	TA	\$ 9,046,548	PAC/AD	1.00%	FIX	38381YPC2	September 2049
		TB	9,046,548	PAC/AD	1.25	FIX	38381YPD0	September 2049
		JC	9,046,548	PAC/AD	1.50	FIX	38381YPE8	September 2049
		TD	9,046,548	PAC/AD	1.75	FIX	38381YPF5	September 2049
		TE	9,046,548	PAC/AD	2.00	FIX	38381YPG3	September 2049
		JL	9,046,548	PAC/AD	2.25	FIX	38381YPH1	September 2049
		TH	7,754,184	PAC/AD	2.75	FIX	38381YPJ7	September 2049
		II	2,713,964	NTL(PAC/AD)	5.00	FIX/IO	38381YPK4	September 2049
		Ţ	6,784,911	PAC/AD	3.00	FIX	38381YPL2	September 2049
		TK	6,031,032	PAC/AD	3.25	FIX	38381YPM0	September 2049
		II	5,427,928	PAC/AD	3.50	FIX	38381YPN8	September 2049
Security Group 13								
Combination 6								
HL	\$ 716,079	MT	\$ 2,806,244	PAC	2.50%	FIX	38381YPP3	September 2049
UL	2,090,165							
COIIIDIIIAUOII 7(0)	\$34 337 992	VI A	\$34 337 992	PAC	1 00%	FIX	38381VPO1	November 2048
)	1	II.	34 337 992	PAC	1.25	FIX	38381YPR9	November 2048
			34 337 992	PAC	ر ار د ار د	FIX	38381YPS7	
		GD D	34.337.992	PAC	1.75	FIX	38381YPT5	
		UE	34,337,992	PAC	2.00	FIX	38381YPU2	November 2048
		Ω C	34,337,992	PAC	2.25	FIX	38381YPV0	November 2048
		I	11,445,997	NTL(PAC)	4.50	FIX/IO	38381YPW8	November 2048
		UJ	29,432,564	PAC	2.75	FIX	38381YPX6	November 2048
		UK	25,753,494	PAC	3.00	FIX	38381YPY4	November 2048
		NM	22,891,994	PAC	3.25	FIX	38381YPZ1	November 2048
		Z	20,602,795	PAC	3.50	FIX	38381YOA5	November 2048

REMIC Securities	rities			M	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)
Combination 8(6)								
Ω	\$34,337,992	Н	\$36,428,157	PAC	2.50%	FIX	38381YQB3	July 2049
In	2,090,165	HA	36,428,157	PAC	1.00	FIX	38381YQC1	July 2049
		HB	36,428,157	PAC	1.25	FIX	38381YQD9	July 2049
		HC	36,428,157	PAC	1.50	FIX	38381YQE7	July 2049
		HD	36,428,157	PAC	1.75	FIX	38381YQF4	July 2049
		HE	36,428,157	PAC	2.00	FIX	38381YQG2	July 2049
		HG	36,428,157	PAC	2.25	FIX	38381ҮQН0	July 2049
		HI	12,142,719	NTL(PAC)	4.50	FIX/IO	38381YQJ6	July 2049
		HĴ	31,224,134	PAC	2.75	FIX	38381YQK3	July 2049
		HK	27,321,117	PAC	3.00	FIX	38381YQL1	July 2049
		HIM	24,285,438	PAC	3.25	FIX	38381YQM9	July 2049
		HN	21,856,894	PAC	3.50	FIX	38381YQN7	July 2049
Security Group 14 Combination 9								
1 4	070707	7	CCC 1007 \$	HA/ O	>>>>	TOTAL	COO7710000	7000 7 3
JA TB	\$ 4,097,040 2.840.192	<u>ر</u>	207,706,0 ¢	3C/F1	0.00.0	ΓΙΛ	26261 I QF2	september 2020
Combination 10	1							
Ħ	\$17,041,147	FK	\$41,623,398	SC/PT	(5)	FLT	38381YQQ0	September 2036
Ţ	24,582,251)	4
Security Group 15								
Combination 11								
BA	\$ 5,247,796	BD	\$28,432,119	SC/PAC/AD	3.00%	FIX	38381YQR8	April 2049
BL	23,184,323							
Combination 12(6)								
BL	\$23,184,323	BC BE	\$23,184,323 23,184,323	SC/PAC/AD SC/PAC/AD	2.00%	FIX FIX	38381YQS6 38381YOT4	April 2049 April 2049
		BG	23,184,323	SC/PAC/AD	2.50	FIX	38381YQU1	April 2049
		BI	5,796,080	NTL(SC/PAC/AD)	4.00	FIX/IO	38381YQV9	April 2049
		BJ	23,184,323	SC/PAC/AD	2.75	FIX	38381YQW7	April 2049

REMIC Securities	ırities			M	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 18 Combination 13(6)								
NA	\$16,596,000	NB	\$16,596,000	SC/SCH/AD	2.00%	FIX	38381YQX5	May 2048
		NC	16,596,000	SC/SCH/AD	2.25	FIX	38381YQY3	May 2048
		ND	16,596,000	SC/SCH/AD	2.50	FIX	38381YQZ0	May 2048
		NE	16,596,000	SC/SCH/AD	2.75	FIX	38381YRA4	May 2048
		NG	16,596,000	SC/SCH/AD	3.00	FIX	38381YRB2	May 2048
		N	5,532,000	NTL(SC/SCH/AD)	4.50	FIX/10	38381YRC0	May 2048

(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. 7

(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.

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

In the case of Combinations 2, 3, 5, 7, 8, 12 and 13, various subcombinations are permitted. See "Description of the Securities — Modification and Exchange" in the Base Offering Circular for a discussion of subcombinations. 9

related Distribution Date on which the Class Principal Balance of this MX Class would be reduced to zero in the second case, effect a 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 on the last Business Day of the calendar month immediately preceding the related Distribution Date in the first case, and prior to the mandatory exchange of this MX Class for its related REMIC Securities and, thereafter, no further exchanges of such REMIC Securities will 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 6

Schedule II

SCHEDULED PRINCIPAL BALANCES

Distribution Date	Class DA	Classes LA and LP (in the aggregate)	Classes PA and PZ (in the aggregate)	Classes T and TZ (in the aggregate)
Initial Balance	\$20,428,000.00	\$39,150,000.00	\$86,600,000.00	\$9,071,548.00
October 2019	20,263,743.17	39,013,845.61	86,331,743.72	9,050,199.53
November 2019	20,090,214.81	38,867,003.64	86,041,911.58	9,024,274.61
December 2019	19,907,508.90	38,709,519.63	85,730,612.05	8,993,782.86
January 2020	19,715,727.69	38,541,445.92	85,397,967.47	8,958,739.69
February 2020	19,514,981.56	38,362,841.69	85,044,113.99	8,919,166.34
March 2020	19,305,388.91	38,173,772.84	84,669,201.49	8,875,089.89
April 2020	19,087,076.07	37,974,312.05	84,273,393.45	8,826,543.23
May 2020	18,860,177.10	37,764,538.64	83,856,866.87	8,773,565.06
June 2020	18,624,833.68	37,544,538.56	83,419,812.10	8,716,199.85
July 2020	18,381,194.94	37,314,404.33	82,962,432.75	8,654,497.79
August 2020	18,129,417.27	37,074,234.94	82,484,945.48	8,588,514.73
September 2020	17,824,930.84	36,824,135.82	81,987,579.87	8,518,312.15
October 2020	17,465,525.64	36,564,218.70	81,470,578.19	8,443,957.01
November 2020	17,095,828.16	36,294,601.58	80,934,195.23	8,365,521.70
December 2020	16,716,287.69	36,015,408.55	80,378,698.08	8,283,083.94
January 2021	16,327,367.36	35,726,769.79	79,804,365.87	8,196,726.63
February 2021	15,929,543.12	35,428,821.36	79,211,489.58	8,106,537.75
March 2021	15,523,302.72	35,121,705.14	78,600,371.75	8,012,610.18
April 2021	15,110,044.24	34,805,568.70	77,971,326.21	7,915,041.60
May 2021	14,690,232.59	34,480,565.13	77,324,677.82	7,813,934.29
June 2021	14,270,253.73	34,146,852.96	76,660,762.16	7,709,394.94
July 2021	13,851,855.88	33,804,595.97	75,979,925.23	7,601,534.51
August 2021	13,440,365.01	33,453,963.06	75,282,523.14	7,490,468.02
September 2021	13,035,662.00	33,095,128.13	74,568,921.77	7,376,314.31
October 2021	12,637,629.71	32,728,269.83	73,839,496.46	7,259,195.89
November 2021	12,246,152.98	32,353,571.49	73,094,631.61	7,139,238.66
December 2021	11,861,118.60	31,971,220.90	72,334,720.39	7,016,571.72
January 2022	11,482,415.28	31,581,410.14	71,579,920.68	6,891,327.12
February 2022	11,109,933.59	31,194,032.18	70,830,197.28	6,763,639.62
March 2022	10,743,565.96	30,809,069.58	70,085,515.22	6,637,772.67
April 2022	10,383,206.64	30,426,505.05	69,345,839.77	6,513,700.84
May 2022	10,028,751.66	30,046,321.38	68,611,136.41	6,391,399.06
June 2022	9,680,098.81	29,668,501.49	67,881,370.87	6,270,842.61
July 2022	9,337,147.60	29,293,028.40	67,156,509.08	6,152,007.10
August 2022	8,999,799.24	28,919,885.25	66,436,517.21	6,034,868.48
September 2022	8,667,956.62	28,549,055.27	65,721,361.66	5,919,403.03
October 2022	8,341,524.26	28,180,521.81	65,011,009.02	5,805,587.37
November 2022	8,020,408.29	27,814,268.34	64,305,426.14	5,693,398.42
December 2022	7,704,516.45	27,450,278.42	63,604,580.06	5,582,813.43
January 2023	7,393,758.01	27,088,535.71	62,908,438.04	5,473,809.97
February 2023	7,088,043.79	26,729,024.00	62,216,967.56	5,366,365.91
March 2023	6,787,286.12	26,371,727.15	61,530,136.33	5,260,459.43
April 2023	6,491,398.80	26,016,629.16	60,847,912.24	5,156,069.02
May 2023	6,200,297.11	25,663,714.11	60,170,263.42	5,053,173.44

