

# \$1,486,395,649 Government National Mortgage Association GINNIE MAE®

# Guaranteed REMIC Pass-Through Securities and MX Securities Ginnie Mae REMIC Trust 2019-031

#### 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-13 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 March 29, 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 QE(1)	\$ 74,012,143	3.0%	PAC/AD	FIX	38381RWY1	January 2049
QF(1)	29,604,857 29,604,857	(5) (5)	PAC/AD NTL(PAC/AD)	FLT INV/IO	38381RWZ8 38381RXA2	January 2049 January 2049
OY	1,474,000	4.0	PAC/AD)	FIX	38381RXB0	March 2049
ŽQ	17,194,652	4.0	SUP	FIX/Z	38381RXC8	March 2049
Security Group 2						
GA(1)	66,277,000	3.5	SEQ/AD	FIX	38381RXD6	September 2047
GF	34,519,161 34,519,161	(5) (5)	PT NTL(PT)	FLT INV/IO	38381RXE4 38381RXF1	March 2049 March 2049
GZ(1)	2,761,322	3.5	SEQ	FIX/Z	38381RXG9	March 2049
Security Group 3						
HC	10,000,000	3.5	SEQ	FIX	38381RXH7	May 2046
HD	2,503,752 3,751,125	3.5 5.0	SEQ NTL(PT)	FIX FIX/IO	38381RXJ3 38381RXK0	March 2049 March 2049
Francisty Crown 4	3,731,123	3.0	NIL(FI)	111/10	36361KAK0	Maich 2049
Security Group 4 MA	15,349,000	3.0	SC/PAC	FIX	38381RXL8	January 2048
MH	3,068,570	3.0	SC/SUP	FIX	38381RXM6	January 2048
MY	470,000	3.0	SC/PAC	FIX	38381RXN4	January 2048
Security Group 5			~~~			
DA	141,178,000 17,647,250	3.5 4.0	SEQ NTL(SEQ)	FIX FIX/IO	38381RXP9 38381RXQ7	December 2045 December 2045
DV(1)	13,201,000	4.0	SEQ/AD	FIX	38381RXR5	May 2030
DZ(1)	23,580,480	4.0	SEQ	FIX/Z	38381RXS3	March 2049
Security Group 6						
V	24,269,104	3.5	SC/PT	FIX	38381RXT1	February 2039
Security Group 7						
NA(1)	78,339,000	3.5	SEQ/AD	FIX	38381RXU8	January 2046
NF	85,616,740 85,616,740	(5) (5)	PT NTL(PT)	FLT INV/IO	38381RXV6 38381RXW4	March 2049 March 2049
ZN(1)	7,277,741	3.5	SEQ	FIX/Z	38381RXX2	March 2049
Security Group 8						
CA(1)	105,445,371	3.5	SEQ	FIX	38381RXY0	June 2044
CB(1)	45,190,873	3.5	SEQ	FIX FLT	38381RXZ7	March 2049
CF	75,318,122 75,318,122	(5) (5)	PT NTL(PT)	INV/IO	38381RYA1 38381RYB9	March 2049 March 2049
Security Group 9	70,010,122	(5)	1,12(11)	11117710	505011(12)	11111011 20 17
PB	17,205,000	3.5	PAC/AD	FIX	38381RYC7	July 2040
PC	20,000,000	3.5	PAC/AD	FIX	38381RYD5	March 2049
PI	4,650,625	4.0	NTL(PAC/AD)	FIX/IO	38381RYE3	March 2049
ZP	5,395,000	4.0	SUP	FIX/Z	38381RYF0	March 2049
Security Group 10 IM	443,750	4.0	NTL(PT)	FIX/IO	38381RYG8	March 2049
MC(1)	3,550,000	3.5	PT	FIX	38381RYH6	March 2049
MD(1)	3,000,000	(5)	SC/PT	WAC/DLY	38381RYJ2	April 2048
ME(1)	3,450,000	3.5	PT	FIX	38381RYK9	March 2049
Security Group 11	1 404 714	2.0	CLID	EDZ	202010371.7	M 1 2040
H	1,494,714 5,603,000	3.0 3.0	SUP PAC	FIX FIX	38381RYL7 38381RYM5	March 2049 July 2047
HP	16,165,426	6.0	PT	FIX	38381RYN3	March 2049
HQ	985,000	3.0	PAC	FIX	38381RYP8	March 2049
Security Group 12						
TA	30,000,000	3.5	PT	FIX	38381RYQ6	March 2049
TF(1)	60,000,000	(5) (5)	PT NTL(PT)	FLT INV/IO	38381RYR4 38381RYS2	March 2049 March 2049
=======================================	00,000,000		1111(11)	1117/10	33301K132	March 2049

(Cover continued on next page)

# **Wells Fargo Securities**

# **Tribal Capital Markets**

	0-1-11					
Class of REMIC Securities	Original Principal Balance(2)	Interest Rate	Principal Type(3)	Interest CUSIP Type(3) Number		Final Distribution Date(4)
Security Group 13						
Α	\$ 35,421,000	3.5%	SEQ	FIX	38381RYT0	March 2045
AI	10,626,300	5.0	NTL(SEQ)	FIX/IO	38381RYU7	March 2045
AV(1)	6,813,000	5.0	SEQ/AD	FIX	38381RYV5	December 2033
AZ(1)	6,288,340	5.0	SEQ	FIX/Z	38381RYW3	March 2049
Security Group 14						
BK	2,172,904	4.0	PAC/AD	FIX	38381RYX1	March 2049
BP(1)	38,322,971	4.0	PAC/AD	FIX	38381RYY9	August 2048
BZ	10,000,000	4.0	SUP	FIX/Z	38381RYZ6	March 2049
Security Group 15						
EI	7,727,654	4.5	NTL(PAC/AD)	FIX/IO	38381RZA0	March 2049
EK	244,275	3.5	PAC/AD	FIX	38381RZB8	March 2049
EP(1)	34,530,169	3.5	PAC/AD	FIX	38381RZC6	March 2049
EZ	10,000,000	4.5	SUP	FIX/Z	38381RZD4	March 2049
Security Group 16						
<u>U</u>	1,112,845	3.0	SUP	FIX	38381RZE2	March 2049
UA	4,123,000	3.0	PAC	FIX	38381RZF9	June 2047
UP	12,037,689	6.0	PT	FIX	38381RZG7	March 2049
<u>UQ</u>	783,000	3.0	PAC	FIX	38381RZH5	March 2049
Security Group 17	11.022.256		NTT (000)	F77.77.0	202017571	* 1 2020
IA(1)	11,023,356	5.5	NTL(SEQ)	FIX/IO	38381RZJ1	July 2038
IB(1)	16,535,033	5.5	NTL(SEQ)	FIX/IO FIX	38381RZK8	March 2049
JA(1)	81,165,000 145,000	4.0 4.0	PAC/AD PAC/AD	FIX/Z	38381RZL6 38381RZM4	March 2049 March 2049
JZ	19,737,428	4.0	SUP	FIX/Z	38381RZN2	March 2049
ZJ	19,737,420	4.0	SUF	TIA/L	36361KZINZ	Maich 2049
Security Group 18	24 414 500	5.0	NITT (DAC(AD)	EIV/IO	20201D7D7	M1- 2040
IP(1)	34,414,500	5.0	NTL(PAC/AD)	FIX/IO	38381RZP7	March 2049
PA(1)	91,521,667	3.0	PAC/AD	FIX FIX	38381RZQ5	October 2048
PE(1)	4,123,000 18,304,333	3.5 (5)	PAC/AD PAC/AD	FLT	38381RZR3 38381RZS1	March 2049 October 2048
PG(1)	766,000	3.5	PAC/AD PAC/AD	FIX	38381RZT9	March 2049
PS(1)	18,304,333	(5)	NTL(PAC/AD)	INV/IO	38381RZU6	October 2048
PZ	35,285,000	5.0	SUP	FIX/Z	38381RZV4	March 2049
Security Group 19	,,			-		
KA(1)	32,404,167	3.0	PAC/AD	FIX	38381RZW2	March 2049
KE(1)	282,000	3.5	PAC/AD	FIX	38381RZX0	March 2049
KF(1)	6,480,833	(5)	PAC/AD	FLT	38381RZY8	March 2049
KI(1)	11,750,100	5.0	NTL(PAC/AD)	FIX/IO	38381RZZ5	March 2049
KS(1)	6,480,833	(5)	NTL(PAC/AD)	INV/IO	38381RA25	March 2049
KZ	10,833,000	5.0	SUP	FIX/Z	38381RA33	March 2049
Residual						
RR	0	0.0	NPR	NPR	38381RA41	March 2049
			1	1	1	

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

# **AVAILABLE INFORMATION**

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

- this Offering Circular Supplement (this "Supplement"),
- the Base Offering Circular and
- in the case of the Group 4 and 6 Securities and the Class MD and MG 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
Terms Sheet	S-3	ERISA Matters	S-48
Risk Factors	S-13	Legal Investment Considerations	S-48
The Trust Assets	S-16	Plan of Distribution	S-49
Ginnie Mae Guaranty	S-18	Increase in Size	S-49
Description of the Securities	S-18	Legal Matters	S-49
Yield, Maturity and Prepayment		Schedule I: Available Combinations	S-I-1
Considerations	S-23	Schedule II: Scheduled Principal	
Certain United States Federal Income		Balances	S-II-1
Tax Consequences	S-45	Exhibit A: Underlying Certificates	A-1

# **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:** March 29, 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 April 2019.

#### **Trust Assets:**

Trust Asset Group or Subgroup <sup>(2)</sup>	Trust Asset Type	Certificate Rate	Original Term To Maturity (in years)
1	Ginnie Mae II	4.0%	30
2	Ginnie Mae II	4.5%	30
3	Ginnie Mae II	5.0%	30
4	Underlying Certificate	(1)	(1)
5	Ginnie Mae II	4.0%	30
6	<b>Underlying Certificates</b>	(1)	(1)
7	Ginnie Mae II	5.0%	30
8	Ginnie Mae II	4.5%	30
9	Ginnie Mae II	4.0%	30
10A	Ginnie Mae II	4.0%	30
10B	<b>Underlying Certificates</b>	(1)	(1)
10C	Ginnie Mae II	3.5%	30
11	Ginnie Mae II	5.0%	30
12	Ginnie Mae II	5.5%	30
13	Ginnie Mae II	5.0%	30
14	Ginnie Mae II	4.0%	30
15	Ginnie Mae II	4.5%	30
16	Ginnie Mae II	5.0%	30
17	Ginnie Mae II	5.5%	30
18	Ginnie Mae II	5.0%	30
19	Ginnie Mae II	5.0%	30

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

<sup>&</sup>lt;sup>(2)</sup> The Group 10 Trust Assets consist of subgroups, Subgroup 10A, Subgroup 10B and Subgroup 10C (each, a "Subgroup").

**Security Groups:** This series of Securities consists of multiple Security Groups (each, a "Group"), as shown on the front cover of this Supplement and on Schedule I to this Supplement. Except in the case of certain MX Classes in Groups 18 and 19, payments on each Group will be based solely on payments on the Trust Asset Group with the same numerical designation.

Assumed Characteristics of the Mortgage Loans Underlying the Group 1, 2, 3, 5, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18 and 19 and Subgroup 10A and 10C Trust Assets<sup>(1)</sup>:

Principal Balance	Weighted Average Remaining Term to Maturity (in months)	Weighted Average Loan Age (in months)	Weighted Average Mortgage Rate <sup>(2)</sup>
<b>Group 1 Trust Assets</b> \$122,285,652	345	14	4.431%
	34)	14	4.431%
<b>Group 2 Trust Assets</b> \$103,557,483	305	47	4.861%
<b>Group 3 Trust Assets</b> \$12,503,752	356	3	5.522%
<b>Group 5 Trust Assets</b> \$177,959,480 <sup>(3)</sup>	358	2	4.508%
<b>Group 7 Trust Assets</b> \$171,233,481	356	2	5.447%
<b>Group 8 Trust Assets</b> \$225,954,366	358	1	4.989%
<b>Group 9 Trust Assets</b> \$42,600,000 <sup>(3)</sup>	353	5	4.486%
<b>Subgroup 10A Trust Assets</b> \$3,550,000 <sup>(3)</sup>	357	3	4.560%
<b>Subgroup 10C Trust Assets</b> \$3,450,000 <sup>(3)</sup>	351	7	4.020%
<b>Group 11 Trust Assets</b> \$24,248,140	357	3	5.398%
<b>Group 12 Trust Assets</b> \$90,000,000	359	1	5.866%
<b>Group 13 Trust Assets</b> \$48,522,340	350	9	5.479%
<b>Group 14 Trust Assets</b> \$50,495,875 <sup>(3)</sup>	352	7	4.484%
<b>Group 15 Trust Assets</b> \$44,774,444 <sup>(3)</sup>	356	3	4.990%
<b>Group 16 Trust Assets</b> \$18,056,534	358	2	5.432%
<b>Group 17 Trust Assets</b> \$101,047,428	348	11	5.950%
<b>Group 18 Trust Assets</b> \$150,000,000	346	13	5.444%
<b>Group 19 Trust Assets</b> \$50,000,000	346	13	5.444%

The actual remaining terms to maturity, loan ages and Mortgage Rates of many of the Mortgage Loans underlying the Group 1, 2, 3, 5, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18 and 19 and Subgroup 10A and 10C 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 4 and 6 and Subgroup 10B Trust Assets:** See Exhibit A to this Supplement for certain information regarding the characteristics of the Mortgage Loans included in the related Underlying Trusts.

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

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

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

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

<sup>(1)</sup> As of March 1, 2019.

<sup>&</sup>lt;sup>(2)</sup> The Mortgage Loans underlying the Group 1, 2, 3, 5, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18 and 19 and Subgroup 10A and 10C Trust Assets may bear interest at rates ranging from 0.25% to 1.50% per annum above the related Certificate Rate.

<sup>(3)</sup> More than 10% of the Mortgage Loans underlying the Group 5, 9, 14 and 15 and Subgroup 10A and 10C Trust Assets may be higher balance Mortgage Loans. See "Risk Factors" in 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	
CF	LIBOR + 0.45%	2.939%	0.45%	6.50%	0	0.00%	
CS	6.05% - LIBOR	3.561%	0.00%	6.05%	0	6.05%	
GF	LIBOR + $0.45\%$	2.939%	0.45%	6.50%	0	0.00%	
GS	6.05% - LIBOR	3.561%	0.00%	6.05%	0	6.05%	
KF	LIBOR + 0.40%	2.889%	0.40%	6.00%	0	0.00%	
KS	5.60% - LIBOR	3.111%	0.00%	5.60%	0	5.60%	
NF	LIBOR + 0.45%	2.939%	0.45%	6.50%	0	0.00%	
NS	6.05% - LIBOR	3.561%	0.00%	6.05%	0	6.05%	
PF	LIBOR + 0.40%	2.889%	0.40%	6.00%	0	0.00%	
PS	5.60% - LIBOR	3.111%	0.00%	5.60%	0	5.60%	
QF	LIBOR + 0.35%	2.839%	0.35%	6.50%	0	0.00%	
QS	6.15% - LIBOR	3.661%	0.00%	6.15%	0	6.15%	
TF	LIBOR + 0.45%	2.939%	0.45%	6.50%	0	0.00%	
TS	6.05% - LIBOR	3.561%	0.00%	6.05%	0	6.05%	

- (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 MD and MG is a Weighted Average Coupon Class. Class MD will accrue interest during each Accrual Period at a per annum Interest Rate equal to the Weighted Average Certificate Rate ("WACR") of the Subgroup 10B Trust Assets for that Accrual Period. The approximate initial Interest Rate for Class MD, which will be in effect for the first Accrual Period, is 3.500%. Class MG 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. The approximate initial Interest Rate for Class MG, which will be in effect for the first Accrual Period, is 3.500%.