Distribution Date	Class DA	Classes LA and LP (in the aggregate)	Classes PA and PZ (in the aggregate)	Classes T and TZ (in the aggregate)
June 2023	\$ 5,913,897.73	\$25,312,966.18	\$59,497,158.19	\$4,951,751.77
July 2023	5,635,078.80	24,964,369.68	58,828,565.08	4,851,783.37
August 2023	5,364,693.45	24,617,908.98	58,164,452.84	4,753,247.88
September 2023	5,102,485.31	24,273,568.59	57,504,790.43	4,656,125.22
October 2023	4,848,205.73	23,931,333.09	56,849,546.98	4,560,395.61
November 2023	4,601,613.59	23,591,187.17	56,198,691.86	4,466,039.52
December 2023	4,362,475.03	23,253,115.63	55,552,194.62	4,373,037.68
January 2024	4,130,563.24	22,917,103.35	54,910,025.03	4,281,371.13
February 2024	3,905,658.29	22,583,135.31	54,272,153.04	4,191,021.12
March 2024	3,687,546.88	22,251,196.59	53,638,548.80	4,101,969.19
April 2024	3,476,022.15	21,921,272.37	53,009,182.66	4,014,197.13
May 2024	3,270,883.49	21,593,347.93	52,384,025.17	3,927,686.99
June 2024	3,071,936.35	21,267,408.62	51,763,047.07	3,842,421.04
July 2024	2,878,992.07	20,943,439.91	51,146,219.30	3,758,381.83
August 2024	2,691,867.70	20,621,427.35	50,533,512.96	3,675,552.13
September 2024	2,510,385.78	20,301,356.59	49,924,899.39	3,593,914.94
October 2024	2,334,374.27	19,983,213.36	49,320,350.08	3,513,453.53
November 2024	2,163,666.29	19,666,983.49	48,719,836.71	3,434,151.37
December 2024	1,998,100.04	19,352,652.91	48,123,331.18	3,355,992.17
January 2025	1,837,518.58	19,040,207.62	47,530,805.53	3,278,959.86
February 2025	1,681,769.76	18,729,633.73	46,942,232.01	3,203,038.60
March 2025	1,530,706.00	18,420,917.42	46,357,583.05	3,128,212.77
April 2025	1,384,184.19	18,114,044.96	45,776,831.26	3,054,466.95
May 2025	1,242,065.58	17,809,002.74	45,199,949.43	2,982,353.76
June 2025	1,104,215.59	17,505,777.20	44,626,910.53	2,911,913.11
July 2025	970,503.73	17,204,354.87	44,057,687.70	2,843,106.70
August 2025	840,803.45	16,904,722.39	43,492,254.27	2,775,897.09
September 2025	714,992.06	16,606,866.46	42,930,583.73	2,710,247.70
October 2025	592,950.56	16,310,773.89	42,372,649.76	2,646,122.79
November 2025	474,563.55	16,016,431.55	41,818,426.21	2,583,487.40
December 2025	359,719.17	15,723,826.40	41,267,887.09	2,522,307.40
January 2026	248,308.90	15,432,945.50	40,721,006.59	2,462,549.42
February 2026	140,227.54	15,147,081.04	40,177,759.07	2,404,180.83
March 2026	35,373.08	14,866,335.06	39,638,119.07	2,347,169.77
April 2026	0.00	14,590,617.97	39,102,061.27	2,291,485.08
May 2026	0.00	14,319,841.72	38,569,560.54	2,237,096.33
June 2026	0.00	14,053,919.76	38,040,591.91	2,183,973.77
July 2026	0.00	13,792,767.07	37,515,130.57	2,132,088.31
August 2026	0.00	13,536,300.06	36,993,151.87	2,081,411.56
September 2026	0.00	13,284,436.59	36,474,631.33	2,031,915.74
October 2026	0.00	13,037,095.95	35,959,544.64	1,983,573.71
November 2026	0.00	12,794,198.81	35,447,867.62	1,936,358.96
December 2026	0.00	12,555,667.21	34,940,422.80	1,890,245.57
January 2027	0.00	12,321,424.54	34,439,785.81	1,845,208.22
February 2027	0.00	12,091,395.51	33,945,868.65	1,801,222.16
March 2027	0.00	11,865,506.13	33,458,584.44	1,758,263.20
April 2027	0.00	11,643,683.68	32,977,847.39	1,716,307.71
May 2027	0.00	11,425,856.71	32,503,572.81	1,675,332.58

Distribution Date	Class DA	Classes LA and LP (in the aggregate)	Classes PA and PZ (in the aggregate)	Classes T and TZ (in the aggregate)
June 2027	\$ 0.00	\$11,211,954.99	\$32,035,677.07	\$1,635,315.26
July 2027	0.00	11,001,909.52	31,574,077.59	1,596,233.67
August 2027	0.00	10,795,652.47	31,118,692.85	1,558,066.27
September 2027	0.00	10,593,117.21	30,669,442.34	1,520,791.99
October 2027	0.00	10,394,238.24	30,226,246.58	1,484,390.25
November 2027	0.00	10,198,951.20	29,789,027.11	1,448,840.94
December 2027	0.00	10,007,192.85	29,357,706.44	1,414,124.39
January 2028	0.00	9,818,901.03	28,932,208.06	1,380,221.41
February 2028	0.00	9,634,014.67	28,512,456.45	1,347,113.21
March 2028	0.00	9,452,473.75	28,098,377.02	1,314,781.46
April 2028	0.00	9,274,219.28	27,689,896.14	1,283,208.24
May 2028	0.00	9,099,193.31	27,286,941.11	1,252,376.04
June 2028	0.00	8,927,338.88	26,889,440.16	1,222,267.73
July 2028	0.00	8,758,600.03	26,497,322.40	1,192,866.59
August 2028	0.00	8,592,921.75	26,110,517.87	1,164,156.29
September 2028	0.00	8,430,250.01	25,728,957.49	1,136,120.85
October 2028	0.00	8,270,531.68	25,352,573.04	1,108,744.67
November 2028	0.00	8,113,714.59	24,981,297.17	1,082,012.51
December 2028	0.00	7,959,747.45	24,615,063.40	1,055,909.46
January 2029	0.00	7,808,579.87	24,253,806.08	1,030,420.96
February 2029	0.00	7,660,162.33	23,897,460.40	1,005,532.80
March 2029	0.00	7,514,446.18	23,545,962.36	981,231.07
April 2029	0.00	7,371,383.59	23,199,248.78	957,502.18
May 2029	0.00	7,230,927.59	22,857,257.28	934,332.87
June 2029	0.00	7,093,032.00	22,519,926.29	911,710.17
July 2029	0.00	6,957,651.47	22,187,194.99	889,621.41
August 2029	0.00	6,824,741.41	21,859,003.35	868,054.20
September 2029	0.00	6,694,258.02	21,535,292.11	846,996.45
October 2029	0.00	6,566,158.26	21,216,002.76	826,436.35
November 2029	0.00	6,440,399.84	20,901,077.52	806,362.32
December 2029	0.00	6,316,941.20	20,590,459.35	786,763.11
January 2030	0.00	6,195,741.50	20,284,091.94	767,627.67
February 2030	0.00	6,076,760.63	19,981,919.70	748,945.23
March 2030	0.00	5,959,959.16	19,683,887.75	730,705.27
April 2030	0.00	5,845,298.35	19,389,941.88	712,897.50
May 2030	0.00	5,732,740.14	19,100,028.62	695,511.87
June 2030	0.00	5,622,247.13	18,814,095.12	678,538.56
July 2030	0.00	5,513,782.56	18,532,089.26	661,967.98
August 2030	0.00	5,407,310.33	18,253,959.55	645,790.76
September 2030	0.00	5,302,794.97	17,979,655.17	629,997.73
October 2030	0.00	5,200,201.60	17,709,125.93	614,579.95
November 2030	0.00	5,099,495.98	17,442,322.30	599,528.68
December 2030	0.00	5,000,644.46	17,179,195.38	584,835.37
January 2031	0.00	4,903,613.96	16,919,696.88	570,491.69
February 2031	0.00	4,808,372.00	16,663,779.13	556,489.46
March 2031	0.00	4,714,886.65	16,411,395.09	542,820.74
April 2031	0.00	4,623,126.55	16,162,498.28	529,477.74
May 2031	0.00	4,533,060.89	15,917,042.85	516,452.85

Distribution Date	Class DA	Classes LA and LP (in the aggregate)	Classes PA and PZ (in the aggregate)	Classes T and TZ (in the aggregate)
June 2031	\$ 0.00	\$ 4,444,659.38	\$15,674,983.51	\$ 503,738.64
July 2031	0.00	4,357,892.27	15,436,275.58	491,327.87
August 2031	0.00	4,272,730.34	15,200,874.90	479,213.42
September 2031	0.00	4,189,144.86	14,968,737.93	467,388.39
October 2031	0.00	4,107,107.63	14,739,821.65	455,845.99
November 2031	0.00	4,026,590.92	14,514,083.60	444,579.62
December 2031	0.00	3,947,567.49	14,291,481.87	433,582.83
January 2032	0.00	3,870,010.58	14,071,975.08	422,849.28
February 2032	0.00	3,793,893.91	13,855,522.37	412,372.84
March 2032	0.00	3,719,191.64	13,642,083.42	402,147.46
April 2032	0.00	3,645,878.40	13,431,618.42	392,167.26
May 2032	0.00	3,573,929.25	13,224,088.06	382,426.50
June 2032	0.00	3,503,319.69	13,019,453.55	372,919.56
July 2032	0.00	3,434,025.67	12,817,676.58	363,640.96
August 2032	0.00	3,366,023.53	12,618,719.34	354,585.33
September 2032	0.00	3,299,290.05	12,422,544.52	345,747.44
October 2032	0.00	3,233,802.41	12,229,115.25	337,122.17
November 2032	0.00	3,169,538.19	12,038,395.17	328,704.53
December 2032	0.00	3,106,475.35	11,850,348.36	320,489.64
January 2033	0.00	3,044,592.27	11,664,939.38	312,472.72
February 2033	0.00	2,983,867.68	11,482,133.24	304,649.13
March 2033	0.00	2,924,280.69	11,301,895.38	297,014.30
April 2033	0.00	2,865,810.79	11,124,191.72	289,563.81
May 2033	0.00	2,808,437.82	10,948,988.59	282,293.29
June 2033	0.00	2,752,141.98	10,776,252.76	275,198.52
July 2033	0.00	2,696,903.81	10,605,951.42	268,275.35
August 2033	0.00	2,642,704.21	10,438,052.20	261,519.73
September 2033	0.00	2,589,524.40	10,272,523.13	254,927.70
October 2033	0.00	2,537,345.93	10,109,332.66	248,495.42
November 2033	0.00	2,486,150.68	9,948,449.63	242,219.10
December 2033	0.00	2,435,920.86	9,789,843.31	236,095.06
January 2034	0.00	2,386,638.98	9,633,483.34	230,119.70
February 2034	0.00	2,338,287.87	9,479,339.76	224,289.51
March 2034	0.00	2,290,850.64	9,327,383.00	218,601.05
April 2034	0.00	2,244,310.73	9,177,583.86	213,050.96
May 2034	0.00	2,198,651.84	9,029,913.52	207,635.98
June 2034	0.00	2,153,857.99	8,884,343.55	202,352.89
July 2034	0.00	2,109,913.46	8,740,845.85	197,198.59
August 2034	0.00	2,066,802.82	8,599,392.72	192,170.00
September 2034	0.00	2,024,510.90	8,459,956.80	187,264.16
October 2034	0.00	1,983,022.81	8,322,511.07	182,478.14
November 2034	0.00	1,942,323.91	8,187,028.89	177,809.10
December 2034	0.00	1,902,399.85	8,053,483.93	173,254.27
January 2035	0.00	1,863,236.49	7,921,850.22	168,810.93
February 2035	0.00	1,824,819.98	7,792,102.14	164,476.43
March 2035	0.00	1,787,136.68	7,664,214.36	160,248.17
April 2035	0.00	1,750,173.23	7,538,161.91	156,123.64
May 2035	0.00	1,713,916.47	7,413,920.13	152,100.37

Distribution Date	Class DA	Classes LA and LP (in the aggregate)	Classes PA and PZ (in the aggregate)	Classes T and TZ (in the aggregate)
June 2035	\$ 0.00	\$ 1,678,353.50	\$ 7,291,464.70	\$ 148,175.93
July 2035	0.00	1,643,471.64	7,170,771.57	144,347.98
August 2035	0.00	1,609,258.43	7,051,817.05	140,614.21
September 2035	0.00	1,575,701.64	6,934,577.73	136,972.38
October 2035	0.00	1,542,789.24	6,819,030.50	133,420.29
November 2035	0.00	1,510,509.45	6,705,152.57	129,955.80
December 2035	0.00	1,478,850.65	6,592,921.42	126,576.82
January 2036	0.00	1,447,801.47	6,482,314.85	123,281.30
February 2036	0.00	1,417,350.72	6,373,310.92	120,067.25
March 2036	0.00	1,387,487.42	6,265,888.00	116,932.71
April 2036	0.00	1,358,200.76	6,160,024.72	113,875.79
May 2036	0.00	1,329,480.17	6,055,700.00	110,894.62
June 2036	0.00	1,301,315.21	5,952,893.03	107,987.39
July 2036	0.00	1,273,695.68	5,851,583.26	105,152.32
August 2036	0.00	1,246,611.53	5,751,750.43	102,387.69
September 2036	0.00	1,220,052.89	5,653,374.52	99,691.80
October 2036	0.00	1,194,010.09	5,556,435.79	97,063.00
November 2036	0.00	1,168,473.60	5,460,914.74	94,499.68
December 2036	0.00	1,143,434.08	5,366,792.14	92,000.26
January 2037	0.00	1,118,882.35	5,274,048.99	89,563.21
February 2037	0.00	1,094,809.41	5,182,666.55	87,187.02
March 2037	0.00	1,071,206.40	5,092,626.33	84,870.24
April 2037	0.00	1,048,064.63	5,003,910.07	82,611.41
May 2037	0.00	1,025,375.55	4,916,499.75	80,409.16
June 2037	0.00	1,003,130.79	4,830,377.58	78,262.11
July 2037	0.00	981,322.11	4,745,526.02	76,168.93
August 2037	0.00	959,941.41	4,661,927.75	74,128.32
September 2037	0.00	938,980.77	4,579,565.66	72,139.01
October 2037	0.00	918,432.37	4,498,422.88	70,199.76
November 2037	0.00	898,288.56	4,418,482.76	68,309.35
December 2037	0.00	878,541.81	4,339,728.86	66,466.60
January 2038	0.00	859,184.74	4,262,144.97	64,670.36
February 2038	0.00	840,210.09	4,185,715.07	62,919.50
March 2038	0.00	821,610.73	4,110,423.36	61,212.91
April 2038	0.00	803,379.68	4,036,254.26	59,549.54
May 2038	0.00	785,510.05	3,963,192.37	57,928.31
June 2038	0.00	767,995.10	3,891,222.50	56,348.21
July 2038	0.00	750,828.21	3,820,329.67	54,808.24
August 2038	0.00	734,002.87	3,750,499.09	53,307.42
September 2038	0.00	717,512.68	3,681,716.15	51,844.79
October 2038	0.00	701,351.38	3,613,966.46	50,419.44
November 2038	0.00	685,512.80	3,547,235.79	49,030.43
December 2038	0.00	669,990.89	3,481,510.11	47,676.90
January 2039	0.00	654,779.71	3,416,775.57	46,357.97
February 2039	0.00	639,873.44	3,353,018.52	45,072.79
March 2039	0.00	625,266.33	3,290,225.46	43,820.55
April 2039	0.00	610,952.76	3,228,383.08	42,600.43
May 2039	0.00	596,927.22	3,167,478.26	41,411.65

Distribution Date	Class DA	Classes LA and LP (in the aggregate)	Classes PA and PZ (in the aggregate)	Classes T and TZ (in the aggregate)
June 2039	\$ 0.00	\$ 583,184.28	\$ 3,107,498.02	\$ 40,253.43
July 2039	0.00	569,718.60	3,048,429.59	39,125.04
August 2039	0.00	556,524.98	2,990,260.33	38,025.73
September 2039	0.00	543,598.26	2,932,977.80	36,954.79
October 2039	0.00	530,933.41	2,876,569.70	35,911.53
November 2039	0.00	518,525.48	2,821,023.91	34,895.26
December 2039	0.00	506,369.62	2,766,328.44	33,905.32
January 2040	0.00	494,461.03	2,712,471.49	32,941.06
February 2040	0.00	482,795.06	2,659,441.41	32,001.84
March 2040	0.00	471,367.08	2,607,226.68	31,087.06
April 2040	0.00	460,172.60	2,555,815.97	30,196.09
May 2040	0.00	449,207.16	2,505,198.07	29,328.37
June 2040	0.00	438,466.42	2,455,361.92	28,483.30
July 2040	0.00	427,946.11	2,406,296.63	27,660.33
August 2040	0.00	417,642.03	2,357,991.42	26,858.91
September 2040	0.00	407,550.06	2,310,435.69	26,078.51
October 2040	0.00	397,666.14	2,263,618.94	25,318.60
November 2040	0.00	387,986.33	2,217,530.84	24,578.68
December 2040	0.00	378,506.70	2,172,161.19	23,858.25
January 2041	0.00	369,223.44	2,127,499.91	23,156.82
February 2041	0.00	360,132.79	2,083,537.08	22,473.92
March 2041	0.00	351,231.06	2,040,262.89	21,809.09
April 2041	0.00	342,514.63	1,997,667.66	21,161.88
May 2041	0.00	333,979.94	1,955,741.86	20,531.84
June 2041	0.00	325,623.50	1,914,476.05	19,918.55
July 2041	0.00	317,441.89	1,873,860.97	19,321.58
August 2041	0.00	309,431.75	1,833,887.42	18,740.54
September 2041	0.00	301,589.77	1,794,546.37	18,175.02
October 2041	0.00	293,912.70	1,755,828.89	17,624.62
November 2041	0.00	286,397.38	1,717,726.16	17,088.98
December 2041	0.00	279,040.67	1,680,229.51	16,567.72
January 2042	0.00	271,839.52	1,643,330.36	16,060.47
February 2042	0.00	264,790.90	1,607,020.23	15,566.89
March 2042	0.00	257,891.87	1,571,290.80	15,086.63
April 2042	0.00	251,139.53	1,536,133.82	14,619.35
May 2042	0.00	244,531.03	1,501,541.16	14,164.73
June 2042	0.00	238,063.58	1,467,504.80	13,722.44
July 2042	0.00	231,734.43	1,434,016.84	13,292.18
August 2042	0.00	225,540.89	1,401,069.48	12,873.63
September 2042	0.00	219,480.33	1,368,655.00	12,466.51
October 2042	0.00	213,550.15	1,336,765.81	12,070.51
November 2042	0.00	207,747.80	1,305,394.43	11,685.36
December 2042	0.00	202,070.78	1,274,533.44	11,310.79
January 2043	0.00	196,516.65	1,244,175.56	10,946.51
February 2043	0.00	191,083.00	1,214,313.58	10,592.28
March 2043	0.00	185,767.46	1,184,940.40	10,247.82
April 2043	0.00	180,567.72	1,156,049.03	9,912.90
May 2043	0.00	175,481.50	1,127,632.54	9,587.27