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

### **SECURITY GROUP 1**

The Group 1 Principal Distribution Amount and the ZQ Accrual Amount will be allocated as follows:

- 1. To QE, QF and QY, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date in the following order of priority:
  - a. Concurrently, to QE and QF, pro rata, until retired
  - b. To QY, until retired
  - 2. To ZQ, until retired

3. To QE, QF and QY, in the same manner and priority as step 1., but without regard to their Aggregate Scheduled Principal Balance, until retired

#### **SECURITY GROUP 2**

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

- The GZ Accrual Amount, sequentially, to GA and GZ, in that order, until retired
- The Group 2 Principal Distribution Amount, concurrently, as follows:
  - 1. 33.3333333333% to GF, until retired
  - 2. 66.66666667%, sequentially, to GA and GZ, in that order, until retired

# **SECURITY GROUP 3**

The Group 3 Principal Distribution Amount will be allocated, sequentially, to HC and HD, in that order, until retired

#### **SECURITY GROUP 4**

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

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

# **SECURITY GROUP 5**

The Group 5 Principal Distribution Amount and the DZ Accrual Amount will be allocated as follows:

- The DZ Accrual Amount, sequentially, to DV and DZ, in that order, until retired
- The Group 5 Principal Distribution Amount, sequentially, to DA, DV and DZ, in that order, until retired

# **SECURITY GROUP 6**

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

# **SECURITY GROUP 7**

The Group 7 Principal Distribution Amount and the ZN Accrual Amount will be allocated as follows:

• The ZN Accrual Amount, sequentially, to NA and ZN, in that order, until retired

- The Group 7 Principal Distribution Amount, concurrently, as follows:
  - 1. 49.99999708% to NF, until retired
  - 2. 50.000000292%, sequentially, to NA and ZN, in that order, until retired

#### **SECURITY GROUP 8**

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

- 1. 33.3333333333% to CF, until retired
- 2. 66.666666667%, sequentially, to CA and CB, in that order, until retired

# **SECURITY GROUP 9**

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

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

#### **SECURITY GROUP 10**

The Subgroup 10A Principal Distribution Amount, the Subgroup 10B Principal Distribution Amount and the Subgroup 10C Principal Distribution Amount will be allocated as follows:

- The Subgroup 10A Principal Distribution Amount to MC, until retired
- The Subgroup 10B Principal Distribution Amount to MD, until retired
- The Subgroup 10C Principal Distribution Amount to ME, until retired

### **SECURITY GROUP 11**

The Group 11 Principal Distribution Amount will be allocated, concurrently, as follows:

- 1. 66.666639173% to HP, until retired
- 2. 33.333360827% in the following order of priority:
- a. Sequentially, to HA and HQ, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
  - b. To H, until retired
- c. Sequentially, to HA and HQ, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired

#### **SECURITY GROUP 12**

The Group 12 Principal Distribution Amount will be allocated, concurrently, to TA and TF, pro rata, until retired

#### **SECURITY GROUP 13**

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

- The AZ Accrual Amount, sequentially, to AV and AZ, in that order, until retired
- The Group 13 Principal Distribution Amount, sequentially, to A, AV and AZ, in that order, until retired

# **SECURITY GROUP 14**

The Group 14 Principal Distribution Amount and the BZ Accrual Amount will be allocated in the following order of priority:

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

#### **SECURITY GROUP 15**

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

- 1. Sequentially, to EP and EK, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
  - 2. To EZ, until retired
- 3. Sequentially, to EP and EK, 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, as follows:

- 1. 66.666648206% to UP, until retired
- 2. 33.333351794% in the following order of priority:
- a. Sequentially, to UA and UQ, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
  - b. To U, until retired
- c. Sequentially, to UA and UQ, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired

# **SECURITY GROUP 17**

The Group 17 Principal Distribution Amount, the JZ Accrual Amount and the ZJ Accrual Amount will be allocated as follows:

• The JZ Accrual Amount, sequentially, to JA and JZ, in that order, until retired

- The Group 17 Principal Distribution Amount and the ZJ Accrual Amount in the following order of priority:
- 1. Sequentially, to JA and JZ, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
  - 2. To ZJ, until retired
- 3. Sequentially, to JA and JZ, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired

# **SECURITY GROUP 18**

The Group 18 Principal Distribution Amount and the PZ Accrual Amount will be allocated as follows:

- 1. To PA, PE, PF and PG, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date in the following order of priority:
  - a. Concurrently, to PA and PF, pro rata, until retired
  - b. Sequentially, to PE and PG, in that order, until retired
  - 2. To PZ, until retired
- 3. To PA, PE, PF and PG, in the same manner and priority as step 1., but without regard to their Aggregate Scheduled Principal Balance, until retired

#### **SECURITY GROUP 19**

The Group 19 Principal Distribution Amount and the KZ Accrual Amount will be allocated as follows:

- 1. To KA, KE and KF, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date in the following order of priority:
  - a. Concurrently, to KA and KF, pro rata, until retired
  - b. To KE, until retired
  - 2. To KZ, until retired
- 3. To KA, KE and KF, in the same manner and priority as step 1., but without regard to their Aggregate Scheduled Principal Balance, until retired

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

	Structuring Ranges
PAC Classes	
BK and BP (in the aggregate)	185% PSA through 375% PSA
EK and EP (in the aggregate)	175% PSA through 400% PSA
HA and HQ (in the aggregate)	175% PSA through 300% PSA
JA and JZ (in the aggregate)	225% PSA through 425% PSA
KA, KE and KF (in the aggregate)	150% PSA through 345% PSA
MA and MY (in the aggregate)	135% PSA through 225% PSA
PA, PE, PF and PG (in the aggregate)	200% PSA through 450% PSA
PB and PC (in the aggregate)	150% PSA through 250% PSA
QE, QF and QY (in the aggregate)	125% PSA through 225% PSA
UA and UQ (in the aggregate)	175% PSA through 300% PSA

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

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

Class	Original Class Notional Balance	Represents Approximately
AI	\$10,626,300	30% of A (SEQ Class)
BI	9,580,742	25% of BP (PAC/AD Class)
CS	75,318,122	100% of CF (PT Class)
DI	17,647,250	12.5% of DA (SEQ Class)
EI	7,727,654	22.222222222% of EK and EP (in the aggregate) (PAC/AD Classes)
GS	34,519,161	100% of GF (PT Class)
Ш	3,751,125	30% of HC and HD (in the aggregate) (SEQ Classes)
IA	11,023,356	27.27272727% of the first \$40,418,972 of the Group 17 Trust Assets
IB	16,535,033	27.27272727% of the last \$60,628,456 of the Group 17 Trust Assets
IE	7,673,370	22.222222222% of EP (PAC/AD Class)
IJ	27,558,389	27.2727272727% of the Group 17 Trust Assets
IM	443,750	12.5% of MC (PT Class)
IO	\$11,665,500	36% of KA (PAC/AD Class)
	84,600	30% of KE (PAC/AD Class)
	32,947,800	36% of PA (PAC/AD Class)
	1,466,700	30% of PE and PG (in the aggregate) (PAC/AD Classes)
	\$46,164,600	
IP	\$32,947,800	36% of PA (PAC/AD Class)
	1,466,700	30% of PE and PG (in the aggregate) (PAC/AD Classes)
	\$34,414,500	
JI	\$22,135,909	27.2727272727% of JA (PAC/AD Class)
KI	\$11,665,500	36% of KA (PAC/AD Class)
	84,600	30% of KE (PAC/AD Class)
	\$11,750,100	
KS	\$ 6,480,833	100% of KF (PAC/AD Class)
NS	85,616,740	100% of NF (PT Class)
PI	4,650,625	12.5% of PB and PC (in the aggregate) (PAC/AD Classes)
PS	18,304,333	100% of PF (PAC/AD Class)
QS	29,604,857	100% of QF (PAC/AD Class)
TS	60,000,000	100% of TF (PT Class)

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

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

#### **RISK FACTORS**

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

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

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

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

A catastrophic weather event 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 classes, the related support class will not receive any principal distribution on that date. If prepayments result in principal distributions on any distribution date greater than the amount needed to produce scheduled payments on the related PAC classes for that distribution date, this excess will be distributed to the related support class.

The rate of payments on the underlying certificates will directly affect the rate of payments on the group 4 and 6 securities and the class MD and MG securities. The underlying certificates will be sensitive in varying degrees to:

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

As described in the related underlying certificate disclosure documents, the underlying certificates included in trust asset group 6 and certain of the

underlying certificates included in trust asset subgroup 10B are not entitled to distributions of principal until certain classes of the related underlying series have been retired and, accordingly, distributions of principal of the related mortgage loans for extended periods may be applied to the distribution of principal of such classes of certificates having priority over these underlying certificates. Accordingly, these underlying certificates may receive no principal distributions for extended periods of time.

In addition, one of the underlying certificates included in trust asset subgroup 10B is a class that provides support to other classes, and it is entitled to receive principal distributions only if scheduled payments have been made on other specified classes of the related underlying series (or if specified classes have been retired). Accordingly, this underlying certificate may receive no principal distributions for extended periods of time or may receive principal payments that vary widely from period to period.

In addition, the principal entitlements of certain of the underlying certificates included in trust asset subgroup 10B 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 subgroup 10B 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 class MD and MG 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 have adhered

to any applicable principal balance schedules, whether any related supporting classes remain outstanding or whether the underlying certificates otherwise have performed as originally anticipated. Additional information as to the underlying certificates may be obtained by performing an analysis of current principal factors of the underlying certificates in light of applicable information contained in the related underlying certificate disclosure documents.

Up to 10% of the mortgage loans underlying the group 1, 2, 3, 6, 7, 8, 11, 12, 13, 16, 17, 18 and 19 trust assets and up to 100% of the mortgage loans underlying the group 4, 5, 9, 10, 14 and 15 trust assets may be higher balance mortgage loans. Subject to special pooling parameters set forth in the Ginnie Mae Mortgage-Backed Securities Guide, qualifying federally-insured or guaranteed mortgage loans that exceed certain balance thresholds established by Ginnie Mae ("higher balance mortgage loans") may be included in Ginnie Mae guaranteed pools. There are no historical performance data regarding the prepayment rates for higher balance mortgage loans. If the higher balance mortgage loans prepay faster or slower than expected, the weighted average lives and yields of the related securities are likely to be affected, perhaps significantly. Furthermore, higher balance mortgage loans tend to be concentrated in certain geographic areas, which may experience relatively higher rates of defaults in the event of adverse economic conditions. No assurances can be given about the prepayment experience or performance of the higher balance mortgage loans.

Changes to, or elimination of, LIBOR could adversely affect your investment in the securities. On July 27, 2017, the U.K.-based Financial Conduct Authority (the "FCA") 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 4 and 6 securities and the class MD and MG securities and, in particular, the support, interest only, accrual and residual classes, are not suitable investments for all investors.

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

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

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

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

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

# The actual characteristics of the underlying mortgage loans will affect the weighted average lives and yields of your securities.

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

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

#### THE TRUST ASSETS

#### General

The Sponsor intends to acquire the Trust Assets in privately negotiated transactions prior to the Closing Date and to sell them to the Trust according to the terms of a Trust Agreement between the Sponsor and the Trustee. The Sponsor will make certain representations and warranties with respect to

the Trust Assets. All Trust Assets, regardless of whether the assets consist of Trust MBS or the Underlying Certificates, will evidence, directly or indirectly, Ginnie Mae Certificates.

# The Trust MBS (Groups 1, 2, 3, 5, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18 and 19 and Subgroups 10A and 10C)

The Trust MBS are either:

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

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

# The Underlying Certificates (Groups 4 and 6 and Subgroup 10B)

The Group 4 and 6 and Subgroup 10B 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 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 1, 2, 3, 5, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18 and 19 and Subgroup 10A and 10C Trust Assets are expected to have, on a weighted average basis, the characteristics set forth in the Terms Sheet under "Assumed Characteristics of the Mortgage Loans Underlying the Group 1, 2, 3, 5, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18 and 19 and Subgroup 10A and 10C 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 Mortgage Rates of the Mortgage Loans underlying the Trust MBS. However, the actual remaining terms to maturity, loan ages and Mortgage Rates of many of the Mortgage Loans will differ from the characteristics assumed, perhaps significantly. This will be the case even if the weighted average characteristics of the Mortgage Loans are the same as the assumed characteristics. Small differences in the characteristics of the Mortgage Loans can have a significant effect on the Weighted Average Lives and yields of the Securities. See "Risk Factors" and "Yield, Maturity and Prepayment Considerations" in this Supplement.

#### The Trustee Fee

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

#### **GINNIE MAE GUARANTY**

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

# **DESCRIPTION OF THE SECURITIES**

# General

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

### **Form of Securities**

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

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

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

### **Distributions**

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

#### **Interest Distributions**

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

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

# Categories of Classes

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

# Accrual Periods

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

Class	Accrual Period
Fixed Rate and Weighted Average Coupon Classes	The calendar month preceding the related Distribution Date
Floating Rate and Inverse Floating Rate Classes	From the 20th day of the month preceding the month of the related Distribution Date through the 19th day of the month of that Distribution Date

#### Fixed Rate Classes

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

# Floating Rate and Inverse Floating Rate Classes

The Floating Rate and Inverse Floating Rate Classes will bear interest as shown under "Terms Sheet — Interest Rates" in this Supplement. The Interest Rates for the Floating Rate and Inverse Floating Rate Classes will be based 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 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 Multiclass Securities e-Access located on Ginnie Mae's website ("e-Access") or by calling the Information Agent at (800) 234-GNMA.

#### Accrual Classes

Each of Classes AZ, BZ, DZ, EZ, GZ, JZ, KZ, PZ, ZJ, ZN, ZP and ZQ is an Accrual Class. Interest will accrue on the Accrual Classes and be distributed as described under "Terms Sheet — Accrual Classes" in this Supplement.

# **Principal Distributions**

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

# Categories of Classes

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

# Notional Classes

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

# **Residual Securities**

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

#### **Class Factors**

The Trustee will calculate and make available for each Class of Securities, no later than the day preceding the Distribution Date, the factor (carried out to eight decimal places) that when multiplied by the Original Class Principal Balance (or original Class Notional Balance) of that Class, determines the Class Principal Balance (or Class Notional Balance) after giving effect to the distribution of principal to be made on the Securities (and any addition to the Class Principal Balance of an Accrual Class) or any reduction of Class Notional Balance on that Distribution Date (each, a "Class Factor").

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

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 10, 11 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 10, 11 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.

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 2019-031. 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 an interest only security unless all securities involved in the exchange are interest only securities. The fee must be paid concurrently with the exchange.

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

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

# YIELD, MATURITY AND PREPAYMENT CONSIDERATIONS

#### General

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

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

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

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

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

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

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

Investors in the Group 4 and 6 Securities and the Class MD and MG Securities are urged to review the discussion under "Risk Factors — *The rate of payments on the underlying certificates will directly affect the rate of payments on the group 4 and 6 securities and the class MD and MG securities*" in this Supplement.

# **Accretion Directed Classes**

Classes AV, BK, BP, DV, EK, EP, GA, JA, JZ, KA, KE, KF, NA, PA, PB, PC, PE, PF, PG, QE, QF and QY are Accretion Directed Classes. The related Accrual Amounts will be applied to making principal distributions on those Classes as described in this Supplement. Each of Classes EI, IP, KI, KS, PI, PS and QS is a Notional Class whose Class Notional Balance is determined by reference to the Class Principal Balance of the related Accretion Directed Class or Classes shown under "Terms Sheet — Notional Classes" in this Supplement.

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

The Accretion Directed Classes are entitled to principal payments in an amount equal to interest accrued on the related Accrual Classes. With respect to the Classes listed in the table below, the Weighted Average Life of each such Class cannot exceed its Weighted Average Life as shown in the following table under any constant prepayment scenario, even a scenario where there are no prepayments.

- Moreover, based on the Modeling Assumptions, if the related Mortgage Loans prepay at any constant rate at or below the rate for an Accretion Directed Class shown in the table below, the Class Principal Balance of such Class would be reduced to zero on, but not before, its Final Distribution Date, and the Weighted Average Life of such Class would equal its maximum Weighted Average Life shown in the table below.
- However, the Weighted Average Lives of Classes AV and DV will be reduced, and may be reduced significantly, at prepayment speeds higher than the constant rates shown in the table below. See "Yield, Maturity and Prepayment Considerations Decrement Tables" in this Supplement.

#### **Accretion Directed Classes**

Class	Maximum Weighted Average Life (in years)(1)	Final Distribution Date	Prepayment Rate at or below
AV	8.3	December 2033	106% PSA
DV	6.0	May 2030	205% PSA

<sup>(1)</sup> The maximum Weighted Average Life for each Class shown in this table is based on the Modeling Assumptions and the assumption that the related Mortgage Loans prepay at any constant rate at or below the rate shown in the table for such Class.

The Mortgage Loans will have characteristics that differ from those of the Modeling Assumptions. Therefore, even if the related Mortgage Loans prepay at a rate at or somewhat below the "at or below" rate shown for any Accretion Directed Class, the Class Principal Balance of such Class could be reduced to zero before its Final Distribution Date, and its Weighted Average Life could be shortened.