Distribution Date	Class DA	Classes LA and LP (in the aggregate)	Classes PA and PZ (in the aggregate)	Classes T and TZ (in the aggregate)
June 2043	\$ 0.00	\$ 170,506.57	\$ 1,099,684.11	\$ 9,270.69
July 2043	0.00	165,640.75	1,072,197.02	8,962.93
August 2043	0.00	160,881.86	1,045,164.63	8,663.76
September 2043	0.00	156,227.82	1,018,580.39	8,372.96
October 2043	0.00	151,676.54	992,437.84	8,090.31
November 2043	0.00	147,226.00	966,730.60	7,815.61
December 2043	0.00	142,874.19	941,452.40	7,548.65
January 2044	0.00	138,619.17	916,597.02	7,289.23
February 2044	0.00	134,459.01	892,158.35	7,037.15
March 2044	0.00	130,391.82	868,130.35	6,792.23
April 2044	0.00	126,415.76	844,507.07	6,554.27
May 2044	0.00	122,529.01	821,282.63	6,323.10
June 2044	0.00	118,729.79	798,451.24	6,098.55
July 2044	0.00	115,016.35	776,007.18	5,880.43
August 2044	0.00	111,386.97	753,944.81	5,668.58
September 2044	0.00	107,839.98	732,258.56	5,462.84
October 2044	0.00	104,373.72	710,942.96	5,263.04
November 2044	0.00	100,986.58	689,992.59	5,069.04
December 2044	0.00	97,676.95	669,402.10	4,880.68
January 2045	0.00	94,443.29	649,166.24	4,697.80
February 2045	0.00	91,284.06	629,279.79	4,520.28
March 2045	0.00	88,197.76	609,737.65	4,347.96
April 2045	0.00	85,182.91	590,534.75	4,180.70
May 2045	0.00	82,238.08	571,666.11	4,018.39
June 2045	0.00	79,361.84	553,126.80	3,860.87
July 2045	0.00	76,552.80	534,911.98	3,708.04
August 2045	0.00	73,809.59	517,016.87	3,559.75
September 2045	0.00	71,130.88	499,436.73	3,415.90
October 2045	0.00	68,515.36	482,166.91	3,276.35
November 2045	0.00	65,961.73	465,202.82	3,141.01
December 2045	0.00	63,468.72	448,539.93	3,009.75
January 2046	0.00	61,035.11	432,173.78	2,882.47
February 2046	0.00	58,659.67	416,099.95	2,759.06
March 2046	0.00	56,341.20	400,314.10	2,639.42
April 2046	0.00	54,078.55	384,811.93	2,523.44
May 2046	0.00	51,870.54	369,589.24	2,411.03
June 2046	0.00	49,716.08	354,641.83	2,302.08
July 2046	0.00	47,614.03	339,965.60	2,196.51
August 2046	0.00	45,563.33	325,556.49	2,094.23
September 2046	0.00	43,562.91	311,410.51	1,995.14
October 2046	0.00	41,611.72	297,523.69	1,899.16
November 2046	0.00	39,708.74	283,892.16	1,806.20
December 2046	0.00	37,852.97	270,512.08	1,716.19
January 2047	0.00	36,043.42	257,379.65	1,629.03
February 2047	0.00	34,279.13	244,491.14	1,544.66
March 2047	0.00	32,559.16	231,842.88	1,462.99
April 2047	0.00	30,882.56	219,431.23	1,383.95
May 2047	0.00	29,248.44	207,252.61	1,307.47

Distribution Date	Class DA	Classes LA and LP (in the aggregate)	Classes PA and PZ (in the aggregate)	Classes T and TZ (in the aggregate)	
June 2047	\$ 0.00	\$ 27,655.90	\$ 195,303.49	\$ 1,233.48	
July 2047	0.00	26,104.06	183,580.39	1,161.91	
August 2047	0.00	24,592.06	172,079.86	1,092.69	
September 2047	0.00	23,119.06	160,798.54	1,025.76	
October 2047	0.00	21,684.24	149,733.06	961.05	
November 2047	0.00	20,286.79	138,880.15	898.50	
December 2047	0.00	18,925.90	128,236.55	838.06	
January 2048	0.00	17,600.81	117,799.05	779.65	
February 2048	0.00	16,310.74	107,564.51	723.23	
March 2048	0.00	15,054.95	97,529.80	668.73	
April 2048	0.00	13,832.71	87,691.86	616.11	
May 2048	0.00	12,643.29	78,047.66	565.31	
June 2048	0.00	11,485.99	68,594.20	516.28	
July 2048	0.00	10,360.11	59,328.55	468.96	
August 2048	0.00	9,264.98	50,247.79	423.32	
September 2048	0.00	8,199.93	41,349.08	379.29	
October 2048	0.00	7,164.31	32,629.58	336.85	
November 2048	0.00	6,157.48	24,086.51	295.93	
December 2048	0.00	5,178.81	15,717.12	256.49	
January 2049	0.00	4,227.68	7,518.72	218.50	
February 2049	0.00	3,303.50	0.00	181.91	
March 2049	0.00	2,405.67	0.00	146.68	
April 2049	0.00	1,533.62	0.00	112.78	
May 2049	0.00	686.77	0.00	80.15	
June 2049	0.00	0.00	0.00	48.76	
July 2049	0.00	0.00	0.00	18.59	
August 2049 and thereafter	0.00	0.00	0.00	0.00	