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

As described in this Supplement, each PAC Class 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	
BK and BP (in the aggregate)	185% PSA through 375% PSA
EK and EP (in the aggregate)	175% PSA through 400% PSA
HA and HQ (in the aggregate)	175% PSA through 300% PSA
JA and JZ (in the aggregate)	225% PSA through 425% PSA
KA, KE and KF (in the aggregate)	150% PSA through 345% PSA
MA and MY (in the aggregate)	135% PSA through 225% PSA
PA, PE, PF and PG (in the aggregate)	200% PSA through 450% PSA
PB and PC (in the aggregate)	150% PSA through 250% PSA
QE, QF and QY (in the aggregate)	125% PSA through 225% PSA
UA and UQ (in the aggregate)	175% PSA through 300% PSA

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

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

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

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

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

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

# **Assumability**

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

#### **Final Distribution Date**

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

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

# **Modeling Assumptions**

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

- 1. The Mortgage Loans underlying the Group 1, 2, 3, 5, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18 and 19 and Subgroup 10A and 10C Trust Assets have the assumed characteristics shown under "Assumed Characteristics of the Mortgage Loans Underlying the Group 1, 2, 3, 5, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18 and 19 and Subgroup 10A and 10C Trust Assets" in the Terms Sheet, except in the case of information set forth under the 0% PSA Prepayment Assumption Rate, for which each Mortgage Loan underlying a Group 1, 2, 3, 5, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18 or 19 or Subgroup 10A or 10C Trust Asset is assumed to have an original and a remaining term to maturity of 360 months and a Mortgage Rate of 1.50% per annum higher than the related Certificate Rate.
- 2. The Mortgage Loans prepay at the constant percentages of PSA (described below) shown in the related table.
- 3. Distributions on the Securities are always received on the 20th day of the month, whether or not a Business Day, commencing in April 2019.
  - 4. A termination of the Trust or the Underlying Trusts does not occur.
  - 5. The Closing Date for the Securities is March 29, 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.

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

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

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

#### **Decrement Tables**

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

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

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

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

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

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

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

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

Security Group 1 PSA Prepayment Assumption Rates

	Classes QC, QD, QE, QF and QS Class QY							el To							
	Cla	sses QC,	QD, QE,	, QF and	QS			Class QY	7				Class ZQ	!	
Distribution Date	0%	125%	160%	225%	400%	0%	125%	160%	225%	400%	0%	125%	160%	225%	400%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
March 2020	98	91	91	91	91	100	100	100	100	100	104	104	94	75	25
March 2021	95	81	81	81	71	100	100	100	100	100	108	108	86	46	0
March 2022	93	70	70	70	53	100	100	100	100	100	113	113	81	24	0
March 2023	90	61	61	61	39	100	100	100	100	100	117	117	78	10	0
March 2024	87	52	52	52	28	100	100	100	100	100	122	122	77	3	0
March 2025	85	44	44	44	21	100	100	100	100	100	127	127	78	0	0
March 2026	81	37	37	37	15	100	100	100	100	100	132	131	79	0	0
March 2027	78	31	31	31	11	100	100	100	100	100	138	131	78	0	0
March 2028	75	26	26	26	8	100	100	100	100	100	143	129	76	0	0
March 2029	71	21	21	21	5	100	100	100	100	100	149	125	73	0	0
March 2030	67	18	18	18	3	100	100	100	100	100	155	119	69	0	0
March 2031	64	14	14	14	2	100	100	100	100	100	161	113	64	0	0
March 2032	59	12	12	12	1	100	100	100	100	100	168	106	59	0	0
March 2033	55	9	9	9	0	100	100	100	100	100	175	98	54	0	0
March 2034	50	8	8	8	0	100	100	100	100	95	182	90	49	0	0
March 2035	46	6	6	6	0	100	100	100	100	68	189	82	44	0	0
March 2036	40	5	5	5	0	100	100	100	100	49	197	74	39	0	0
March 2037	35	3	3	3	0	100	100	100	100	34	205	65	34	0	0
March 2038	29	2	2	2	0	100	100	100	100	24	214	58	30	0	0
March 2039	23	2	2	2	0	100	100	100	100	17	222	50	25	0	0
March 2040	17	1	1	1	0	100	100	100	100	12	231	43	21	0	0
March 2041	11	0	0	0	0	100	100	100	100	8	241	36	18	0	0
March 2042	4	0	0	0	0	100	97	97	97	5	251	30	14	0	0
March 2043	0	0	0	0	0	71	71	71	71	3	241	24	11	0	0
March 2044	0	0	0	0	0	49	49	49	49	2	207	18	8	0	0
March 2045	0	0	0	0	0	32	32	32	32	1	171	13	6	0	0
March 2046	0	0	0	0	0	18	18	18	18	1	132	8	3	0	0
March 2047	0	0	0	0	0	7	7	7	7	0	91	3	1	0	0
March 2048	0	0	0	0	0	0	0	0	0	0	47	0	0	0	0
March 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Life (years)	14.1	6.5	6.5	6.5	4.0	25.3	25.2	25.2	25.2	17.7	27.0	18.3	13.8	2.1	0.7

Security Group 2 PSA Prepayment Assumption Rates

			Class GA				Classes	GB, GF	and GS				Class G7	:	
Distribution Date	0%	100%	255%	450%	600%	0%	100%	255%	450%	600%	0%	100%	255%	450%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
March 2020	99	92	82	70	61	99	92	83	72	63	104	104	104	104	104
March 2021	97	84	67	49	36	97	85	69	51	39	107	107	107	107	107
March 2022	95	76	55	33	21	96	78	57	36	25	111	111	111	111	111
March 2023	94	69	44	22	11	95	71	47	26	15	115	115	115	115	115
March 2024	92	63	35	14	5	93	65	39	18	10	119	119	119	119	119
March 2025	90	57	28	8	1	91	59	32	13	6	123	123	123	123	123
March 2026	88	51	22	4	0	90	54	26	9	4	128	128	128	128	92
March 2027	86	46	17	1	0	88	49	21	6	2	132	132	132	132	57
March 2028	84	41	12	0	0	86	44	17	5	1	137	137	137	114	35
March 2029	81	36	9	0	0	84	40	14	3	1	142	142	142	80	21
March 2030	79	31	6	0	0	81	36	11	2	1	147	147	147	56	13
March 2031	76	27	3	0	0	79	32	9	2	0	152	152	152	39	8
March 2032	73	23	1	0	0	77	29	7	1	0	158	158	158	27	5
March 2033	70	19	0	0	0	74	25	6	1	0	163	163	147	18	3
March 2034	67	16	0	0	0	71	22	5	0	0	169	169	116	12	2
March 2035	64	13	0	0	0	68	19	4	0	0	175	175	91	8	1
March 2036	60	10	0	0	0	65	17	3	0	0	181	181	70	6	1
March 2037	56	7	0	0	0	61	14	2	0	0	188	188	54	4	0
March 2038	52	4	0	0	0	58	12	2	0	0	194	194	40	2	0
March 2039	48	i	Õ	Õ	Ŏ	54	9	1	Ŏ	Õ	201	201	29	2	Ŏ
March 2040	43	0	0	0	0	50	7	1	0	0	208	186	21	1	0
March 2041	39	0	0	0	0	46	6	1	0	0	216	138	14	1	0
March 2042	33	0	0	0	0	41	4	0	0	0	223	94	9	0	0
March 2043	28	0	0	0	0	36	2	0	0	0	231	53	4	0	0
March 2044	22	0	0	0	0	31	1	0	0	0	240	15	1	0	0
March 2045	16	0	0	0	0	26	0	0	0	0	248	Ó	0	0	0
March 2046	10	0	0	0	0	20	0	0	0	0	257	0	0	0	0
March 2047	3	Ő	Õ	Õ	Õ	14	Õ	0	0	Õ	266	Õ	Õ	Õ	0
March 2048	Ŏ	Õ	Õ	Õ	Ŏ	7	Õ	Õ	Ŏ	Õ	174	Õ	Õ	Ŏ	Õ
March 2049	Ö	0	0	0	0	Ó	Ő	Ö	Õ	Õ	0	Õ	Ö	Ö	Õ
Weighted Average															
Life (years)	18.0	8.2	4.3	2.5	1.8	19.3	9.2	5.1	3.0	2.1	29.2	22.9	17.2	11.3	8.4

Security Group 3 PSA Prepayment Assumption Rates

			Class HC	;				Class HD	)				Class HI		
Distribution Date	0%	150%	274%	450%	600%	0%	150%	274%	450%	600%	0%	150%	274%	450%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
March 2020	99	95	92	88	84	100	100	100	100	100	99	96	93	90	87
March 2021	97	85	77	64	55	100	100	100	100	100	98	88	81	72	64
March 2022	96	74	59	39	25	100	100	100	100	100	96	79	67	52	40
March 2023	94	64	44	21	7	100	100	100	100	100	95	71	55	37	25
March 2024	92	54	31	8	0	100	100	100	100	80	94	63	45	27	16
March 2025	90	46	21	0	0	100	100	100	95	50	92	56	37	19	10
March 2026	88	38	13	0	0	100	100	100	68	31	90	50	30	14	6
March 2027	86	31	6	0	0	100	100	100	48	20	89	45	25	10	4
March 2028	83	25	0	0	0	100	100	100	34	12	87	40	20	7	2
March 2029	81	19	0	0	0	100	100	82	24	8	85	35	16	5	2
March 2030	78	14	0	0	0	100	100	66	17	5	83	31	13	3	1
March 2031	75	9	0	0	0	100	100	54	12	3	80	27	11	2	1
March 2032	72	5	0	0	0	100	100	43	9	2	78	24	9	2	0
March 2033	69	1	0	0	0	100	100	35	6	1	75	21	7	1	0
March 2034	66	0	0	0	0	100	92	28	4	1	73	18	6	1	0
March 2035	62	0	0	0	0	100	80	22	3	0	70	16	4	1	0
March 2036	58	0	0	0	0	100	69	18	2	0	66	14	4	0	0
March 2037	54	0	0	0	0	100	59	14	1	0	63	12	3	0	0
March 2038	49	0	0	0	0	100	50	11	1	0	59	10	2	0	0
March 2039	45	0	0	0	0	100	43	8	1	0	56	9	2	0	0
March 2040	39	0	0	0	0	100	36	6	0	0	52	7	1	0	0
March 2041	34	0	0	0	0	100	29	5	0	0	47	6	1	0	0
March 2042	28	0	0	0	0	100	24	4	0	0	43	5	1	0	0
March 2043	22	0	0	0	0	100	19	3	0	0	38	4	1	0	0
March 2044	15	0	0	0	0	100	15	2	0	0	32	3	0	0	0
March 2045	8	0	0	0	0	100	11	1	0	0	27	2	0	0	0
March 2046	1	0	0	0	0	100	7	1	0	0	21	1	0	0	0
March 2047	0	0	0	0	0	71	4	0	0	0	14	1	0	0	0
March 2048	0	0	0	0	0	37	2	0	0	0	7	0	0	0	0
March 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average															
Life (years)	17.3	6.1	3.9	2.7	2.2	28.6	19.9	13.5	8.8	6.7	19.6	8.9	5.9	3.9	3.1

Security Group 4
PSA Prepayment Assumption Rates

							1 ,		1						
			Class MA	1				Class MI	I				Class MY	?	
Distribution Date	0%	135%	175%	225%	400%	0%	135%	175%	225%	400%	0%	135%	175%	225%	400%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
March 2020	98	91	91	91	91	100	100	90	77	32	100	100	100	100	100
March 2021	96	80	80	80	72	100	100	78	51	0	100	100	100	100	100
March 2022	93	70	70	70	53	100	100	68	31	0	100	100	100	100	100
March 2023	91	60	60	60	39	100	100	61	17	0	100	100	100	100	100
March 2024	88	52	52	52	28	100	100	56	8	0	100	100	100	100	100
March 2025	85	44	44	44	20	100	100	53	3	0	100	100	100	100	100
March 2026	83	37	37	37	14	100	100	51	0	0	100	100	100	100	100
March 2027	80	31	31	31	9	100	100	50	0	0	100	100	100	100	100
March 2028	77	25	25	25	6	100	98	49	0	0	100	100	100	100	100
March 2029	73	21	21	21	4	100	94	46	0	0	100	100	100	100	100
March 2030	70	17	17	17	2	100	90	43	0	0	100	100	100	100	100
March 2031	66	13	13	13	1	100	84	40	0	0	100	100	100	100	100
March 2032	63	11	11	11	0	100	79	37	0	0	100	100	100	100	87
March 2033	59	8	8	8	0	100	73	33	0	0	100	100	100	100	63
March 2034	55	6	6	6	0	100	66	30	0	0	100	100	100	100	45
March 2035	51	5	5	5	0	100	60	27	0	0	100	100	100	100	33
March 2036	46	3	3	3	0	100	54	24	0	0	100	100	100	100	23
March 2037	41	2	2	2	0	100	48	21	0	0	100	100	100	100	17
March 2038	37	1	1	1	0	100	42	18	0	0	100	100	100	100	12
March 2039	32	0	0	0	0	100	36	15	0	0	100	100	100	100	8
March 2040	26	0	0	0	0	100	31	13	0	0	100	80	80	80	6
March 2041	21	0	0	0	0	100	26	10	0	0	100	62	62	62	4
March 2042	15	0	0	0	0	100	21	8	0	0	100	46	46	46	2
March 2043	9	0	0	0	0	100	17	6	0	0	100	34	34	34	2
March 2044	3	0	0	0	0	100	12	5	0	0	100	23	23	23	1
March 2045	0	0	0	0	0	94	9	3	0	0	15	15	15	15	1
March 2046	0	0	0	0	0	61	5	2	0	0	8	8	8	8	0
March 2047	0	0	0	0	0	26	2	1	0	0	3	3	3	3	0
March 2048	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average															
Life (years)	15.1	6.3	6.3	6.3	3.9	27.3	18.0	9.9	2.4	0.8	25.9	23.2	23.2	23.2	15.6

Security Group 5 PSA Prepayment Assumption Rates

		Class	ses DA a	and DI				Class I	v				Class D	Y				Class I	Z	
Distribution Date	0%	300%	603%	950%	1,300%	0%	300%	603%	950%	1,300%	0%	300%	603%	950%	1,300%	0%	300%	603%	950%	1,300%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
March 2020	98	92	85	78	70	93	93	93	93	93	100	100	100	100	100	104	104	104	104	104
March 2021	97	75	56	36	17	85	85	85	85	85	100	100	100	100	100	108	108	108	108	108
March 2022	95	56	26	1	0	77	77	77	77	0	100	100	100	100	38	113	113	113	113	59
March 2023	93	40	6	0	0	69	69	69	0	0	100	100	100	43	8	117	117	117	67	13
March 2024	90	27	0	0	0	61	61	0	0	0	100	100	78	18	2	122	122	122	28	3
March 2025	88	16	0	0	0	52	52	0	0	0	100	100	49	8	0	127	127	76	12	1
March 2026	86	8	0	0	0	42	42	0	0	0	100	100	30	3	0	132	132	47	5	0
March 2027	83	1	0	0	0	33	33	0	0	0	100	100	19	1	0	138	138	29	2	0
March 2028	81	0	0	0	0	23	0	0	0	0	100	83	12	1	0	143	129	18	1	0
March 2029	78	0	0	0	0	12	0	0	0	0	100	66	7	0	0	149	103	11	0	0
March 2030	75	0	0	0	0	1	0	0	0	0	100	52	4	0	0	155	82	7	0	0
March 2031	72	0	0	0	0	0	0	0	0	0	100	41	3	0	0	156	65	4	0	0
March 2032	69	0	0	0	0	0	0	0	0	0	100	33	2	0	0	156	51	3	0	0
March 2033	65	0	0	0	0	0	0	0	0	0	100	26	1	0	0	156	40	2	0	0
March 2034	62	0	0	0	0	0	0	0	0	0	100	20	1	0	0	156	31	1	0	0
March 2035	58	0	0	0	0	0	0	0	0	0	100	16	0	0	0	156	25	1	0	0
March 2036	54	0	0	0	0	0	0	0	0	0	100	12	0	0	0	156	19	0	0	0
March 2037	49	0	0	0	0	0	0	0	0	0	100	9	0	0	0	156	15	0	0	0
March 2038	45	0	0	0	0	0	0	0	0	0	100	7	0	0	0	156	11	0	0	0
March 2039	40	0	0	0	0	0	0	0	0	0	100	5	0	0	0	156	9	0	0	0
March 2040	35	0	0	0	0	0	0	0	0	0	100	4	0	0	0	156	6	0	0	0
March 2041	29	0	0	0	0	0	0	0	0	0	100	3	0	0	0	156	5	0	0	0
March 2042	24	0	0	0	0	0	0	0	0	0	100	2	0	0	0	156	3	0	0	0
March 2043	18	0	0	0	0	0	0	0	0	0	100	2	0	0	0	156	3	0	0	0
March 2044	11	0	0	0	0	0	0	0	0	0	100	1	0	0	0	156	2	0	0	0
March 2045	5	0	0	0	0	0	0	0	0	0	100	1	0	0	0	156	1	0	0	0
March 2046	0	0	0	0	0	0	0	0	0	0	91	0	0	0	0	142	1	0	0	0
March 2047	0	0	0	0	0	0	0	0	0	0	62	0	0	0	0	97	0	0	0	0
March 2048	0	0	0	0	0	0	0	0	0	0	32	0	0	0	0	50	0	0	0	0
March 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)	16.5	3.7	2.2	1.7	1.4	6.0	5.6	3.9	2.8	2.3	28.4	12.4	6.6	4.2	3.0	28.4	12.8	7.1	4.6	3.3