Distribution Date	Classes HL, U and UL (in the aggregate)	Classes BA and BL (in the aggregate)	Class AP	Class NA
Initial Balance	\$37,144,236.00	\$28,432,119.00	\$32,277,000.00	\$16,596,000.00
October 2019	37,057,049.16	28,162,437.12	31,978,519.43	16,353,135.32
November 2019	36,953,109.94	27,875,517.20	31,674,508.71	16,206,927.71
December 2019	36,832,460.32	27,571,661.37	31,365,029.56	16,056,182.21
January 2020	36,695,161.45	27,251,198.29	31,050,151.58	15,900,988.20
February 2020	36,541,293.70	26,914,482.63	30,730,753.16	15,741,438.37
March 2020	36,370,956.61	26,561,894.40	30,406,893.12	15,577,628.51
April 2020	36,184,268.94	26,193,838.29	30,078,637.43	15,409,657.52
May 2020	35,981,368.48	25,810,742.87	29,746,059.11	15,237,627.24
June 2020	35,762,412.00	25,413,059.78	29,409,238.08	15,061,642.33
July 2020	35,527,575.11	25,001,262.80	29,068,261.08	14,881,810.20
August 2020	35,277,052.00	24,575,846.95	28,723,221.49	14,698,240.83
September 2020	35,011,055.29	24,137,327.41	28,374,219.16	14,516,066.84
October 2020	34,729,815.71	23,686,238.49	28,021,360.29	14,335,276.58
November 2020	34,433,581.85	23,223,132.47	27,664,757.21	14,155,858.48
December 2020	34,122,619.76	22,748,578.45	27,304,528.21	13,977,801.10
January 2021	33,797,212.65	22,263,161.11	26,940,797.34	13,801,093.03
February 2021	33,457,660.45	21,770,068.21	26,573,694.19	13,625,722.99
March 2021	33,104,279.35	21,269,786.43	26,203,353.70	13,418,146.36
April 2021	32,737,401.37	20,764,563.69	25,829,915.88	13,149,843.24
May 2021	32,357,373.83	20,255,410.43	25,453,525.65	12,886,181.90
June 2021	31,964,558.82	19,749,789.57	25,074,332.50	12,627,077.87
July 2021	31,559,332.64	19,248,595.90	24,692,490.34	12,372,448.18
August 2021	31,142,085.18	18,751,862.74	24,308,157.14	12,122,211.35
September 2021	30,713,219.33	18,263,424.75	23,927,974.42	11,876,287.35
October 2021	30,273,150.30	17,783,178.22	23,551,895.58	11,634,597.57
November 2021	29,822,304.98	17,310,981.36	23,179,874.51	11,397,064.81
December 2021	29,361,121.21	16,846,694.78	22,811,865.63	11,163,613.24
January 2022	28,890,047.07	16,390,181.47	22,447,823.83	10,934,168.37
February 2022	28,409,540.14	15,941,306.73	22,087,704.51	10,708,657.05
March 2022	27,935,207.65	15,499,938.16	21,731,463.54	10,487,007.43
April 2022	27,466,972.22	15,065,945.61	21,379,057.26	10,269,148.95
May 2022	27,004,757.43	14,639,201.13	21,030,442.50	10,055,012.30
June 2022	26,548,487.80	14,219,578.96	20,685,576.56	9,844,529.39
July 2022	26,098,088.80	13,806,955.46	20,344,417.18	9,637,633.37
August 2022	25,653,486.78	13,401,209.11	20,006,922.58	9,434,258.57
September 2022	25,214,609.04	13,002,220.44	19,673,051.41	9,234,340.49
October 2022	24,781,383.76	12,609,872.02	19,342,762.81	9,037,815.78
November 2022	24,353,740.00	12,224,048.40	19,016,016.31	8,844,622.23
December 2022	23,931,607.72	11,844,636.13	18,692,771.91	8,654,698.72
January 2023	23,514,917.71	11,471,523.65	18,372,990.05	8,467,985.25
February 2023	23,103,601.65	11,104,601.32	18,056,631.57	8,285,781.04
March 2023	22,697,592.05	10,743,761.36	17,743,657.76	8,108,539.25
April 2023	22,296,822.25	10,388,897.82	17,434,030.32	7,936,120.75
May 2023	21,901,226.41	10,039,906.56	17,127,711.37	7,768,390.29
June 2023	21,510,739.53	9,701,274.24	16,824,663.43	7,605,216.36
July 2023	21,125,297.38	9,373,637.86	16,524,849.43	7,446,471.11
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Distribution Date	Classes HL, U and UL (in the aggregate)	Classes BA and BL (in the aggregate)	Class AP	Class NA
August 2023	\$20,744,836.55	\$ 9,056,642.83	\$16,228,232.71	\$ 7,292,030.22
September 2023	20,369,294.39	8,749,945.91	15,934,777.01	7,141,772.83
October 2023	19,998,609.05	8,453,214.90	15,644,446.44	6,995,581.43
November 2023	19,632,719.43	8,166,128.23	15,357,205.53	6,838,106.52
December 2023	19,271,565.20	7,888,374.66	15,073,019.17	6,683,248.73
January 2024	18,915,086.74	7,619,652.92	14,791,852.65	6,530,959.72
February 2024	18,563,225.22	7,359,671.43	14,513,671.61	6,381,191.99
March 2024	18,215,922.51	7,108,147.96	14,238,442.10	6,233,898.91
April 2024	17,873,121.19	6,864,809.32	13,966,130.51	6,089,034.67
May 2024	17,534,764.56	6,629,391.13	13,696,703.60	5,946,554.31
June 2024	17,200,796.63	6,401,637.47	13,430,128.49	5,806,413.63
July 2024	16,871,162.11	6,181,300.64	13,166,372.67	5,668,569.24
August 2024	16,545,806.36	5,968,140.92	12,906,089.75	5,532,978.54
September 2024	16,224,675.46	5,761,926.27	12,650,808.25	5,399,599.66
October 2024	15,907,716.13	5,562,432.11	12,400,433.87	5,268,391.52
November 2024	15,594,875.75	5,369,441.08	12,154,874.07	5,139,313.73
December 2024	15,286,102.36	5,182,742.81	11,914,038.03	5,012,326.64
January 2025	14,981,344.66	5,002,133.69	11,677,836.64	4,887,391.34
February 2025	14,680,551.95	4,827,416.65	11,446,182.41	4,764,469.56
March 2025	14,383,674.18	4,658,400.98	11,218,989.50	4,643,523.76
April 2025	14,090,661.93	4,494,902.07	10,996,173.69	4,524,517.05
May 2025	13,801,466.38	4,336,741.28	10,777,652.28	4,407,413.20
June 2025	13,516,039.30	4,183,745.71	10,563,344.15	4,292,176.64
July 2025	13,234,333.09	4,035,748.01	10,353,169.68	4,178,772.44
August 2025	12,956,300.73	3,892,586.23	10,147,050.73	4,067,166.26
September 2025	12,681,895.76	3,754,103.63	9,944,910.62	3,957,324.42
October 2025	12,412,390.25	3,620,148.52	9,746,674.10	3,810,697.23
November 2025	12,148,479.35	3,490,574.10	9,552,267.32	3,668,227.07
December 2025	11,890,048.79	3,365,238.28	9,361,617.81	3,529,796.93
January 2026	11,636,986.63	3,244,003.56	9,174,654.45	3,395,293.04
February 2026	11,389,183.17	3,126,736.87	8,991,307.45	3,264,604.83
March 2026	11,146,530.92	3,013,309.44	8,811,508.32	3,137,624.81
April 2026	10,908,924.58	2,903,596.62	8,635,189.86	3,014,248.47
May 2026	10,676,260.97	2,797,477.81	8,462,286.09	2,894,374.26
June 2026	10,448,438.98	2,694,836.29	8,292,732.30	2,777,903.42
July 2026	10,225,359.56	2,595,559.10	8,126,464.97	2,664,739.99
August 2026	10,006,925.66	2,499,536.91	7,963,421.78	2,554,790.66
September 2026	9,793,042.20	2,406,663.95	7,803,541.55	2,447,964.75
October 2026	9,583,615.99	2,316,837.84	7,646,764.26	2,344,174.09
November 2026	9,378,555.76	2,229,959.51	7,493,031.02	2,243,333.00
December 2026	9,177,772.07	2,145,933.08	7,342,284.03	2,145,358.19
January 2027	8,981,177.29	2,064,665.80	7,194,466.56	2,050,168.68
February 2027	8,788,685.57	1,986,067.86	7,049,522.96	1,957,685.79
March 2027	8,600,212.79	1,910,052.40	6,907,398.61	1,867,833.00
April 2027	8,415,676.54	1,836,535.34	6,768,039.93	1,780,535.97
May 2027	8,234,996.06	1,765,435.33	6,631,394.31	1,695,722.42
June 2027	8,058,092.25	1,696,673.64	6,497,410.14	1,613,322.10
June 202/	0,000,094.40	1,070,0/3.04	0,49/,410.14	1,013,344.10

Distribution Date	Classes HL, U and UL (in the aggregate)	Classes BA and BL (in the aggregate)	Class AP	Class NA
July 2027	\$ 7,884,887.60	\$ 1,630,174.09	\$ 6,366,036.80	\$ 1,533,266.71
August 2027	7,715,306.17	1,565,862.96	6,237,224.58	1,455,489.90
September 2027	7,549,273.56	1,503,668.91	6,110,924.73	1,379,927.14
October 2027	7,386,716.88	1,443,522.93	5,987,089.39	1,306,515.74
November 2027	7,227,564.71	1,385,358.22	5,865,671.62	1,235,194.74
December 2027	7,071,747.09	1,329,110.15	5,746,625.33	1,165,904.90
January 2028	6,919,195.46	1,274,716.18	5,629,905.33	1,098,588.66
February 2028	6,769,842.67	1,222,115.79	5,515,467.26	1,033,190.03
March 2028	6,623,622.93	1,171,250.42	5,403,267.58	969,654.64
April 2028	6,480,471.77	1,122,063.43	5,293,263.58	907,929.60
May 2028	6,340,326.04	1,074,499.99	5,185,413.35	849,901.81
June 2028	6,203,123.88	1,028,507.04	5,079,675.77	819,510.88
July 2028	6,068,804.65	984,033.27	4,976,010.48	789,978.93
August 2028	5,937,308.99	941,029.01	4,874,377.90	761,281.53
September 2028	5,808,578.72	899,446.21	4,774,739.17	733,394.93
October 2028	5,682,556.83	859,238.36	4,677,056.16	706,296.04
November 2028	5,559,187.50	820,360.49	4,581,291.48	679,962.43
December 2028	5,438,416.02	782,769.07	4,487,408.42	654,372.31
January 2029	5,320,188.79	746,421.98	4,395,370.98	629,504.48
February 2029	5,204,453.32	711,278.48	4,305,143.81	605,338.36
March 2029	5,091,158.18	677,299.14	4,216,692.24	581,853.93
April 2029	4,980,252.98	644,445.81	4,129,982.26	559,031.74
May 2029	4,871,688.35	612,681.60	4,044,980.49	536,852.89
June 2029	4,765,415.94	581,970.79	3,961,654.18	515,299.01
July 2029	4,661,388.37	552,278.84	3,879,971.19	494,352.24
August 2029	4,559,559.24	523,572.33	3,799,900.00	473,995.24
September 2029	4,459,883.09	495,818.92	3,721,409.67	454,211.15
October 2029	4,362,315.37	468,987.33	3,644,469.86	434,983.58
November 2029	4,266,812.45	443,047.29	3,569,050.77	416,296.60
December 2029	4,173,331.60	417,969.52	3,495,123.20	398,134.75
January 2030	4,081,830.95	393,725.68	3,422,658.47	380,482.98
February 2030	3,992,269.47	370,288.38	3,351,628.45	363,326.68
March 2030	3,904,606.99	347,631.09	3,282,005.56	346,651.65
April 2030	3,818,804.15	325,728.18	3,213,762.71	330,444.08
May 2030	3,734,822.40	304,554.81	3,146,873.34	314,690.57
June 2030	3,652,623.95	284,086.99	3,081,311.39	299,378.08
July 2030	3,572,171.81	264,377.97	3,017,051.28	284,493.95
August 2030	3,493,429.74	252,126.13	2,954,067.93	270,025.87
September 2030	3,416,362.24	240,282.78	2,892,336.72	255,961.88
October 2030	3,340,934.51	228,834.48	2,831,833.50	242,290.36
November 2030	3,267,112.50	217,768.21	2,772,534.58	229,000.02
December 2030	3,194,862.84	207,071.38	2,714,416.71	216,079.89
January 2031	3,124,152.83	196,731.82	2,657,457.09	203,519.30
February 2031	3,054,950.45	186,737.75	2,601,633.34	191,307.89
March 2031	2,987,224.34	177,077.76	2,546,923.52	179,435.59
April 2031	2,920,943.77	167,740.84	2,493,306.09	167,892.63
May 2031	2,856,078.64	158,716.32	2,440,759.92	156,669.49