Security Group 6
PSA Prepayment Assumption Rates

			Class V		
Distribution Date	0%	150%	383%	600%	800%
Initial Percent	100	100	100	100	100
March 2020	100	100	100	100	100
March 2021	100	100	100	100	100
March 2022	100	100	100	100	100
March 2023	100	100	100	100	0
March 2024	100	100	100	9	0
March 2025	100	100	100	0	0
March 2026	100	100	33	0	0
March 2027	100	100	0	0	0
March 2028	100	100	0	0	0
March 2029	100	100	0	0	0
March 2030	99	99	0	0	0
March 2031	91	91	0	0	0
March 2032	80	47	0	0	0
March 2033	69	1	0	0	0
March 2034	57	0	0	0	0
March 2035	44	0	0	0	0
March 2036	31	0	0	0	0
March 2037	18	0	0	0	0
March 2038	7	0	0	0	0
March 2039	0	0	0	0	0
Weighted Average					
Life (years)	15.5	12.9	6.8	4.7	3.6

Security Group 7 PSA Prepayment Assumption Rates

			Class NA				Classes	NF, NH	and NS				Class ZN	ſ	
Distribution Date	0%	100%	255%	450%	600%	0%	100%	255%	450%	600%	0%	100%	255%	450%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
March 2020	98	96	93	90	87	99	97	94	91	88	104	104	104	104	104
March 2021	97	90	81	70	62	98	92	83	73	66	107	107	107	107	107
March 2022	95	82	66	47	35	96	85	70	53	42	111	111	111	111	111
March 2023	93	75	53	31	18	95	78	58	38	26	115	115	115	115	115
March 2024	91	68	42	19	7	94	72	48	27	16	119	119	119	119	119
March 2025	89	61	32	10	0	92	67	40	19	10	123	123	123	123	122
March 2026	87	55	24	3	0	90	61	33	14	6	128	128	128	128	76
March 2027	85	49	18	0	0	89	56	27	10	4	132	132	132	116	48
March 2028	82	44	12	0	0	87	52	23	7	3	137	137	137	83	30
March 2029	79	38	7	0	0	85	47	19	5	2	142	142	142	59	19
March 2030	77	33	3	0	0	83	43	15	4	1	147	147	147	42	12
March 2031	74	29	0	0	0	80	39	13	3	1	152	152	148	29	7
March 2032	71	24	0	0	0	78	36	10	2	0	158	158	121	21	4
March 2033	67	20	0	0	0	75	32	8	1	0	163	163	99	15	3
March 2034	64	16	0	0	0	73	29	7	1	0	169	169	80	10	2
March 2035	60	12	0	0	0	70	26	6	1	0	175	175	65	7	1
March 2036	56	9	0	0	0	66	23	4	0	0	181	181	52	5	1
March 2037	52	5	0	0	0	63	21	4	0	0	188	188	42	3	0
March 2038	47	2	0	0	0	59	18	3	0	0	194	194	33	2	0
March 2039	42	0	0	0	0	56	16	2	0	0	201	186	26	2	0
March 2040	37	0	0	0	0	52	14	2	0	0	208	161	20	1	0
March 2041	32	0	0	0	0	47	12	1	0	0	216	137	16	1	0
March 2042	26	0	0	0	0	43	10	1	0	0	223	115	12	0	0
March 2043	20	0	0	0	0	38	8	1	0	0	231	94	9	0	0
March 2044	13	0	0	0	0	32	6	1	0	0	240	75	6	0	0
March 2045	6	0	0	0	0	27	5	0	0	0	248	57	4	0	0
March 2046	0	0	0	0	0	21	3	0	0	0	243	40	3	0	0
March 2047	0	0	0	0	0	14	2	0	0	0	167	24	1	0	0
March 2048	0	0	0	0	0	7	1	0	0	0	86	9	1	0	0
March 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	16.9	8.6	4.8	3.2	2.6	19.6	11.0	6.2	4.0	3.2	28.5	24.1	16.4	10.6	8.1

#### Security Group 8 PSA Prepayment Assumption Rates

			Class CA					Class CB	3			Classes	s CF, CS	and CT	
Distribution Date	0%	200%	418%	650%	900%	0%	200%	418%	650%	900%	0%	200%	418%	650%	900%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
March 2020	98	94	89	84	79	100	100	100	100	100	99	96	92	89	85
March 2021	96	81	66	50	34	100	100	100	100	100	97	87	76	65	54
March 2022	94	65	38	14	0	100	100	100	100	84	96	75	56	40	25
March 2023	92	50	16	0	0	100	100	100	79	38	95	65	42	24	11
March 2024	90	37	1	0	0	100	100	100	47	17	93	56	31	14	5
March 2025	88	26	0	0	0	100	100	75	28	8	91	48	22	8	2
March 2026	85	17	0	0	0	100	100	55	17	3	90	42	16	5	1
March 2027	83	8	0	0	0	100	100	40	10	2	88	36	12	3	0
March 2028	80	1	0	0	0	100	100	29	6	1	86	31	9	2	0
March 2029	77	0	0	0	0	100	87	21	4	0	84	26	6	1	0
March 2030	74	0	0	0	0	100	74	15	2	0	81	22	5	1	0
March 2031	70	0	0	0	0	100	63	11	1	0	79	19	3	0	0
March 2032	67	0	0	0	0	100	54	8	1	0	77	16	2	0	0
March 2033	63	0	0	0	0	100	45	6	0	0	74	14	2	0	0
March 2034	59	0	0	0	0	100	38	4	0	0	71	11	1	0	0
March 2035	54	0	0	0	0	100	32	3	0	0	68	10	1	0	0
March 2036	50	0	0	0	0	100	27	2	0	0	65	8	1	0	0
March 2037	45	0	0	0	0	100	22	1	0	0	61	7	0	0	0
March 2038	40	0	0	0	0	100	18	1	0	0	58	6	0	0	0
March 2039	34	0	0	0	0	100	15	1	0	0	54	4	0	0	0
March 2040	28	0	0	0	0	100	12	1	0	0	50	4	0	0	0
March 2041	22	0	0	0	0	100	10	0	0	0	46	3	0	0	0
March 2042	16	0	0	0	0	100	8	0	0	0	41	2	0	0	0
March 2043	9	0	0	0	0	100	6	0	0	0	36	2	0	0	0
March 2044	1	0	0	0	0	100	4	0	0	0	31	1	0	0	0
March 2045	0	0	0	0	0	85	3	0	0	0	26	1	0	0	0
March 2046	0	0	0	0	0	66	2	0	0	0	20	1	0	0	0
March 2047	0	0	0	0	0	45	1	0	0	0	14	0	0	0	0
March 2048	0	0	0	0	0	23	0	0	0	0	7	0	0	0	0
March 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average	157	/ 2	2.6	2.0	1.	07.7	1/0	0.0		/ 1	10.2	- /	/ 2	2.0	2 /
Life (years)	15.7	4.3	2.6	2.0	1.6	27.7	14.8	8.2	5.5	4.1	19.3	7.4	4.3	3.0	2.4

Security Group 9 PSA Prepayment Assumption Rates

•		(	Class PI	3			(	Class Po	0				Class Pl	[			(	Class ZF	•	
Distribution Date	0%	150%	200%	250%	400%	0%	150%	200%	250%	400%	0%	150%	200%	250%	400%	0%	150%	200%	250%	400%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
March 2020	95	86	86	86	86	100	100	100	100	100	98	94	94	94	94	104	104	95	86	59
March 2021	91	64	64	64	60	100	100	100	100	100	96	84	84	84	81	108	108	83	58	0
March 2022	85	40	40	40	15	100	100	100	100	100	93	72	72	72	61	113	113	71	31	0
March 2023	80	18	18	18	0	100	100	100	100	84	91	62	62	62	45	117	117	63	13	0
March 2024	74	0	0	0	0	100	98	98	98	63	88	53	53	53	34	122	122	59	3	0
March 2025	68	0	0	0	0	100	82	82	82	46	85	44	44	44	25	127	127	59	0	0
March 2026	62	0	0	0	0	100	68	68	68	34	83	37	37	37	19	132	131	60	0	0
March 2027	56	0	0	0	0	100	56	56	56	25	79	30	30	30	14	138	130	58	0	0
March 2028	49	0	0	0	0	100	46	46	46	19	76	25	25	25	10	143	127	56	0	0
March 2029	41	0	0	0	0	100	38	38	38	14	73	21	21	21	7	149	122	53	0	0
March 2030	34	0	0	0	0	100	31	31	31	10	69	17	17	17	5	155	116	49	0	0
March 2031	26	0	0	0	0	100	26	26	26	7	66	14	14	14	4	161	108	45	0	0
March 2032	17	0	0	0	0	100	21	21	21	5	62	11	11	11	3	168	100	41	0	0
March 2033	8	0	0	0	0	100	17	17	17	4	58	9	9	9	2	175	92	37	0	0
March 2034	0	0	0	0	0	99	14	14	14	3	53	7	7	7	2	182	84	33	0	0
March 2035	0	0	0	0	0	90	11	11	11	2	49	6	6	6	1	189	75	29	0	0
March 2036	0	0	0	0	0	81	9	9	9	1	44	5	5	5	1	197	67	25	0	0
March 2037	0	0	0	0	0	72	7	7	7	1	39	4	4	4	1	205	59	22	0	0
March 2038	0	0	0	0	0	62	6	6	6	1	33	3	3	3	0	214	52	18	0	0
March 2039	0	0	0	0	0	51	4	4	4	1	28	2	2	2	0	222	44	16	0	0
March 2040	0	0	0	0	0	40	3	3	3	0	22	2	2	2	0	231	38	13	0	0
March 2041	0	0	0	0	0	29	3	3	3	0	15	1	1	1	0	241	32	11	0	0
March 2042	0	0	0	0	0	17	2	2	2	0	9	1	1	1	0	251	26	9	0	0
March 2043	0	0	0	0	0	4	1	1	1	0	2	1	1	1	0	261	21	7	0	0
March 2044	0	0	0	0	0	1	1	1	1	0	1	1	1	1	0	231	16	5	0	0
March 2045	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	190	12	4	0	0
March 2046	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	147	8	2	0	0
March 2047	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	101	4	1	0	0
March 2048	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52	1	0	0	0
March 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)	8.4	2.6	2.6	2.6	2.1	20.0	10.0	10.0	10.0	6.8	14.6	6.6	6.6	6.6	4.6	27.3	17.7	10.7	2.4	1.1

Security Group 10 PSA Prepayment Assumption Rates

		Classe	es IM ar	nd MC			(	lass MI	D			C	lass MI	Ξ			(	lass MO	ì	
Distribution Date	0%	150%	276%	450%	600%	0%	150%	276%	450%	600%	0%	150%	276%	450%	600%	0%	150%	276%	450%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
March 2020	99	96	93	90	87	100	100	99	98	95	99	94	91	86	82	99	96	94	91	88
March 2021	97	88	81	71	63	100	100	98	90	87	97	85	77	65	56	98	91	84	75	68
March 2022	96	79	66	51	40	100	100	96	87	87	95	76	63	47	35	97	84	74	60	52
March 2023	94	70	54	37	25	100	100	94	87	87	94	68	51	33	22	96	78	65	51	43
March 2024	92	62	44	26	16	100	100	93	87	87	92	60	42	24	14	95	73	58	44	36
March 2025	91	56	36	19	10	100	100	87	87	87	90	53	34	17	9	93	68	51	39	33
March 2026	89	49	29	13	6	100	99	87	87	37	88	47	27	12	5	92	64	46	35	15
March 2027	87	44	24	9	4	100	97	87	87	15	86	42	22	9	3	90	59	42	32	7
March 2028	85	39	19	7	2	100	95	87	37	15	84	37	18	6	2	89	55	39	16	6
March 2029	83	34	16	5	1	100	89	87	27	8	81	32	15	4	1	87	50	37	11	3
March 2030	80	30	13	3	1	100	88	87	15	0	79	29	12	3	1	86	47	35	7	1
March 2031	78	26	10	2	1	100	74	74	15	0	76	25	9	2	0	84	40	29	6	0
March 2032	75	23	8	2	0	95	37	37	11	0	74	22	8	1	0	81	27	17	4	0
March 2033	72	20	7	1	0	83	34	34	3	0	71	19	6	1	0	75	24	15	2	0
March 2034	69	18	5	1	0	71	22	21	0	0	68	16	5	1	0	69	18	10	1	0
March 2035	66	15	4	1	0	58	15	15	0	0	65	14	4	0	0	63	15	7	0	0
March 2036	63	13	3	0	0	50	15	15	0	0	61	12	3	0	0	59	13	7	0	0
March 2037	60	11	3	0	0	50	14	14	0	0	58	10	2	0	0	56	12	6	0	0
March 2038	56	10	2	0	0	50	6	6	0	0	54	9	2	0	0	54	8	3	0	0
March 2039	52	8	2	0	0	50	0	0	0	0	51	7	1	0	0	51	5	1	0	0
March 2040	48	7	1	0	0	10	0	0	0	0	47	6	1	0	0	36	4	1	0	0
March 2041	44	6	1	0	0	4	0	0	0	0	42	5	1	0	0	32	4	1	0	0
March 2042	40	4	1	0	0	0	0	0	0	0	38	4	1	0	0	27	3	0	0	0
March 2043	35	4	0	0	0	0	0	0	0	0	33	3	0	0	0	24	2	0	0	0
March 2044	30	3	0	0	0	0	0	0	0	0	28	2	0	0	0	20	2	0	0	0
March 2045	24	2	0	0	0	0	0	0	0	0	23	2	0	0	0	17	1	0	0	0
March 2046	19	1	0	0	0	0	0	0	0	0	18	1	0	0	0	13	1	0	0	0
March 2047	13	1	0	0	0	0	0	0	0	0	12	1	0	0	0	9	0	0	0	0
March 2048	7	0	0	0	0	0	0	0	0	0	6	0	0	0	0	5	0	0	0	0
March 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)	19.0	8.7	5.7	3.9	3.1	17.7	13.3	12.6	8.8	6.6	18.6	8.3	5.5	3.6	2.8	18.5	10.0	7.7	5.3	4.1

Security Group 11 PSA Prepayment Assumption Rates

			Class H	[			(	lass H	<b>A</b>			(	lass HI	•			(	lass H(	2	
Distribution Date	0%	175%	250%	300%	500%	0%	175%	250%	300%	500%	0%	175%	250%	300%	500%	0%	175%	250%	300%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
March 2020	100	100	92	87	67	98	93	93	93	93	99	95	94	93	89	100	100	100	100	100
March 2021	100	100	77	62	3	97	81	81	81	81	98	87	83	80	69	100	100	100	100	100
March 2022	100	100	60	35	0	95	66	66	66	51	96	77	69	64	48	100	100	100	100	100
March 2023	100	100	48	17	0	93	53	53	53	30	95	67	58	52	33	100	100	100	100	100
March 2024	100	100	41	6	0	91	41	41	41	15	94	59	48	42	23	100	100	100	100	100
March 2025	100	100	37	1	0	89	31	31	31	5	92	52	40	34	15	100	100	100	100	100
March 2026	100	100	35	0	0	86	21	21	21	0	90	45	33	27	11	100	100	100	100	87
March 2027	100	98	33	0	0	84	14	14	14	0	89	40	28	22	7	100	100	100	100	59
March 2028	100	94	31	0	0	81	7	7	7	0	87	35	23	17	5	100	100	100	100	41
March 2029	100	89	28	0	0	78	2	2	2	0	85	30	19	14	3	100	100	100	100	28
March 2030	100	83	26	0	0	75	0	0	0	0	83	26	16	11	2	100	90	90	90	19
March 2031	100	76	23	0	0	72	0	0	0	0	80	23	13	9	2	100	71	71	71	13
March 2032	100	69	20	0	0	68	0	0	0	0	78	20	11	7	1	100	57	57	57	9
March 2033	100	62	17	0	0	64	0	0	0	0	75	17	9	5	1	100	45	45	45	6
March 2034	100	55	15	0	0	60	0	0	0	0	73	15	7	4	0	100	35	35	35	4
March 2035	100	49	13	0	0	56	0	0	0	0	70	12	6	3	0	100	27	27	27	3
March 2036	100	43	11	0	0	52	0	0	0	0	66	11	5	3	0	100	21	21	21	2
March 2037	100	37	9	0	0	47	0	0	0	0	63	9	4	2	0	100	17	17	17	1
March 2038	100	32	8	0	0	42	0	0	0	0	59	7	3	2	0	100	13	13	13	1
March 2039	100	27	6	0	0	36	0	0	0	0	56	6	2	1	0	100	10	10	10	0
March 2040	100	23	5	0	0	30	0	0	0	0	52	5	2	1	0	100	7	7	7	0
March 2041	100	19	4	0	0	24	0	0	0	0	47	4	1	1	0	100	5	5	5	0
March 2042	100	15	3	0	0	17	0	0	0	0	43	3	1	0	0	100	4	4	4	0
March 2043	100	12	2	0	0	10	0	0	0	0	38	3	1	0	0	100	3	3	3	0
March 2044	100	9	2	0	0	2	0	0	0	0	32	2	1	0	0	100	2	2	2	0
March 2045	100	7	1	0	0	0	0	0	0	0	27	1	0	0	0	67	1	1	1	0
March 2046	100	5	1	0	0	0	0	0	0	0	21	1	0	0	0	17	1	1	1	0
March 2047	76	3	0	0	0	0	0	0	0	0	14	1	0	0	0	0	0	0	0	0
March 2048	40	1	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0
March 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)	28.7	16.6	7.0	2.6	1.2	16.0	4.6	4.6	4.6	3.2	19.6	8.0	6.3	5.5	3.6	26.4	14.6	14.6	14.6	9.2

Security Group 12 PSA Prepayment Assumption Rates

		Class	es TA, TF, TM	I and TS	
Distribution Date	0%	250%	566%	900%	1,200%
Initial Percent	100	100	100	100	100
March 2020	99	95	90	85	81
March 2021	98	85	69	54	42
March 2022	97	71	46	25	12
March 2023	95	60	30	11	3
March 2024	94	50	19	5	1
March 2025	93	42	13	2	0
March 2026	91	35	8	1	0
March 2027	89	29	5	0	0
March 2028	88	24	3	0	0
March 2029	86	20	2	0	0
March 2030	84	16	1	0	0
March 2031	82	14	1	0	0
March 2032	79	11	1	0	0
March 2033	77	9	0	0	0
March 2034	74	7	0	0	0
March 2035	71	6	0	0	0
March 2036	68	5	0	0	0
March 2037	65	4	0	0	0
March 2038	61	3	0	0	0
March 2039	57	3 2	0	0	0
March 2040	53	2	0	0	0
March 2041	49	2	0	0	0
March 2042	44	1	0	0	0
March 2043	39	1	0	0	0
March 2044	34	1	0	0	0
March 2045	28	0	0	0	0
March 2046	22	0	0	0	0
March 2047	15	0	0	0	0
March 2048	8	0	0	0	0
March 2049	0	0	0	0	0
Weighted Average					
Life (years)	19.9	6.5	3.4	2.4	1.9

Security Group 13 PSA Prepayment Assumption Rates

		Clas	ses A a	nd AI				Class A	V				Class A	Y				Class A	Z	
Distribution Date	0%	250%	474%	750%	1,000%	0%	250%	474%	750%	1,000%	0%	250%	474%	750%	1,000%	0%	250%	474%	750%	1,000%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
March 2020	98	88	78	66	56	95	95	95	95	95	100	100	100	100	100	105	105	105	105	105
March 2021	97	69	47	23	5	90	90	90	90	90	100	100	100	100	100	110	110	110	110	110
March 2022	95	52	22	0	0	85	85	85	63	0	100	100	100	88	44	116	116	116	116	92
March 2023	93	37	5	0	0	80	80	80	0	0	100	100	100	48	17	122	122	122	99	36
March 2024	91	25	0	0	0	74	74	34	0	0	100	100	79	26	7	128	128	128	54	14
March 2025	89	14	0	0	0	68	68	0	0	0	100	100	55	14	3	135	135	116	29	6
March 2026	87	6	0	0	0	61	61	0	0	0	100	100	39	7	1	142	142	81	16	2
March 2027	84	0	0	0	0	55	47	0	0	0	100	96	27	4	0	149	149	56	8	1
March 2028	82	0	0	0	0	48	8	0	0	0	100	79	19	2	0	157	157	39	4	0
March 2029	79	0	0	0	0	40	0	0	0	0	100	66	13	1	0	165	137	27	2	0
March 2030	76	0	0	0	0	33	0	0	0	0	100	54	9	1	0	173	113	19	1	0
March 2031	73	0	0	0	0	24	0	0	0	0	100	44	6	0	0	182	93	13	1	0
March 2032	70	0	0	0	0	16	0	0	0	0	100	36	4	0	0	191	76	9	0	0
March 2033	66	0	0	0	0	7	0	0	0	0	100	30	3	0	0	201	62	6	0	0
March 2034	62	0	0	0	0	0	0	0	0	0	100	24	2	0	0	208	50	4	0	0
March 2035	58	0	0	0	0	0	0	0	0	0	100	20	1	0	0	208	41	3	0	0
March 2036	54	0	0	0	0	0	0	0	0	0	100	16	1	0	0	208	33	2	0	0
March 2037	49	0	0	0	0	0	0	0	0	0	100	13	1	0	0	208	26	1	0	0
March 2038	45	0	0	0	0	0	0	0	0	0	100	10	0	0	0	208	21	1	0	0
March 2039	39	0	0	0	0	0	0	0	0	0	100	8	0	0	0	208	16	1	0	0
March 2040	34	0	0	0	0	0	0	0	0	0	100	6	0	0	0	208	13	0	0	0
March 2041	28	0	0	0	0	0	0	0	0	0	100	5	0	0	0	208	10	0	0	0
March 2042	21	0	0	0	0	0	0	0	0	0	100	3	0	0	0	208	7	0	0	0
March 2043	15	0	0	0	0	0	0	0	0	0	100	3	0	0	0	208	5	0	0	0
March 2044	7	0	0	0	0	0	0	0	0	0	100	2	0	0	0	208	4	0	0	0
March 2045	0	0	0	0	0	0	0	0	0	0	99	1	0	0	0	206	2	0	0	0
March 2046	0	0	0	0	0	0	0	0	0	0	76	1	0	0	0	159	1	0	0	0
March 2047	0	0	0	0	0	0	0	0	0	0	53	0	0	0	0	109	1	0	0	0
March 2048	0	0	0	0	0	0	0	0	0	0	27	0	0	0	0	57	0	0	0	0
March 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)	16.5	3.4	2.0	1.4	1.1	8.3	6.6	4.4	3.0	2.3	28.1	12.7	7.1	4.4	3.2	28.1	14.0	8.4	5.3	3.9

Security Group 14 PSA Prepayment Assumption Rates

	Clas	ses BA, I	BC, BD, I	BE, BI an	d BP			Class BK				Class BZ						
Distribution Date	0%	185%	300%	375%	600%	0%	185%	300%	375%	600%	0%	185%	300%	375%	600%			
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100			
March 2020	97	90	90	90	90	100	100	100	100	100	104	104	89	78	48			
March 2021	94	76	76	76	68	100	100	100	100	100	108	108	68	43	0			
March 2022	91	60	60	60	41	100	100	100	100	100	113	113	52	16	0			
March 2023	88	47	47	47	23	100	100	100	100	100	117	117	44	3	0			
March 2024	84	35	35	35	13	100	100	100	100	100	122	122	42	Õ	0			
March 2025	81	25	25	25	6	100	100	100	100	100	127	123	40	0	0			
March 2026	77	17	17	17	1	100	100	100	100	100	132	120	37	0	0			
March 2027	73	12	12	12	0	100	100	100	100	78	138	114	34	0	0			
March 2028	69	7	7	7	0	100	100	100	100	49	143	106	30	0	0			
March 2029	64	4	4	4	0	100	100	100	100	30	149	96	26	0	0			
March 2030	60	2	2	2	Ŏ	100	100	100	100	19	155	87	22	Ŏ	Ŏ			
March 2031	55	0	0	0	0	100	97	97	97	11	161	78	19	0	0			
March 2032	49	0	Õ	0	Õ	100	73	73	73	7	168	69	16	Õ	0			
March 2033	44	Ŏ	Õ	Ŏ	Ŏ	100	54	54	54	4	175	60	13	Ŏ	Ŏ			
March 2034	38	0	0	0	0	100	40	40	40	3	182	52	11	0	0			
March 2035	32	0	0	0	0	100	29	29	29	2	189	45	9	0	0			
March 2036	26	Ŏ	Õ	Ŏ	Ŏ	100	21	21	21	1	197	39	Ź	Ŏ	Ŏ			
March 2037	20	0	0	0	0	100	16	16	16	1	205	33	6	0	0			
March 2038	13	0	0	0	0	100	11	11	11	0	214	27	4	0	0			
March 2039	-5	Ŏ	Õ	Ŏ	Ŏ	100	8	8	8	Ŏ	222	23	3	Ŏ	Ŏ			
March 2040	0	0	0	0	0	57	6	6	6	0	231	19	3	0	0			
March 2041	Õ	0	Õ	0	Õ	4	4	4	4	Õ	221	15	2	Õ	0			
March 2042	Ŏ	Ŏ	Ŏ	Ŏ	Ŏ	3	3	3	3	Ŏ	199	12	1	Ŏ	Ŏ			
March 2043	0	0	0	0	0	2	2	2	2	0	175	9	1	0	0			
March 2044	0	0	0	0	Õ	1	1	1	1	Õ	150	Ź	1	Õ	0			
March 2045	0	Õ	Õ	Õ	Õ	Ĩ	1	1	1	Ŏ	123	5	0	Õ	Õ			
March 2046	0	0	0	0	Õ	0	0	0	0	Õ	95	3	Õ	Õ	0			
March 2047	Õ	0	0	0	Õ	Õ	Õ	Õ	Õ	Õ	65	2	Õ	Õ	0			
March 2048	Ŏ	Ŏ	Ŏ	Ŏ	Ŏ	ŏ	ŏ	ŏ	ŏ	Ŏ	33	0	ő	Ő	Ŏ			
March 2049	Õ	Ő	ő	Õ	Ő	0	ő	ő	ő	Ŏ	0	Ő	ő	ő	Ő			
Weighted Average					0	•	~	~	~	~	~			~				
Life (years)	12.1	4.3	4.3	4.3	2.9	21.2	15.2	15.2	15.2	9.6	26.1	14.8	6.3	1.9	0.9			

Security Group 15 PSA Prepayment Assumption Rates

	Classe	s EA, E	B, EC, I	ED, EP a	and IE			(	Class El			Class EZ								
Distribution Date	0%	175%	350%	400%	700%	0%	175%	350%	400%	700%	0%	175%	350%	400%	700%	0%	175%	350%	400%	700%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
March 2020	97	92	92	92	92	97	93	93	93	93	100	100	100	100	100	105	105	90	86	60
March 2021	94	80	80	80	75	94	80	80	80	75	100	100	100	100	100	109	109	65	53	0
March 2022	91	65	65	65	43	91	65	65	65	43	100	100	100	100	100	114	114	40	21	0
March 2023	87	52	52	52	24	87	52	52	52	25	100	100	100	100	100	120	120	27	5	0
March 2024	84	39	39	39	13	84	40	40	40	14	100	100	100	100	100	125	125	23	0	0
March 2025	80	29	29	29	7	80	30	30	30	8	100	100	100	100	100	131	128	22	0	0
March 2026	76	21	21	21	4	76	22	22	22	4	100	100	100	100	100	137	125	20	0	0
March 2027	72	16	16	16	2	72	16	16	16	3	100	100	100	100	100	143	120	17	0	0
March 2028	67	11	11	11	1	67	12	12	12	1	100	100	100	100	100	150	112	15	0	0
March 2029	62	8	8	8	0	63	9	9	9	1	100	100	100	100	100	157	103	13	0	0
March 2030	57	6	6	6	0	58	7	7	7	0	100	100	100	100	65	164	93	11	0	0
March 2031	52	4	4	4	0	53	5	5	5	0	100	100	100	100	36	171	83	9	0	0
March 2032	47	3	3	3	0	47	4	4	4	0	100	100	100	100	20	179	74	7	0	0
March 2033	41	2	2	2	0	41	3	3	3	0	100	100	100	100	11	188	65	6	0	0
March 2034	35	1	1	1	0	35	2	2	2	0	100	100	100	100	6	196	57	5	0	0
March 2035	28	1	1	1	0	29	1	1	1	0	100	100	100	100	3	205	50	4	0	0
March 2036	21	0	0	0	0	22	1	1	1	0	100	100	100	100	2	215	43	3	0	0
March 2037	14	0	0	0	0	15	1	1	1	0	100	99	99	99	1	224	36	2	0	0
March 2038	6	0	0	0	0	7	0	0	0	0	100	71	71	71	1	235	31	2	0	0
March 2039	0	0	0	0	0	0	0	0	0	0	50	50	50	50	0	241	26	1	0	0
March 2040	0	0	0	0	0	0	0	0	0	0	35	35	35	35	0	223	21	1	0	0
March 2041	0	0	0	0	0	0	0	0	0	0	24	24	24	24	0	204	17	1	0	0
March 2042	0	0	0	0	0	0	0	0	0	0	16	16	16	16	0	183	14	1	0	0
March 2043	0	0	0	0	0	0	0	0	0	0	11	11	11	11	0	162	11	0	0	0
March 2044	0	0	0	0	0	0	0	0	0	0	7	7	7	7	0	139	8	0	0	0
March 2045	0	0	0	0	0	0	0	0	0	0	4	4	4	4	0	114	6	0	0	0
March 2046	0	0	0	0	0	0	0	0	0	0	2	2	2	2	0	88	4	0	0	0
March 2047	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	61	2	0	0	0
March 2048	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	1	0	0	0
March 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)	11.6	4.8	4.8	4.8	3.1	11.7	4.9	4.9	4.9	3.2	21.2	20.7	20.7	20.7	12.0	25.5	15.1	4.4	2.2	1.1

Security Group 16 PSA Prepayment Assumption Rates

			Class U						(	Class UI			Class UQ							
Distribution Date	0%	175%	250%	300%	500%	0%	175%	250%	300%	500%	0%	175%	250%	300%	500%	0%	175%	250%	300%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
March 2020	100	100	93	89	70	98	94	94	94	94	99	96	94	94	90	100	100	100	100	100
March 2021	100	100	78	64	8	97	82	82	82	82	98	87	83	81	71	100	100	100	100	100
March 2022	100	100	61	36	0	95	67	67	67	52	96	77	70	65	49	100	100	100	100	100
March 2023	100	100	49	18	0	93	53	53	53	30	95	68	59	53	34	100	100	100	100	100
March 2024	100	100	41	7	0	91	41	41	41	15	94	60	49	42	23	100	100	100	100	100
March 2025	100	100	37	1	0	88	30	30	30	4	92	52	41	34	16	100	100	100	100	100
March 2026	100	100	35	0	0	86	21	21	21	0	90	46	34	27	11	100	100	100	100	84
March 2027	100	98	33	0	0	83	13	13	13	0	89	40	28	22	7	100	100	100	100	57
March 2028	100	95	31	0	0	81	7	7	7	0	87	35	23	18	5	100	100	100	100	39
March 2029	100	89	29	0	0	78	1	1	1	0	85	31	19	14	3	100	100	100	100	27
March 2030	100	83	26	0	0	75	0	0	0	0	83	27	16	11	2	100	86	86	86	18
March 2031	100	76	23	0	0	71	0	0	0	0	80	23	13	9	2	100	68	68	68	12
March 2032	100	70	20	0	0	68	0	0	0	0	78	20	11	7	1	100	54	54	54	8
March 2033	100	63	18	0	0	64	0	0	0	0	75	17	9	6	1	100	43	43	43	6
March 2034	100	56	15	0	0	60	0	0	0	0	73	15	7	4	0	100	33	33	33	4
March 2035	100	50	13	0	0	56	0	0	0	0	70	13	6	3	0	100	26	26	26	3
March 2036	100	43	11	0	0	51	0	0	0	0	66	11	5	3	0	100	20	20	20	2
March 2037	100	38	9	0	0	46	0	0	0	0	63	9	4	2	0	100	16	16	16	1
March 2038	100	32	8	0	0	41	0	0	0	0	59	8	3	2	0	100	12	12	12	1
March 2039	100	28	6	0	0	35	0	0	0	0	56	6	2	1	0	100	9	9	9	0
March 2040	100	23	5	0	0	29	0	0	0	0	52	5	2	1	0	100	7	7	7	0
March 2041	100	19	4	0	0	23	0	0	0	0	47	4	1	1	0	100	5	5	5	0
March 2042	100	16	3	0	0	16	0	0	0	0	43	3	1	0	0	100	4	4	4	0
March 2043	100	12	3	0	0	9	0	0	0	0	38	3	1	0	0	100	3	3	3	0
March 2044	100	10	2	0	0	1	0	0	0	0	32	2	1	0	0	100	2	2	2	0
March 2045	100	7	1	0	0	0	0	0	0	0	27	1	0	0	0	63	1	1	1	0
March 2046	100	5	1	0	0	0	0	0	0	0	21	1	0	0	0	16	1	1	1	0
March 2047	76	3	1	0	0	0	0	0	0	0	14	1	0	0	0	0	0	0	0	0
March 2048	40	1	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0
March 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)	28.7	16.7	7.1	2.7	1.3	15.9	4.6	4.6	4.6	3.3	19.6	8.1	6.3	5.5	3.7	26.3	14.4	14.4	14.4	9.2