Distribution Date	Classes HL, U and UL (in the aggregate)	Classes BA and BL (in the aggregate)	Class AP	Class NA
June 2031	\$ 2,792,599.47	\$ 149,993.88	\$ 2,389,264.28	\$ 145,756.95
July 2031	2,730,477.40	141,563.55	2,338,798.84	135,146.01
August 2031	2,669,684.12	133,415.67	2,289,343.65	124,827.98
September 2031	2,610,191.93	125,540.92	2,240,879.14	114,794.36
October 2031	2,551,973.71	117,930.24	2,193,386.10	105,036.93
November 2031	2,495,002.85	110,574.92	2,146,845.71	95,547.69
December 2031	2,439,253.34	103,466.50	2,101,239.48	86,318.87
January 2032	2,384,699.65	96,596.81	2,056,549.29	77,342.91
February 2032	2,331,316.82	89,957.94	2,012,757.34	68,612.48
March 2032	2,279,080.36	83,542.24	1,969,846.20	60,120.45
April 2032	2,227,966.33	77,342.33	1,927,798.75	51,859.90
May 2032	2,177,951.24	71,351.04	1,886,598.19	43,824.08
June 2032	2,129,012.10	65,561.46	1,846,228.07	36,006.47
July 2032	2,081,126.39	59,966.90	1,806,672.21	28,400.71
August 2032	2,034,272.05	54,560.87	1,767,914.78	21,000.63
September 2032	1,988,427.48	49,337.13	1,729,940.21	13,800.23
October 2032	1,943,571.52	44,289.62	1,692,733.26	6,793.69
November 2032	1,899,683.45	39,412.48	1,656,278.97	0.00
December 2032	1,856,742.95	34,700.05	1,620,562.65	0.00
January 2033	1,814,730.16	30,146.84	1,585,569.91	0.00
February 2033	1,773,625.61	25,747.57	1,551,286.62	0.00
March 2033	1,733,410.21	21,497.12	1,517,698.93	0.00
April 2033	1,694,065.29	17,390.51	1,484,793.25	0.00
May 2033	1,655,572.56	13,422.97	1,452,556.24	0.00
June 2033	1,617,914.09	9,589.86	1,420,974.83	0.00
July 2033	1,581,072.35	5,886.69	1,390,036.19	0.00
August 2033	1,545,030.14	2,309.14	1,359,727.73	0.00
September 2033	1,509,770.64	0.00	1,330,037.12	0.00
October 2033	1,475,277.35	0.00	1,300,952.24	0.00
November 2033	1,441,534.13	0.00	1,272,461.23	0.00
December 2033	1,408,525.18	0.00	1,244,552.42	0.00
January 2034	1,376,235.01	0.00	1,217,214.40	0.00
February 2034	1,344,648.44	0.00	1,190,435.95	0.00
March 2034	1,313,750.64	0.00	1,164,206.09	0.00
April 2034	1,283,527.04	0.00	1,138,514.03	0.00
May 2034	1,253,963.42	0.00	1,113,349.19	0.00
June 2034	1,225,045.82	0.00	1,088,701.20	0.00
July 2034	1,196,760.58	0.00	1,064,559.89	0.00
August 2034	1,169,094.31	0.00	1,040,915.27	0.00
September 2034	1,142,033.92	0.00	1,017,757.55	0.00
October 2034	1,115,566.58	0.00	995,077.14	0.00
November 2034	1,089,679.72	0.00	972,864.62	0.00
	, ,			0.00
December 2034	1,064,361.04	0.00	951,110.75 929,806.46	0.00
January 2035	1,039,598.49	0.00		0.00
February 2035	1,015,380.26	0.00	908,942.89	0.00
March 2035	991,694.80	0.00	888,511.31 868 503 17	
April 2035	968,530.80	0.00	868,503.17	0.00

Distribution Date	Classes HL, U and UL (in the aggregate)	Classes BA and BL (in the aggregate)	 Class AP	 Class NA
May 2035	\$ 945,877.18	\$ 0.00	\$ 848,910.10	\$ 0.00
June 2035	923,723.08	0.00	829,723.86	0.00
July 2035	902,057.88	0.00	810,936.41	0.00
August 2035	880,871.18	0.00	792,539.83	0.00
September 2035	860,152.78	0.00	774,526.36	0.00
October 2035	839,892.72	0.00	756,888.40	0.00
November 2035	820,081.21	0.00	739,618.49	0.00
December 2035	800,708.70	0.00	722,709.31	0.00
January 2036	781,765.81	0.00	706,153.69	0.00
February 2036	763,243.39	0.00	689,944.59	0.00
March 2036	745,132.43	0.00	674,075.11	0.00
April 2036	727,424.16	0.00	658,538.49	0.00
May 2036	710,109.96	0.00	643,328.08	0.00
June 2036	693,181.39	0.00	628,437.39	0.00
July 2036	676,630.21	0.00	613,860.02	0.00
August 2036	660,448.33	0.00	599,589.71	0.00
September 2036	644,627.84	0.00	585,620.34	0.00
October 2036	629,160.98	0.00	571,945.87	0.00
November 2036	614,040.17	0.00	558,560.41	0.00
December 2036	599,257.99	0.00	545,458.17	0.00
January 2037	584,807.15	0.00	532,633.48	0.00
February 2037	570,680.53	0.00	520,080.75	0.00
March 2037	556,871.17	0.00	507,794.55	0.00
April 2037	543,372.23	0.00	495,769.51	0.00
May 2037	530,177.04	0.00	484,000.39	0.00
June 2037	517,279.04	0.00	472,482.04	0.00
July 2037	504,671.84	0.00	461,209.42	0.00
August 2037	492,349.16	0.00	450,177.57	0.00
September 2037	480,304.86	0.00	439,381.64	0.00
October 2037	468,532.92	0.00	428,816.88	0.00
November 2037	457,027.46	0.00	418,478.62	0.00
December 2037	445,782.73	0.00	408,362.29	0.00
January 2038	434,793.07	0.00	398,463.40	0.00
February 2038	424,052.96	0.00	388,777.55	0.00
March 2038	413,557.01	0.00	379,300.44	0.00
April 2038	403,299.90	0.00	370,027.83	0.00
May 2038	393,276.48	0.00	360,955.57	0.00
June 2038	383,481.65	0.00	352,079.61	0.00
July 2038	373,910.46	0.00	343,395.96	0.00
August 2038	364,558.04	0.00	334,900.71	0.00
September 2038	355,419.64	0.00	326,590.03	0.00
October 2038	346,490.59	0.00	318,460.17	0.00
November 2038	337,766.34	0.00	310,507.44	0.00
December 2038	329,242.42	0.00	302,728.23	0.00
January 2039	320,914.47	0.00	295,119.00	0.00
February 2039	312,778.20	0.00	287,676.29	0.00
March 2039	304,829.43	0.00	280,396.69	0.00
waten 20 <i>3</i> 7	504,049.43	0.00	200,390.09	0.00