Security Group 17 PSA Prepayment Assumption Rates

			Class IA			Class IB					Class IJ						
Distribution Date	0%	225%	260%	425%	600%	0%	225%	260%	425%	600%	0%	225%	260%	425%	600%		
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
March 2020	97	77	74	60	45	100	100	100	100	100	99	91	90	84	78		
March 2021	95	45	38	7	0	100	100	100	100	84	98	78	75	63	51		
March 2022	92	16	7	0	0	100	100	100	77	53	97	67	63	46	32		
March 2023	89	0	0	0	0	100	94	87	56	33	95	57	52	34	20		
March 2024	85	0	0	0	0	100	80	72	41	21	94	48	43	25	13		
March 2025	82	0	0	0	0	100	68	59	30	13	93	41	36	18	8		
March 2026	78	0	0	0	0	100	58	49	22	8	91	35	29	13	5		
March 2027	74	0	0	0	0	100	49	41	16	5	89	29	24	10	3		
March 2028	69	0	0	0	0	100	41	33	12	3	88	25	20	7	2		
March 2029	65	0	0	0	0	100	35	27	8	2	86	21	16	5	1		
March 2030	59	0	0	0	0	100	29	22	6	1	84	17	13	4	1		
March 2031	54	0	0	0	0	100	24	18	4	1	82	15	11	3	0		
March 2032	48	0	0	0	0	100	20	15	3	0	79	12	9	2	0		
March 2033	42	0	0	0	0	100	17	12	2	0	77	10	7	1	0		
March 2034	35	0	0	0	0	100	14	10	2	0	74	8	6	1	0		
March 2035	28	0	0	0	0	100	12	8	1	0	71	7	5	1	0		
March 2036	20	0	0	0	0	100	9	6	1	0	68	6	4	0	0		
March 2037	12	0	0	0	0	100	8	5	1	0	65	5	3	0	0		
March 2038	3	0	0	0	0	100	6	4	0	0	61	4	2	0	0		
March 2039	0	0	0	0	0	96	5	3	0	0	57	3	2	0	0		
March 2040	0	0	0	0	0	89	4	2	0	0	53	2	1	0	0		
March 2041	0	0	0	0	0	81	3	2	0	0	49	2	1	0	0		
March 2042	0	0	0	0	0	73	2	1	0	0	44	1	1	0	0		
March 2043	0	0	0	0	0	65	2	1	0	0	39	1	1	0	0		
March 2044	0	0	0	0	0	56	1	1	0	0	34	1	0	0	0		
March 2045	0	0	0	0	0	46	1	0	0	0	28	0	0	0	0		
March 2046	0	0	0	0	0	36	0	0	0	0	22	0	0	0	0		
March 2047	0	0	0	0	0	25	0	0	0	0	15	0	0	0	0		
March 2048	0	0	0	0	0	13	0	0	0	0	8	0	0	0	0		
March 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Weighted Average																	
Life (years)	11.8	1.9	1.7	1.2	0.9	25.3	9.3	8.3	5.3	3.8	19.9	6.4	5.7	3.7	2.6		

						roa i	терауш	CIII ASSU	шрион	Rates					
	Class	ses JA, JE JM, JP, J	3, JC, JD, IQ, JT, JU		I, JK,			Class JZ					Class ZJ		
Distribution Date	0%	225%	260%	425%	600%	0%	225%	260%	425%	600%	0%	225%	260%	425%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
March 2020	98	88	88	88	88	104	104	104	104	104	104	104	98	69	37
March 2020	95	71	71	71	63	108	104	104	104	108	108	104	94	30	0
March 2022	93	55	55	55	40	113	113	113	113	113	113	113	93	8	ő
March 2023	90	42	42	42	25	117	117	117	117	117	117	117	94	0	0
March 2024	87	31	31	31	16	122	122	122	122	122	122	120	94	0	0
March 2025	84	22	22	22	10	127	127	127	127	127	127	117	90	0	0
March 2026	81	16	16	16	6	132	132	132	132	132	132	110	83	0	0
March 2027	78	12	12	12	4	138	138	138	138	138	138	101	75	0	0
March 2028	74	8	8	8	2	143	143	143	143	143	143	91	67	0	0
March 2029	70	6	6	6	1	149	149	149	149	149	149	80	58	0	0
March 2030	66	4	4	4	1	155	155	155	155	155	155	71	50	0	0
March 2031	62	3	3	3	0	161	161	161	161	161	161	61	43	0	0
March 2032	57	2	2	2	0	168	168	168	168	168	168	53	36	0	0
March 2033	53	1	1	1	0	175	175	175	175	123	175	45	30	0	0
March 2034	48	1	1	1	0	182	182	182	182	75	182	38	25	0	0
March 2035	42	1	1	1	0	189	189	189	189	46	189	32	21	0	0
March 2036	36	0	0	0	0	197	197	197	197	28	197	27	17	0	0
March 2037	30	0	0	0	0	205	205	205	205	17	205	22	14	0	0
March 2038	24	0	0	0	0	214	165	165	165	10	214	18	11	0	0
March 2039	17	0	0	0	0	222	113	113	113	6	222	14	9	0	0
March 2040	10	0	0	0	0	231	77	77	77	3	231	11	7	0	0
March 2041	2	0	0	0	0	241	52	52	52	2	241	9	5	0	0
March 2042	0	0	0	ő	0	34	34	34	34	1	225	7	4	0	ő
March 2043	ő	0	0	ő	ő	22	22	22	22	1	200	5	3	ő	ő
March 2044	0	0	0	0	0	13	13	13	13	0	172	4	2	0	0
March 2045	0	0	0	ő	0	7	7	7	7	0	142	2	1	0	ő
March 2046	ő	0	0	ő	0	4	4	4	4	0	110	1	1	ő	ő
March 2047	0	0	0	0	0	1	1	1	1	0	76	1	0	0	0
March 2048	0	0	0	ő	ő	0	0	0	0	0	39	0	0	ő	ő
March 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average	J	U	U	U	v	U	J	J	J	V	U	J	J	J	J
Life (years)	13.5	4.1	4.1	4.1	3.1	22.6	20.9	20.9	20.9	15.4	26.5	13.2	11.6	1.6	0.8

Security Group 18 PSA Prepayment Assumption Rates

		Clas	ses IP a	nd P		Cl	asses P.	A, PD, I	F and	PS		(	Class PI	3			(	Class PG	ì	
Distribution Date	0%	200%	300%	450%	600%	0%	200%	300%	450%	600%	0%	200%	300%	450%	600%	0%	200%	300%	450%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
March 2020	97	86	86	86	86	97	86	86	86	86	100	100	100	100	100	100	100	100	100	100
March 2021	94	69	69	69	63	93	68	68	68	61	100	100	100	100	100	100	100	100	100	100
March 2022	90	54	54	54	40	90	52	52	52	37	100	100	100	100	100	100	100	100	100	100
March 2023	87	40	40	40	25	86	37	37	37	22	100	100	100	100	100	100	100	100	100	100
March 2024	83	28	28	28	16	82	25	25	25	12	100	100	100	100	100	100	100	100	100	100
March 2025	79	20	20	20	10	78	17	17	17	6	100	100	100	100	100	100	100	100	100	100
March 2026	75	14	14	14	6	73	11	11	11	2	100	100	100	100	100	100	100	100	100	100
March 2027	70	10	10	10	4	69	6	6	6	0	100	100	100	100	88	100	100	100	100	100
March 2028	65	7	7	7	2	64	3	3	3	0	100	100	100	100	48	100	100	100	100	100
March 2029	60	5	5	5	1	58	1	1	1	0	100	100	100	100	23	100	100	100	100	100
March 2030	55	4	4	4	1	53	0	0	0	0	100	83	83	83	7	100	100	100	100	100
March 2031	49	3	3	3	1	47	0	0	0	0	100	53	53	53	0	100	100	100	100	85
March 2032	43	2	2	2	0	41	0	0	0	0	100	32	32	32	0	100	100	100	100	52
March 2033	37	1	1	1	0	34	0	0	0	0	100	17	17	17	0	100	100	100	100	32
March 2034	30	1	1	1	0	27	0	0	0	0	100	6	6	6	0	100	100	100	100	20
March 2035	23	1	1	1	0	19	0	0	0	0	100	0	0	0	0	100	92	92	92	12
March 2036	15	0	0	0	0	11	0	0	0	0	100	0	0	0	0	100	63	63	63	7
March 2037	7	0	0	0	0	3	0	0	0	0	100	0	0	0	0	100	43	43	43	4
March 2038	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29	29	29	29	3
March 2039	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	20	20	20	2
March 2040	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	13	13	13	1
March 2041	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	9	9	9	1
March 2042	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	5	5	0
March 2043	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3	3	0
March 2044	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	0
March 2045	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0
March 2046	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
March 2047	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
March 2048	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
March 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)	11.1	4.0	4.0	4.0	3.1	10.8	3.6	3.6	3.6	2.8	18.6	12.4	12.4	12.4	9.2	19.5	18.3	18.3	18.3	13.7

PSA Prepayment Assumption Rates
Class PM

						F3A I	терауш	CIII ASSU	шриоп	Rates					
			Class PL		Class PM								Class PZ	:	
Distribution Date	0%	200%	300%	450%	600%	0%	200%	300%	450%	600%	0%	200%	300%	450%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
March 2020	97	86	86	86	86	100	100	100	100	100	105	105	89	64	39
March 2021	94	69	69	69	63	100	100	100	100	100	110	110	75	25	0
March 2022	90	53	53	53	39	100	100	100	100	100	116	116	68	5	0
March 2023	87	39	39	39	24	100	100	100	100	100	122	122	66	0	0
March 2024	83	28	28	28	15	100	100	100	100	100	128	124	64	0	0
March 2025	79	20	20	20	9	100	100	100	100	100	135	121	60	0	0
March 2026	74	14	14	14	5	100	100	100	100	100	142	113	54	0	0
March 2027	70	10	10	10	3	100	100	100	100	90	149	104	47	0	0
March 2028	65	7	7	7	2	100	100	100	100	56	157	94	41	0	0
March 2029	60	5	5	5	1	100	100	100	100	35	165	84	34	0	0
March 2030	55	3	3	3	0	100	86	86	86	22	173	74	29	0	0
March 2031	49	2	2	2	0	100	61	61	61	13	182	65	24	0	0
March 2032	43	1	1	1	0	100	43	43	43	8	191	56	20	0	0
March 2033	36	1	1	1	0	100	30	30	30	5	201	48	16	0	0
March 2034	29	0	0	0	0	100	21	21	21	3	211	41	13	0	0
March 2035	22	0	0	0	0	100	14	14	14	2	222	35	10	0	0
March 2036	14	0	0	0	0	100	10	10	10	1	234	29	8	0	0
March 2037	6	0	0	0	0	100	7	7	7	1	246	24	6	0	0
March 2038	0	0	0	0	0	5	5	5	5	0	252	20	5	0	0
March 2039	0	0	0	0	0	3	3	3	3	0	236	16	4	0	0
March 2040	0	0	0	0	0	2	2	2	2	0	219	13	3	0	0
March 2041	0	0	0	0	0	1	1	1	1	0	201	10	2	0	0
March 2042	0	0	0	0	0	1	1	1	1	0	181	8	2	0	0
March 2043	0	0	0	0	0	1	1	1	1	0	160	6	1	0	0
March 2044	0	0	0	0	0	0	0	0	0	0	137	4	1	0	0
March 2045	0	0	0	0	0	0	0	0	0	0	113	3	0	0	0
March 2046	0	0	0	0	0	0	0	0	0	0	88	2	0	0	0
March 2047	0	0	0	0	0	0	0	0	0	0	60	1	0	0	0
March 2048	0	0	0	0	0	0	0	0	0	0	31	0	0	0	0
March 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average															
Life (years)	11.0	3.9	3.9	3.9	3.0	18.7	13.4	13.4	13.4	9.9	25.1	13.3	7.9	1.4	0.8

Security Group 19 PSA Prepayment Assumption Rates

	Cla	isses K	4, KF, K	M and	KS		(	lass K	Е			Classe	es KI ar	d KN			(	lass KZ		
Distribution Date	0%	150%	300%	345%	600%	0%	150%	300%	345%	600%	0%	150%	300%	345%	600%	0%	150%	300%	345%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
March 2020	97	89	89	89	89	100	100	100	100	100	97	89	89	89	89	105	105	78	70	25
March 2021	94	76	76	76	61	100	100	100	100	100	94	76	76	76	62	110	110	52	35	0
March 2022	91	63	63	63	38	100	100	100	100	100	91	63	63	63	39	116	116	35	13	0
March 2023	87	51	51	51	24	100	100	100	100	100	88	51	51	51	24	122	122	26	2	0
March 2024	84	40	40	40	15	100	100	100	100	100	84	40	40	40	15	128	128	24	0	0
March 2025	80	31	31	31	9	100	100	100	100	100	80	31	31	31	10	135	131	23	0	0
March 2026	76	24	24	24	5	100	100	100	100	100	76	24	24	24	6	142	129	22	0	0
March 2027	72	18	18	18	3	100	100	100	100	100	72	19	19	19	4	149	125	20	0	0
March 2028	67	14	14	14	2	100	100	100	100	100	67	14	14	14	2	157	118	17	0	0
March 2029	62	11	11	11	1	100	100	100	100	100	63	11	11	11	1	165	111	15	0	0
March 2030	57	8	8	8	0	100	100	100	100	100	58	9	9	9	1	173	102	13	0	0
March 2031	52	6	6	6	0	100	100	100	100	77	52	7	7	7	1	182	93	11	0	0
March 2032	46	4	4	4	0	100	100	100	100	47	47	5	5	5	0	191	84	9	0	0
March 2033	40	3	3	3	0	100	100	100	100	29	41	4	4	4	0	201	76	8	0	0
March 2034	34	2	2	2	0	100	100	100	100	18	34	3	3	3	0	211	67	7	0	0
March 2035	27	1	1	1	0	100	100	100	100	11	27	2	2	2	0	222	59	5	0	0
March 2036	20	1	1	1	0	100	100	100	100	7	20	2	2	2	0	234	52	4	0	0
March 2037	12	0	0	0	0	100	100	100	100	4	13	1	1	1	0	246	45	4	0	0
March 2038	4	0	0	0	0	100	100	100	100	2	5	1	1	1	0	258	39	3	0	0
March 2039	0	0	0	0	0	91	91	91	91	1	1	1	1	1	0	255	33	2	0	0
March 2040	0	0	0	0	0	65	65	65	65	1	0	0	0	0	0	236	27	2	0	0
March 2041	0	0	0	0	0	46	46	46	46	0	0	0	0	0	0	217	22	1	0	0
March 2042	0	0	0	0	0	32	32	32	32	0	0	0	0	0	0	196	18	1	0	0
March 2043	0	0	0	0	0	22	22	22	22	0	0	0	0	0	0	173	14	1	0	0
March 2044	0	0	0	0	0	14	14	14	14	0	0	0	0	0	0	149	10	0	0	0
March 2045	0	0	0	0	0	8	8	8	8	0	0	0	0	0	0	123	7	0	0	0
March 2046	0	0	0	0	0	4	4	4	4	0	0	0	0	0	0	95	4	0	0	0
March 2047	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	65	2	0	0	0
March 2048	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34	0	0	0	0
March 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)	11.5	4.9	4.9	4.9	3.0	22.4	22.4	22.4	22.4	13.5	11.6	5.1	5.1	5.1	3.1	25.4	16.0	4.4	1.7	0.7

### Security Groups 18 and 19 PSA Prepayment Assumption Rates

	Class IO								Class KG							
Distribution Date	0%	150%	200%	300%	345%	450%	600%	0%	150%	200%	300%	345%	450%	600%		
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
March 2020	97	89	87	87	87	87	87	100	100	100	100	100	100	100		
March 2021	94	75	71	71	71	71	63	100	100	100	100	100	100	100		
March 2022	91	62	56	56	56	54	39	100	100	100	100	100	100	100		
March 2023	87	50	43	43	43	39	25	100	100	100	100	100	100	100		
March 2024	83	39	31	31	31	28	16	100	100	100	100	100	100	100		
March 2025	79	29	23	23	23	20	10	100	100	100	100	100	100	100		
March 2026	75	20	17	17	17	14	6	100	100	100	100	100	100	100		
March 2027	71	12	12	12	12	10	4	100	100	100	100	100	100	90		
March 2028	66	9	9	9	9	7	2	100	100	100	100	100	100	58		
March 2029	61	7	7	7	7	5	1	100	100	100	100	100	100	38		
March 2030	56	5	5	5	5	4	1	100	87	87	87	87	87	26		
March 2031	50	4	4	4	4	3	1	100	63	63	63	63	63	17		
March 2032	44	3	3	3	3	2	0	100	46	46	46	46	46	10		
March 2033	38	2	2	2	2	1	0	100	34	34	34	34	34	6		
March 2034	31	1	1	1	1	1	0	100	25	25	25	25	25	4		
March 2035	24	1	1	1	1	1	0	100	19	19	19	19	18	2		
March 2036	16	1	1	1	1	0	0	100	15	15	15	15	13	1		
March 2037	8	1	1	1	1	0	0	100	12	12	12	12	9	1		
March 2038	1	0	0	0	0	0	0	10	10	10	10	10	6	1		
March 2039	0	0	0	0	0	0	0	8	8	8	8	8	4	0		
March 2040	0	0	0	0	0	0	0	5	5	5	5	5	3	0		
March 2041	0	0	0	0	0	0	0	4	4	4	4	4	2	0		
March 2042	0	0	0	0	0	0	0	3	3	3	3	3	1	0		
March 2043	0	0	0	0	0	0	0	2	2	2	2	2	1	0		
March 2044	0	0	0	0	0	0	0	1	1	1	1	1	0	0		
March 2045	0	0	0	0	0	0	0	1	1	1	1	1	0	0		
March 2046	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
March 2047	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
March 2048	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
March 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Weighted Average																
Life (years)	11.2	4.6	4.3	4.3	4.3	4.0	3.1	18.9	13.9	13.9	13.9	13.9	13.6	10.1		

### **Yield Considerations**

An investor seeking to maximize yield should make a decision whether to invest in any Regular or MX Class based on the anticipated yield of that Class resulting from its purchase price, the investor's own projection of Mortgage Loan prepayment rates under a variety of scenarios, in the case of the Group 4 and 6 Securities and the Class MD and MG 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.

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 Weighted Average Coupon Classes

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

### **Yield Tables**

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

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

The yields were calculated by

- determining the monthly discount rates that, when applied to the applicable assumed streams
  of cash flows to be paid on the applicable Class, would cause the discounted present value of
  the assumed streams of cash flows to equal the assumed purchase price of that Class plus
  accrued interest, 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 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 QS to Prepayments Assumed Price 16.0%\*

	PSA Prepayment Assumption Ra								
LIBOR	125%	160%	225%	400%					
1.0000%	19.7%	19.7%	19.7%	8.9%					
2.4890%	9.0%	9.0%	9.0%	(2.8)%					
4.3195%	(5.1)%	(5.1)%	(5.1)%	(18.7)%					
6.1500% and above	**	**	**	**					

### **SECURITY GROUP 2**

### Sensitivity of Class GS to Prepayments Assumed Price 13.0%\*

	PS.	A Prepaymen	t Assumption 1	Rates
LIBOR	100%	255%	450%	600%
1.0000%	31.8%	20.3%	4.9%	(7.9)%
2.4890%	19.1%	8.2%	(6.5)%	(18.6)%
4.2695%	3.7%	(6.6)%	(20.3)%	(31.6)%
6.0500% and above	**	**	**	**

### **SECURITY GROUP 3**

### Sensitivity of Class HI to Prepayments Assumed Price 22.5%\*

PSA Prepayment Assumption Rates												
150%	274%	376%	450%	600%								
12.7%	5.8%	0.0%	(4.3)%	(13.2)%								

### **SECURITY GROUP 5**

### Sensitivity of Class DI to Prepayments Assumed Price 9.0%\*

300%	579%	603%	950%	1,300%
22.9%	0.0%	(1.9)%	(27.1)%	(48.2)%

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

<sup>\*\*</sup> Indicates that investors will suffer a loss of virtually all of their investment.

### **Sensitivity of Class NS to Prepayments** Assumed Price 11.8125%\*

	PS	A Prepaymen	t Assumption 1	Rates
LIBOR	100%	255%	450%	600%
1.0000%	39.6%	32.0%	22.1%	14.3%
2.4890%	25.0%	16.9%	6.5%	(1.8)%
4.2695%	7.6%	(1.0)%	(12.3)%	(21.5)%
6.0500% and above	**	**	**	3/43/4

### **SECURITY GROUP 8**

### **Sensitivity of Class CS to Prepayments** Assumed Price 14.75%\*

	PSA Prepayment Assumption Rates			
LIBOR	200%	418%	650%	900%
1.0000%	24.6%	13.6%	1.5%	(11.9)%
2.4890%	12.8%	1.1%	(11.8)%	(26.3)%
4.2695%	(1.6)%	(14.2)%	(28.4)%	(44.8)%
6.0500% and above	**	***	***	***

### **SECURITY GROUP 9**

### Sensitivity of Class PI to Prepayments **Assumed Price 13.0%\***

PSA Prepayment Assumption Rates			
200%	250%	400%	

150%	200%	250%	400%	593%
18.2%	18.2%	18.2%	11.0%	0.1%

### **SECURITY GROUP 10**

### **Sensitivity of Class IM to Prepayments** Assumed Price 15.307363535%\*

150%	276%	450%	453%	600%
16.9%	10.0%	0.2%	0.0%	(8.5)%

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

<sup>\*\*</sup> Indicates that investors will suffer a loss of virtually all of their investment.

### Sensitivity of Class TS to Prepayments Assumed Price 10.5%\*

	PSA Prepayment Assumption Rates			
LIBOR	250%	566%	900%	1,200%
1.0000%	39.4%	24.3%	7.9%	(7.3)%
2.4890%	22.3%	6.0%	(11.9)%	(28.5)%
4.2695%	2.0%	(16.1)%	(36.7)%	(56.4)%
6.0500% and above	**	**	**	**

### **SECURITY GROUP 13**

### Sensitivity of Class AI to Prepayments Assumed Price 9.0%\*

PSA Prepayment Assumption Rates				
250%	474%	529%	750%	1,000%
33.7%	6.8%	0.0%	(26.5)%	(53.5)%

### **SECURITY GROUP 14**

### Sensitivity of Class BI to Prepayments Assumed Price 14.5%\*

	PSA Prepayment Assumption Rates			
185%	300%	375%	457%	600%
5.1%	5.1%	5.1%	0.0%	(10.5)%

### **SECURITY GROUP 15**

### Sensitivity of Class EI to Prepayments Assumed Price 18.5%\*

PSA Prepayment Assumption Rates				
175%	350%	400%	502%	700%
4.8%	4.8%	4.8%	0.0%	(10.8)%

### Sensitivity of Class IE to Prepayments Assumed Price 18.5%\*

PSA Prepayment Assumption Rates				
175%	350%	400%	488%	700%
4.3%	4.3%	4.3%	0.0%	(12.2)%

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

<sup>\*\*</sup> Indicates that investors will suffer a loss of virtually all of their investment.

# Sensitivity of Class IA to Prepayments Assumed Price 6.5%\*

### **PSA Prepayment Assumption Rates**

225%	260%	396%	425%	600%
41.8%	33.1%	0.2%	(6.4)%	(42.5)%

### Sensitivity of Class IB to Prepayments Assumed Price 17.75%\*

### **PSA Prepayment Assumption Rates**

225%	260%	425%	600%	694%
27.2%	25.6%	17.0%	6.3%	0.0%

### Sensitivity of Class IJ to Prepayments Assumed Price 13.25%\*

### **PSA Prepayment Assumption Rates**

225%	260%	425%	600%	645%
28.5%	26.2%	15.4%	3.3%	0.1%

### Sensitivity of Class JI to Prepayments Assumed Price 15.34375%\*

### **PSA Prepayment Assumption Rates**

225%	260%	425%	600%	647%
13.5%	13.5%	13.5%	3.3%	0.1%

### **SECURITY GROUP 18**

### Sensitivity of Class IP to Prepayments Assumed Price 17.0%\*

### **PSA Prepayment Assumption Rates**

200%	300%	450%	530%	600%
4.6%	4.6%	4.6%	0.0%	(4.6)%

### Sensitivity of Class PS to Prepayments Assumed Price 9.75%\*

LIBOR	200%	300%	450%	600%
1.0000%	24.2%	24.2%	24.2%	14.9%
2.4890%	5.1%	5.1%	5.1%	(6.1)%
4.0445%	(17.3)%	(17.3)%	(17.3)%	(31.0)%
5.6000% and above	**	**	**	**

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

<sup>\*\*</sup> Indicates that investors will suffer a loss of virtually all of their investment.

### Sensitivity of Class KI to Prepayments Assumed Price 20.75%\*

### **PSA Prepayment Assumption Rates**

150%	300%	345%	429%	600%
4.8%	4.8%	4.8%	0.1%	(11.5)%

### Sensitivity of Class KS to Prepayments Assumed Price 13.0%\*

### **PSA Prepayment Assumption Rates**

LIBOR	150%	300%	345%	600%
1.0000%	18.2%	18.2%	18.2%	2.2%
2.4890%	4.5%	4.5%	4.5%	(13.1)%
4.0445%	(10.9)%	(10.9)%	(10.9)%	(31.2)%
5.6000% and above	**	**	**	3[43]4

### **SECURITY GROUPS 18 AND 19**

### Sensitivity of Class IO to Prepayments Assumed Price 17.9545%\*

### **PSA Prepayment Assumption Rates**

150%	200%	300%	345%	450%	500%	600%
7.2%	4.7%	4.7%	4.7%	2.9%	0.0%	(6.6)%

<sup>\*</sup> 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.

### **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.

<sup>\*\*</sup> Indicates that investors will suffer a loss of virtually all of their investment.

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 160% PSA in the case of the Group 1 Securities, 255% PSA in the case of the Group 2 and 7 Securities, 274% PSA in the case of the Group 3 Securities, 175% PSA in the case of the Group 4 Securities, 603% PSA in the case of the Group 5 Securities, 383% PSA in the case of the Group 6 Securities, 418% PSA in the case of the Group 8 Securities, 200% PSA in the case of the Group 9 Securities, 276% PSA in the case of the Group 10 Securities, 250% PSA in the case of the Group 11 and 16 Securities, 566% PSA in the case of the Group 12 Securities, 474% PSA in the case of the Group 13 Securities, 300% PSA in the case of the Group 14, 18 and 19 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.

A Holder of Regular Securities that uses 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. The application of this rule thus may require the accrual of income earlier than would be the case under the general tax rules described under "Certain United States Federal Income Tax Consequences — Tax Treatment of Regular Securities" in the Base Offering Circular, although the precise application of this rule is unclear at this time. This rule generally will be effective for Regular Securities issued with original issue discount for tax years beginning after December 31, 2018. The Service issued Notice 2018-80 stating its intention to issue regulations that would exclude market discount from this rule. 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 this legislation 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) March 1, 2019 on the Fixed Rate and Weighted Average Coupon Classes and (2) March 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 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			Maximum		MX Securities			
	Original Class Principal Balance or Class Notional Balance	Related MX Class	Original Class Principal Balance or Class Notional Balance(2)	Principal Type (3)	Interest Rate	Interest Type (3)	CUSIP Number	Final Distribution Date (4)
Security Group 1								
	\$ 74,012,143 5,693,242 5,693,242	QÒ	\$ 79,705,385	PAC/AD	3.25%	FIX	38381RA58	January 2049
QE QF QS Security Group 2	\$ 74,012,143 12,335,357 12,335,357	٥ <u>٥</u>	\$ 86,347,500	PAC/AD	3.50%	FIX	38381RA66	38381RA66 January 2049
Combination 5 GA GZ Security Group 5	\$ 66,277,000 2,761,322	GB	\$ 69,038,322	PT	3.50%	FIX	38381RA74	March 2049
	7000	ì	00/ 70 +	Ç	900	7 7 7 7	00000	0700
DV DZ <b>Security Group 7</b> Combination 5	\$ 15,201,000 23,580,480	DY	\$ 56,/81,480	SEQ	4.00%	YIY	28281KA82	March 2049
NA ZN Security Group 8 Combination 6	\$ 78,339,000 7,277,741	NH	\$ 85,616,741	PT	3.50%	FIX	38381RA90	March 2049
	\$105,445,371 45,190,873	CT	\$150,636,244	PT	3.50%	FIX	38381RB24	March 2049

REMIC Securities				MC	MX Securities			
	Original Class Principal Balance or Class Notional	Related	Maximum Original Class Principal Balance or Class Notional	Principal	Interest	Interest	CUSIP	Final Distribution
Class	Balance	MX Class	Balance(2)	Type (3)	Rate	Type (3)	Number	Date (4)
Security Group 10 Combination 7								
MC	\$ 3,550,000	MG	\$ 10,000,000	SC/PT	(5)	WAC/DLY	38381RB32	March 2049
MD	3,000,000				}			
ME	3,450,000							
Security Group 12								
Combination 8								
TF	\$ 60,000,000	ΙM	\$ 60,000,000	PT	6.50%	FIX	38381RB40	March 2049
TS	000,000,000							
Security Group 13								
Combination 9								
AV	\$ 6.813,000	AY	\$ 13,101,340	SEO	2.00%	FIX	38381RB57	March 2049
AZ	6,288,340			,				
Security Group 14								
Combination $10(6)$								
BP	\$ 38,322,971	BA	\$ 38,322,971	PAC/AD	3.00%	FIX	38381RB65	August 2048
		BC	38,322,971	PAC/AD	3.25	FIX	38381RB73	August 2048
		BD	38,322,971	PAC/AD	3.50	FIX	38381RB81	August 2048
		BE	38,322,971	PAC/AD	3.75	FIX	38381RB99	August 2048
		BI	9,580,742	NTL(PAC/AD)	4.00	FIX/IO	38381RC23	August 2048
Security Group 15								)
Combination 11(6)								
EP	\$ 34,530,169	EA	\$ 34,530,169	PAC/AD	2.50%	FIX	38381RC31	March 2049
		EB	34,530,169	PAC/AD	2.75	FIX	38381RC49	March 2049
		EC	34,530,169	PAC/AD	3.00	FIX	38381RC56	March 2049
		ED	34,530,169	PAC/AD	3.25	FIX	38381RC64	March 2049
		E	7,673,370	NTL(PAC/AD)	4.50	FIX/IO	38381RC72	March 2049
Security Group 17								
Combination 12								
IA IB	\$ 11,023,356 16,535,033	IJ	\$ 27,558,389	NTL(PT)	5.50%	FIX/IO	38381RC80	March 2049

REMIC Securities				M	MX Securities			
7	Original Class Principal Balance or Class Notional	Related	Maximum Original Class Principal Balance or Class Notional	Principal	Interest	Interest	disno	Final Distribution
Class	Balance	MX Class	Balance(2)	Type (3)	Rate	Type (3)	Number	Date (4)
Combination 13(6)								,
JA	\$ 81,165,000	ЭВ	\$ 81,165,000	PAC/AD	3.75%	FIX	38381RC98	March 2049
		C	81,165,000	PAC/AD	3.50	FIX	38381RD22	March 2049
		Q	81,165,000	PAC/AD	3.25	FIX	38381RD30	March 2049
		Œ	81,165,000	PAC/AD	3.00	FIX	38381RD48	March 2049
		ЭG	81,165,000	PAC/AD	2.75	FIX	38381RD55	March 2049
		Iſ	22,135,909	NTL(PAC/AD)	5.50	FIX/IO	38381RD63	March 2049
		JК	81,165,000	PAC/AD	2.50	FIX	38381RD71	March 2049
		JM	69,570,000	PAC/AD	4.25	FIX	38381RD89	March 2049
		JP	60,873,750	PAC/AD	4.50	FIX	38381RD97	March 2049
		Q	54,110,000	PAC/AD	4.75	FIX	38381RE21	March 2049
		Ц	48,699,000	PAC/AD	5.00	FIX	38381RE39	March 2049
		U	40,582,500	PAC/AD	5.50	FIX	38381RE47	March 2049
		X	34,785,000	PAC/AD	00.9	FIX	38381RE54	March 2049
Security Group 18								
Combination 14								
PA	\$ 91,521,667	PD	\$109,826,000	PAC/AD	3.50%	FIX	38381RE62	October 2048
PF	18,304,333							
PS	18,304,333							
Combination 15								
PA	\$ 91,521,667	ΡL	\$113,949,000	PAC/AD	3.50%	FIX	38381RE70	March 2049
PE	4,123,000							
PF	18,304,333							
PS	18,304,333							
Combination 16								
PA	\$ 91,521,667	Ь	\$114,715,000	PAC/AD	3.50%	FIX	38381RE88	March 2049
PE	4,123,000							
PF	18,304,333							
PG	766,000							
PS	18,304,333							

REMIC Securities				W	MX Securities			
7	Original Class Principal Balance or Class Notional	Related	Maximum Original Class Principal Balance or Class Notional	Principal	Interest	Interest	CUSIP	Final Distribution
Class	Balance	MX Class	Balance(2)	Type (3)	Rate	Type (3)	Number	Date (4)
Combination 17								
PE	\$ 4,123,000	PM	\$ 4,889,000	PAC/AD	3.50%	FIX	38381RE96	March 2049
PG	766,000							
Security Group 19								
Combination 18								
KA	\$ 32,404,167	KM	\$ 38,885,000	PAC/AD	3.50%	FIX	38381RF20	March 2049
KF	6,480,833							
KS	6,480,833							
Combination 19								
KA	\$ 32,404,167	KN	\$ 39,167,000	PAC/AD	3.50%	FIX	38381RF38	March 2049
KE	282,000							
KF	6,480,833							
KS	6,480,833							
Security Groups 18 and 19								
Combination $20(7)$								
IP	\$ 34,414,500	OI	\$ 46,164,600	NTL(PAC/AD)	5.00%	FIX/IO	38381RF46	March 2049
KI	11,750,100							
Combination 21(7)								
KE	\$ 282,000	KG	\$ 5,171,000	PAC/AD	3.50%	FIX	38381RF53	March 2049
PE	4,123,000							
PG	766,000							

(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.