Distribution Date	Classes HL, U and UL (in the aggregate)	Classes BA and BL (in the aggregate)	Class AP	 Class NA
April 2039	\$ 297,064.07	\$ 0.00	\$ 273,276.87	\$ 0.00
May 2039	289,478.09	0.00	266,313.55	0.00
June 2039	282,067.57	0.00	259,503.53	0.00
July 2039	274,828.67	0.00	252,843.67	0.00
August 2039	267,757.63	0.00	246,330.89	0.00
September 2039	260,850.75	0.00	239,962.17	0.00
October 2039	254,104.45	0.00	233,734.54	0.00
November 2039	247,515.19	0.00	227,645.10	0.00
December 2039	241,079.52	0.00	221,691.02	0.00
January 2040	234,794.05	0.00	215,869.50	0.00
February 2040	228,655.49	0.00	210,177.80	0.00
March 2040	222,660.58	0.00	204,613.25	0.00
April 2040	216,806.17	0.00	199,173.21	0.00
May 2040	211,089.15	0.00	193,855.12	0.00
June 2040	205,506.49	0.00	188,656.45	0.00
July 2040	200,055.21	0.00	183,574.73	0.00
August 2040	194,732.41	0.00	178,607.52	0.00
September 2040	189,535.24	0.00	173,752.46	0.00
October 2040	184,460.92	0.00	169,007.21	0.00
November 2040	179,506.72	0.00	164,369.49	0.00
December 2040	174,669.98	0.00	159,837.05	0.00
January 2041	169,948.08	0.00	155,407.71	0.00
February 2041	165,338.47	0.00	151,079.32	0.00
March 2041	160,838.66	0.00	146,849.76	0.00
April 2041	156,446.18	0.00	142,716.97	0.00
May 2041	152,158.66	0.00	138,678.92	0.00
June 2041	147,973.74	0.00	134,733.64	0.00
July 2041	143,889.14	0.00	130,879.17	0.00
August 2041	139,902.61	0.00	127,113.61	0.00
	136,011.96	0.00	123,435.09	0.00
September 2041	132,215.04	0.00	119,841.78	0.00
October 2041	128,509.75	0.00	116,331.89	0.00
	,			0.00
December 2041	124,894.02	0.00	112,903.65	0.00
January 2042	121,365.86	0.00	109,555.34	
February 2042	117,923.28	0.00	106,285.28	0.00
March 2042	114,564.37	0.00	103,091.81	0.00
April 2042	111,287.23	0.00	99,973.31	0.00
May 2042	108,090.03	0.00	96,928.19	0.00
June 2042	104,970.95	0.00	93,954.88	0.00
July 2042	101,928.24	0.00	91,051.87	0.00
August 2042	98,960.16	0.00	88,217.66	0.00
September 2042	96,065.03	0.00	85,450.78	0.00
October 2042	93,241.19	0.00	82,749.80	0.00
November 2042	90,487.02	0.00	80,113.31	0.00
December 2042	87,800.94	0.00	77,539.93	0.00
January 2043	85,181.40	0.00	75,028.32	0.00
February 2043	82,626.89	0.00	72,577.13	0.00

Distribution Date	Classes HL, U and UL (in the aggregate)	Classes BA and BL (in the aggregate)	Class AP	Class NA
March 2043	\$ 80,135.92	\$ 0.00	\$ 70,185.09	\$ 0.00
April 2043	77,707.05	0.00	67,850.92	0.00
May 2043	75,338.86	0.00	65,573.37	0.00
June 2043	73,029.95	0.00	63,351.23	0.00
July 2043	70,778.98	0.00	61,183.29	0.00
August 2043	68,584.61	0.00	59,068.39	0.00
September 2043	66,445.54	0.00	57,005.39	0.00
October 2043	64,360.51	0.00	54,993.15	0.00
November 2043	62,328.27	0.00	53,030.58	0.00
December 2043	60,347.60	0.00	51,116.59	0.00
January 2044	58,417.32	0.00	49,250.13	0.00
February 2044	56,536.27	0.00	47,430.17	0.00
March 2044	54,703.30	0.00	45,655.69	0.00
April 2044	52,917.30	0.00	43,925.70	0.00
May 2044	51,177.18	0.00	42,239.23	0.00
June 2044	49,481.89	0.00	40,595.31	0.00
July 2044	47,830.37	0.00	38,993.02	0.00
August 2044	46,221.62	0.00	37,431.45	0.00
September 2044	44,654.63	0.00	35,909.69	0.00
October 2044	43,128.43	0.00	34,426.87	0.00
November 2044	41,642.06	0.00	32,982.13	0.00
December 2044	40,194.61	0.00	31,574.63	0.00
January 2045	38,785.15	0.00	30,203.54	0.00
February 2045	37,412.79	0.00	28,868.06	0.00
March 2045	36,076.66	0.00	27,567.39	0.00
April 2045	34,775.92	0.00	26,300.76	0.00
May 2045	33,509.72	0.00	25,067.41	0.00
June 2045	32,277.26	0.00	23,866.60	0.00
July 2045	31,077.73	0.00	22,697.60	0.00
August 2045	29,910.36	0.00	21,559.69	0.00
September 2045	28,774.39	0.00	20,452.19	0.00
October 2045	27,669.06	0.00	19,374.40	0.00
November 2045	26,593.66	0.00	18,325.65	0.00
		0.00	17,305.30	0.00
December 2045	25,547.47 24,529.79	0.00	16,312.69	0.00
-		0.00	15,347.21	0.00
February 2046	23,539.95	0.00	14,408.23	0.00
March 2046	22,577.28	0.00	13,495.15	0.00
April 2046	21,641.12	0.00	12,607.39	0.00
May 2046	20,730.84			0.00
June 2046	19,845.82	0.00	11,744.36	
July 2046	18,985.46	0.00	10,905.49	0.00
August 2046	18,149.15	0.00	10,090.25	0.00
September 2046	17,336.32	0.00	9,298.08	0.00
October 2046	16,546.40	0.00	8,528.44	0.00
November 2046	15,778.83	0.00	8,004.43	0.00
December 2046	15,033.07	0.00	7,494.82	0.00
January 2047	14,308.59	0.00	6,999.27	0.00

Distribution Date	Classes HL, U and UL the aggregate)	BA and BL ggregate)	 Class AP	 Class NA
February 2047	\$ 13,604.87	\$ 0.00	\$ 6,517.47	\$ 0.00
March 2047	12,921.41	0.00	6,049.11	0.00
April 2047	12,257.70	0.00	5,593.87	0.00
May 2047	11,613.27	0.00	5,151.46	0.00
June 2047	10,987.65	0.00	4,721.58	0.00
July 2047	10,380.36	0.00	4,333.75	0.00
August 2047	9,790.96	0.00	3,956.94	0.00
September 2047	9,219.01	0.00	3,590.89	0.00
October 2047	8,664.07	0.00	3,235.35	0.00
November 2047	8,125.72	0.00	2,890.08	0.00
December 2047	7,603.56	0.00	2,554.85	0.00
January 2048	7,097.17	0.00	2,229.41	0.00
February 2048	6,606.16	0.00	1,913.55	0.00
March 2048	6,130.16	0.00	1,607.04	0.00
April 2048	5,668.77	0.00	1,309.65	0.00
May 2048	5,221.65	0.00	1,021.18	0.00
June 2048	4,788.42	0.00	741.42	0.00
July 2048	4,368.73	0.00	470.15	0.00
August 2048	3,962.25	0.00	207.19	0.00
September 2048	3,568.64	0.00	0.00	0.00
October 2048	3,187.57	0.00	0.00	0.00
November 2048	2,818.73	0.00	0.00	0.00
December 2048	2,461.80	0.00	0.00	0.00
January 2049	2,116.47	0.00	0.00	0.00
February 2049	1,782.45	0.00	0.00	0.00
March 2049	1,459.45	0.00	0.00	0.00
April 2049	1,147.18	0.00	0.00	0.00
May 2049	845.37	0.00	0.00	0.00
June 2049	553.74	0.00	0.00	0.00
July 2049	272.03	0.00	0.00	0.00
August 2049 and thereafter	0.00	0.00	0.00	0.00

Underlying Certificates

Ginnie Mae I or II		
Approximate Weighted Average Loan Age of Mortgage Loans (in months)(3)	(1812 × 10.00 × 4 × 4 × 8 × 8 × 8 × 8 × 8 × 8 × 8 × 8	
Approximate Weighted Average Remaining Term to Maturity of Mortgage Loans (in months)(3)	☐%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%	
Approximate Weighted Average Coupon of Mortgage Loans(3)	I .	
Percentage of Class in Trust	15.028177883496 82.47767357 13.876525 (1087 13.70017669 10.00000000000000000000000000000000000	
Principal or Notional Balance in Trust	\$1,037,625 2,450,000 2,450,000 1,500,000 1,500,000 1,500,000 1,500,000 1,500,000 1,500,000 2,458,148 1,126,005 1,245,005 1,126,005 1,245	
Underlying Certificate Factor(2)	0.76861119 1.00000000 1.00000000 1.00000000 0.97166440 0.97168795 0.9872076 0.995608796 0.9956089 0.05724781 0.06727614	
Original Principal or Notional Balance of Class	\$ 8,988,112 29,775,000 19,0775,000 10,626,347 10,626,347 10,626,347 11,331,252 11,331,25	
Principal Type(1)	PAC SCPT SCPT SCPAC	
Final Distribution Date	August 2033 April 2042 November 2048 Narch 2045 Narch 2045 Narch 2045 Narch 2045 April 2048 April 2048 April 2049 August 2044 August 2046 April 2049 April 2049 April 2049 April 2049 April 2046 April 2049 April 2049 April 2046 April 2046 April 2046 April 2047 April 2046 April 2049	
Interest Type(1)		
Interest Rate	01444444444444444444444444444444444444	
CUSIP	88774BXC2 88776EA5 88776EA5 8878PUZ9 8878PUZ9 8878LWU 8878LWU 8878LWU 8878LTIUB 8878LWU 8878LTIUB 8878LWU 8878LWU 8878CAYU 8878CAYU 8878CAYU 8877CRQ 8877CRQ 8877CRQ 8877CRQ 8877CWU 8878TWU 8878TWU 8878TWU 8878TWU 8878TWU 8878TWU 8878TWU 8878TWU 8878TWU 8878TWU	
Issue Date	August 29, 2003 December 30, 2013 March 30, 2015 March 30, 2015 March 30, 2015 March 30, 2018 November 30, 2018 November 30, 2018 November 30, 2018 Pebruay 28, 2019 April 30, 2019 March 30, 2016 Cochoer 28, 2016 Cochoer 28, 2016 April 20, 2018 April 20, 2018 April 20, 2018 April 20, 2018 April 30, 2019	
Class	FO PX(4)(6)	
Series	2003-067 2012-073 2015-186 201	
Issuer	Ginnie Mae	
Trust Asset Group or Subgroup	86777888888888888888888888888888888888	

As defined under "Class Types" in Appendix I to the Base Offering Circular.
 Underlying Certificate Factors are as of September 2019.
 Based on information as of September 2019.
 MX Class.

- More than 10% of the Mortgage Loans underlying this Underlying Certificate may be higher balance Mortgage Loans. See "Risk Factors" in (2)
- Ginnie Mae 2012-073 Class KC is backed by a previously issued REMIC certificate, Class KP from Ginnie Mae 2012-043. 9
- iously issued MX certificate, Class BG from Ginnie Mae 2013-005. Ginnie Mae 2013-005 Class BG is in turn backed by previously issued 103. Ginnie Mae 2013-144 Class BA is backed by a previously issued REMIC certificate, Class MY from Ginnie Mae 2013-023, and pre-382. Ginnie Mae 2013-144 Class UK is backed by a previously issued REMIC certificate, Class UN from Ginnie Mae 2013-098. Ginnie Mae 2013-098 Class UN is in turn backed by previously issued MX certificates, Classes JA, II, TA and TI from Ginnie Mae 2013-005. Ginnie Mae viously issued REMIC certificates, Class HB from Ginnie Mae 2012-128 and Class EK from Ginnie Mae 2012-140, and previously issued MX from Ginnie Mae 2012-103. Ginnie Mae 2012-140 Class EK is in turn backed by a previously issued REMIC certificate, Class QP from Ginnie Mae 2012-103. Ginnie Mae Class 2013-005 Class YK is in turn backed by previously issued MX certificates, Class BG from Ginnie Ginnie Mae 2013-186 Class PY is backed by previously issued MX certificates, Classes JE, BA, MY and LE from Ginnie Mae 2013-144, and previously issued REMIC certificates, Classes LN and UK from Ginnie Mae 2013-144. Ginnie Mae 2013-144 Class JE is backed by a pre-Class CW from Ginnie Mae 2012-026, Class BG from Ginnie Mae 2012-128, Class LE from Ginnie Mae 2012-140 and Class QH from Ginnie Mae 2012-103. Ginnie Mae 2012-140 Class EK is in turn backed by a previously issued REMIC certificate, Class QP from Ginnie Mae 2012viously issued MX certificates, Class LC from Ginnie Mae 2013-023, Class GJ from Ginnie Mae 2013-082 and Class BD from Ginnie Mae 2013-098. Ginnie Mae 2013-144 Classes LN and LE are backed by a previously issued REMIC certificate, Class DE from Ginnie Mae 2013-2013-144 Class MY is an MX Class that is derived from REMIC Classes of separate Security Groups and is backed by previously issued and a previously issued MX certificate, Class BG from Ginnie Mae 2013-005. Ginnie Mae 2013-005 Class BG is in turn backed by precertificates, Class CW from Ginnie Mae 2012-026, Class BG from Ginnie Mae 2012-128, Class LE from Ginnie Mae 2012-140 and Class QH Mae 2012-128 and Class LE from Ginnie Mae 2012-140. Ginnie Mae 2013-113 Class PY is in turn backed by previously issued REMIC certificates, Class XB from Ginnie Mae 2012-128 and Classes DE and JD from Ginnie Mae 2013-082, and previously issued MX certificates, Classes JA, JE, LI, TA and TI from Ginnie Mae 2013-005. These previously issued certificates are backed by certain mortgage loans whose REMIC certificates, Class HB from Ginnie Mae 2012-128 and Class EK from Ginnie Mae 2012-140, and previously issued MX certificates, REMIC certificates, Class YK from Ginnie Mae 2013-005, Class DE from Ginnie Mae 2013-082 and Class PY from Ginnie Mae 2013-113, approximate weighted average characteristics are as follows: 0

Approximate Weighted Average Loan Age of Mortgage Loans (in months)(3)	92	06	83	83	81	80	80	9/	9/	82	
Average Remaining Term to Maturity of Mortgage Loans (in months)(3)	256	142	262	263	263	263	253	265	267	261	
Approximate Weighted Average Coupon of Mortgage Loans(3)	3.908%	3.864	3.800	3.801	3.802	3.811	3.766	3.803	3.804	3.828	
Ap V V V V V V V V V V V V V V V V V V V	CW	QH and QP	BG, HB and XB	LE	JA, JE, II, TA and TI	LC and MY	DE	Ģ	요	BD	
Series	2012-026	2012-103	2012-128	2012-140	2013-005	2013-023	2013-082	2013-082	2013-082	2013-098	

Ginnie Mae 2016-120 Class IA is an MX Class that is derived from REMIC Classes of separate Security Groups, which are backed by certain mortgage loans whose approximate weighted average characteristics are as follows: 8

Approximate Weighted Average Loan Age of Mortgage Loans (in months)(3)	37	36
Approximate Weighted Average Remaining Term to Maurity of Mortgage Loans (in months)(3)	319	320
Approximate Weighted Average Coupon of Mortgage Loans(3)	3.410%	3,396
Trust Asset Group	8	4
Series	2016-120	2016-120

Ginnie Mae 2016-135 Class JI is backed by previously issued REMIC certificates, Class IG from Ginnie Mae 2016-129 and Class EI from Ginnie Mae 2016-135. These previously issued certificates are backed by certain mortgage loans whose approximate weighted average characteristics are as follows: 6

Approximate Weighted Average Loan Age of Mortgage Loans (in months)(3)	50	35
Weighted Average Remaining Term to Maturity of Mortgage Loans (in months)(3)	305	32.1
Approximate Weighted Average Coupon of Mortgage Loans(3)	3.456%	3 363
Class	IG	Ī
Series	2016-129	2016-135

(10) Ginnie Mae 2014-161 Class IQ is an MX Class that is derived from REMIC Classes of separate Security Groups, which are backed by certain mortgage loans whose approximate weighted average characteristics are as follows:

Approximate Weighted Weighted Average Loan Age of Mourgage Loans (in months)(3)	63	62
Approximate Weighted Wergee Remaining Term to Maturity of Mortgage Loans (in	291	291
Approximate Weighted Average Coupon of Mortgage Loans(3)	3.852%	3.865
Trust Asset Group	8	_
Series	2014-161	2014-161

- (11) Ginnie Mae 2016-135 Class YI is backed by a previously issued MX certificate, Class GI from Ginnie Mae 2016-109.
 - (12) Ginnie Mae 2012-092 Class AI is backed by a previously issued MX certificate, Class ET from Ginnie Mae 2012-048.

(13) Ginnie Mae 2015-069 Class XI is an MX Class that is derived from REMIC Classes of separate Security Groups, which are backed by certain mortgage loans whose approximate weighted average characteristics are as follows:

Approximate Weighted Average Loan Age of Mortgage Loans (in months)(3)	55	v.
Approximate Weighted Average Remaining Term to Maturity of Mortgage Loans (in	296	906
Approximate Weighted Average Coupon of Mortgage Loans(3)	3.914%	3 014
Trust Asset Group	4	10
Series	2015-069	2015-060

- (14) Ginnie Mae 2002-070 Class AZ is backed by a previously issued REMIC certificate, Class J from Ginnie Mae 2002-060.
- (15) Ginnie Mae 2004-005 Class Z is backed by previously issued REMIC certificates, Class PG from Ginnie Mae 2002-046 and Class CF from Ginnie Mae 2002-080, and a previously issued MX certificate, Class PE from Ginnie Mae 2002-057. These previously issued certificates are backed by certain mortgage loans whose approximate weighted average characteristics are as follows:

Approximate Weighted Average Loan Age of Mortgage Loans (in months)(3)	209	213	206
Approximate Weighted Average Remaining Term to Maturity of Mortgage Loans (in	135	134	140
Approximate Weighted Average Coupon of Mortgage Loans(3)	6.796%	96.796	6.773
Class	PG	PE	CF
Series	2002-046	2002-057	2002-080

- (16) Ginnie Mae 2004-027 Class ZJ is backed by a previously issued MX certificate, Class PB from Ginnie Mae 2002-077.
- (17) Ginnie Mae 2019-018 Class MA is backed by previously issued REMIC certificates, Classes CD and CE from Ginnie Mae 2018-076, and a previously issued MX certificate, Class TB from Ginnie Mae 2018-104. These previously issued certificates are backed by certain mortgage loans whose approximate weighted average characteristics are as follows:

Approximate Weighted Average Loan Age of Mortgage Loans (in months)(3)	18
Average Remaining Term to Manurity of Mortgage Loans (in months)(3)	342 340
Approximate Weighted Average Coupon of Mortgage Loans(3)	4.948% 5.082
Class(cs)	CD and CE TB
Series	2018-076 2018-104



\$718,456,091

Government National Mortgage Association

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Guaranteed REMIC
Pass-Through Securities
and MX Securities
Ginnie Mae REMIC Trust 2019-111

OFFERING CIRCULAR SUPPLEMENT September 23, 2019

Wells Fargo Securities Tribal Capital Markets