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

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

The Interest Rate will be calculated as described under "Terms Sheet — Interest Rates" in this Supplement. (2) In the case of Combinations 10, 11 and 13, various subcombinations are permitted. See "Description of the Securities — Modification and Exchange" in the Base Offering Circular for a discussion of subcombinations.

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

### Schedule II

### SCHEDULED PRINCIPAL BALANCES

Distribution Date	Classes QE, QF and QY (in the aggregate)	Classes MA and MY (in the aggregate)	Classes PB and PC (in the aggregate)	Classes HA and HQ (in the aggregate)
Initial Balance	\$105,091,000.00	\$15,819,000.00	\$37,205,000.00	\$6,588,000.00
April 2019	104,469,432.17	15,724,637.67	37,064,400.16	6,569,348.70
May 2019	103,823,123.69	15,626,211.37	36,912,998.73	6,548,305.13
June 2019	103,152,381.96	15,523,776.72	36,750,864.07	6,524,879.41
July 2019	102,457,529.82	15,417,392.09	36,578,072.80	6,499,083.84
August 2019	101,738,905.36	15,307,118.57	36,394,709.80	6,470,932.85
September 2019	100,996,861.53	15,193,019.88	36,200,868.13	6,440,442.99
October 2019	100,231,765.90	15,075,162.33	35,996,648.95	6,407,632.97
November 2019	99,444,000.32	14,953,614.76	35,782,161.44	6,372,523.57
December 2019	98,633,960.57	14,828,448.45	35,557,522.69	6,335,137.69
January 2020	97,802,055.99	14,699,737.07	35,322,857.60	6,295,500.29
February 2020	96,948,709.15	14,567,556.62	35,078,298.77	6,253,638.37
March 2020	96,074,355.43	14,431,985.33	34,823,986.35	6,209,580.95
April 2020	95,179,442.64	14,293,103.59	34,560,067.92	6,163,359.05
May 2020	94,264,430.60	14,150,993.88	34,286,698.33	6,115,005.61
June 2020	93,329,790.73	14,006,062.31	34,004,039.56	6,064,555.51
July 2020	92,376,005.56	13,859,870.63	33,712,260.52	6,012,045.51
August 2020	91,428,289.03	13,714,792.73	33,411,536.89	5,957,514.19
September 2020	90,486,598.49	13,570,820.50	33,102,050.96	5,901,001.91
October 2020	89,550,891.61	13,427,945.89	32,783,991.37	5,842,550.78
November 2020	88,621,126.29	13,286,160.91	32,457,552.99	5,782,204.60
December 2020	87,697,260.74	13,145,457.62	32,122,936.62	5,720,008.79
January 2021	86,779,253.40	13,005,828.14	31,780,348.84	5,656,010.35
February 2021	85,867,063.01	12,867,264.65	31,430,001.76	5,590,257.81
March 2021	84,960,648.54	12,729,759.39	31,072,112.77	5,522,801.13
April 2021	84,059,969.25	12,593,304.64	30,706,904.32	5,453,691.68
May 2021	83,164,984.66	12,457,892.74	30,344,571.22	5,382,982.15
June 2021	82,275,654.52	12,323,516.10	29,985,089.29	5,310,726.51
July 2021	81,391,938.87	12,190,167.17	29,628,434.51	5,239,178.29
August 2021	80,513,798.00	12,057,838.45	29,274,583.07	5,168,330.80
September 2021	79,641,192.43	11,926,522.50	28,923,511.34	5,098,177.37
October 2021	78,774,082.97	11,796,211.94	28,575,195.87	5,028,711.43
November 2021	77,912,430.64	11,666,899.44	28,229,613.42	4,959,926.45
December 2021	77,056,196.75	11,538,577.71	27,886,740.90	4,891,815.97
January 2022	76,205,342.83	11,411,239.51	27,546,555.42	4,824,373.57
February 2022	75,359,830.66	11,284,877.69	27,209,034.28	4,757,592.93
March 2022	74,519,622.27	11,159,485.10	26,874,154.94	4,691,467.74
April 2022	73,684,679.92	11,035,054.67	26,541,895.05	4,625,991.80
May 2022	72,854,966.14	10,911,579.38	26,212,232.43	4,561,158.92
June 2022	72,030,443.67	10,789,052.25	25,885,145.07	4,496,963.00
July 2022	71,211,075.50	10,667,466.36	25,560,611.16	4,433,397.99
August 2022	70,396,824.85	10,546,814.82	25,238,609.02	4,370,457.90
September 2022	69,587,655.18	10,427,090.83	24,919,117.17	4,308,136.77

Distribution Date	Classes QE, QF and QY (in the aggregate)	Classes MA and MY (in the aggregate)	Classes PB and PC (in the aggregate)	Classes HA and HQ (in the aggregate)
October 2022	\$ 68,783,530.18	\$10,308,287.59	\$24,602,114.30	\$4,246,428.73
November 2022	67,984,413.78	10,190,398.37	24,287,579.26	4,185,327.94
December 2022	67,190,270.13	10,073,416.50	23,975,491.06	4,124,828.64
January 2023	66,401,063.61	9,957,335.35	23,665,828.89	4,064,925.10
February 2023	65,616,758.84	9,842,148.32	23,358,572.09	4,005,611.66
March 2023	64,837,320.64	9,727,848.88	23,053,700.18	3,946,882.69
April 2023	64,062,714.07	9,614,430.54	22,751,192.82	3,888,732.64
May 2023	63,292,904.41	9,501,886.84	22,451,029.85	3,831,156.00
June 2023	62,527,857.18	9,390,211.40	22,153,191.26	3,774,147.31
July 2023	61,767,538.08	9,279,397.86	21,857,657.19	3,717,701.16
August 2023	61,011,913.05	9,169,439.90	21,564,407.95	3,661,812.20
September 2023	60,260,948.26	9,060,331.27	21,273,424.00	3,606,475.11
October 2023	59,514,610.08	8,952,065.74	20,984,685.95	3,551,684.66
November 2023	58,772,865.08	8,844,637.15	20,698,174.56	3,497,435.61
December 2023	58,035,680.07	8,738,039.36	20,413,870.77	3,443,722.83
January 2024	57,303,022.05	8,632,266.29	20,131,755.62	3,390,541.19
February 2024	56,574,858.25	8,527,311.89	19,851,810.34	3,337,885.63
March 2024	55,851,156.08	8,423,170.17	19,574,016.30	3,285,751.14
April 2024	55,131,883.19	8,319,835.17	19,298,355.00	3,234,132.76
May 2024	54,417,007.40	8,217,300.98	19,024,808.10	3,183,025.55
June 2024	53,706,496.77	8,115,561.72	18,753,357.40	3,132,424.65
July 2024	53,000,319.54	8,014,611.57	18,483,984.85	3,082,325.22
August 2024	52,298,444.14	7,914,444.73	18,216,672.53	3,032,722.48
September 2024	51,600,839.24	7,815,055.47	17,951,402.67	2,983,611.69
October 2024	50,907,473.67	7,716,438.08	17,688,157.64	2,934,988.15
November 2024	50,218,316.48	7,618,586.89	17,426,919.93	2,886,847.22
December 2024	49,533,336.90	7,521,496.28	17,167,672.20	2,839,184.29
January 2025	48,852,504.37	7,425,160.66	16,910,397.22	2,791,994.78
February 2025	48,175,788.52	7,329,574.50	16,655,077.91	2,745,274.18
March 2025	47,503,159.15	7,234,732.29	16,401,697.32	2,699,018.02
April 2025	46,834,586.29	7,140,628.57	16,150,238.62	2,653,221.84
May 2025	46,172,926.85	7,047,257.91	15,900,685.14	2,607,881.26
June 2025	45,520,044.21	6,954,614.93	15,654,772.40	2,562,991.93
July 2025	44,875,826.01	6,862,694.27	15,412,480.20	2,518,549.52
August 2025	44,240,161.29	6,771,490.64	15,173,756.77	2,474,549.77
September 2025	43,612,940.49	6,680,998.75	14,938,551.08	2,430,988.44
October 2025	42,994,055.42	6,591,213.38	14,706,812.83	2,387,861.34
November 2025	42,383,399.23	6,502,129.32	14,478,492.41	2,345,164.31
December 2025	41,780,866.44	6,413,741.43	14,253,540.90	2,302,893.25
January 2026	41,186,352.88	6,326,044.57	14,031,910.09	2,261,044.07
February 2026	40,599,755.66	6,239,033.68	13,813,552.42	2,201,044.07
March 2026				
	40,020,973.23 39,449,905.27	6,152,703.68	13,598,421.02 13,386,469.66	2,179,370.65 2,139,608.86
April 2026		6,067,049.58		
May 2026	38,886,452.74	5,982,066.40	13,177,652.78	2,100,547.26
June 2026	38,330,517.85	5,897,749.20	12,971,925.45	2,062,173.77
July 2026	37,782,004.01	5,814,093.07	12,769,243.35	2,024,476.56
August 2026	37,240,815.88	5,731,093.14	12,569,562.83	1,987,443.97

Distribution Date	Classes QE, QF and QY (in the aggregate)	Classes MA and MY (in the aggregate)	Classes PB and PC (in the aggregate)	Classes HA and HQ (in the aggregate)	
September 2026	\$ 36,706,859.27	\$ 5,648,876.90	\$12,372,840.81	\$1,951,064.53	
October 2026	36,180,041.23	5,567,760.04	12,179,034.83	1,915,326.99	
November 2026	35,660,269.93	5,487,728.40	11,988,103.04	1,880,220.29	
December 2026	35,147,454.72	5,408,768.04	11,800,004.17	1,845,733.53	
January 2027	34,641,506.07	5,330,865.16	11,614,697.52	1,811,856.02	
February 2027	34,142,335.60	5,254,006.15	11,432,142.97	1,778,577.25	
March 2027	33,649,856.02	5,178,177.56	11,252,300.98	1,745,886.88	
April 2027	33,163,981.15	5,103,366.12	11,075,132.54	1,713,774.75	
May 2027	32,684,625.88	5,029,558.73	10,900,599.21	1,682,230.87	
June 2027	32,211,706.18	4,956,742.44	10,728,663.08	1,651,245.42	
July 2027	31,745,139.08	4,884,904.47	10,559,286.78	1,620,808.75	
August 2027	31,284,842.66	4,814,032.21	10,392,433.46	1,590,911.38	
September 2027	30,830,736.01	4,744,113.19	10,228,066.80	1,561,543.99	
October 2027	30,382,739.25	4,675,135.12	10,066,150.98	1,532,697.39	
November 2027	29,940,773.52	4,607,085.84	9,906,650.69	1,504,362.59	
December 2027	29,504,760.92	4,539,953.35	9,749,531.12	1,476,530.72	
January 2028	29,074,624.56	4,473,725.83	9,594,757.95	1,449,193.08	
February 2028	28,650,288.51	4,408,391.57	9,442,297.34	1,422,341.11	
March 2028	28,231,677.79	4,343,939.02	9,292,115.93	1,395,966.40	
April 2028	27,818,718.38	4,280,356.78	9,144,180.84	1,370,060.68	
May 2028	27,411,337.18	4,217,633.59	8,998,459.63	1,344,615.83	
June 2028	27,009,462.01	4,155,758.35	8,854,920.34	1,319,623.84	
July 2028	26,613,021.61	4,094,720.07	8,713,531.46	1,295,076.87	
August 2028	26,221,945.63	4,034,507.91	8,574,261.91	1,270,967.20	
September 2028	25,836,164.57	3,975,111.18	8,437,081.07	1,247,287.24	
October 2028	25,455,609.84	3,916,519.31	8,301,958.73	1,224,029.53	
November 2028	25,080,213.70	3,858,721.87	8,168,865.13	1,201,186.75	
December 2028	24,709,909.27	3,801,708.55	8,037,770.90	1,178,751.68	
January 2029	24,344,630.53	3,745,469.19	7,908,647.12	1,156,717.24	
February 2029	23,984,312.26	3,689,993.74	7,781,465.26	1,135,076.47	
March 2029	23,628,890.10	3,635,272.30	7,656,197.19	1,113,822.52	
April 2029	23,278,300.47	3,581,295.06	7,532,815.18	1,092,948.68	
May 2029	22,932,480.61	3,528,052.37	7,411,291.92	1,072,448.33	
June 2029	22,591,368.56	3,475,534.67	7,291,600.44	1,052,314.96	
July 2029	22,254,903.14	3,423,732.56	7,173,714.18	1,032,542.20	
August 2029	21,923,023.93	3,372,636.71	7,057,606.96	1,013,123.76	
September 2029	21,595,671.29	3,322,237.95	6,943,252.95	994,053.48	
October 2029	21,272,786.32	3,272,527.21	6,830,626.70	975,325.28	
November 2029	20,954,310.89	3,223,495.53	6,719,703.13	956,933.21	
December 2029	20,640,187.57	3,175,134.06	6,610,457.49	938,871.40	
January 2030	20,330,359.69	3,127,434.09	6,502,865.40	921,134.10	
February 2030	20,024,771.27	3,080,386.98	6,396,902.82	903,715.65	
March 2030	19,723,367.07	3,033,984.23	6,292,546.05	886,610.48	
April 2030	19,426,092.53	2,988,217.44	6,189,771.72	869,813.12	
May 2030	19,132,893.77	2,943,078.30	6,088,556.82	853,318.20	
June 2030	18,843,717.62	2,898,558.64	5,988,878.62	837,120.43	
July 2030	18,558,511.57	2,854,650.36	5,890,714.76	821,214.62	
July 2000	10,70,711.7/	4,054,050.50	2,030,/14./0	041,414.04	

Distribution Date	Classes QE, QF and QY (in the aggregate)	Classes MA and MY (in the aggregate)	Classes PB and PC (in the aggregate)	Classes HA and HQ (in the aggregate)
August 2030	\$ 18,277,223.77	\$ 2,811,345.47	\$ 5,794,043.16	\$ 805,595.68
September 2030	17,999,803.04	2,768,636.10	5,698,842.07	790,258.57
October 2030	17,726,198.85	2,726,514.46	5,605,090.06	775,198.38
November 2030	17,456,361.29	2,684,972.86	5,512,765.98	760,410.25
December 2030	17,190,241.11	2,644,003.73	5,421,849.00	745,889.43
January 2031	16,927,789.66	2,603,599.56	5,332,318.58	731,631.24
February 2031	16,668,958.94	2,563,752.97	5,244,154.46	717,631.06
March 2031	16,413,701.53	2,524,456.64	5,157,336.70	703,884.39
April 2031	16,161,970.62	2,485,703.38	5,071,845.60	690,386.78
May 2031	15,913,720.00	2,447,486.07	4,987,661.78	677,133.85
June 2031	15,668,904.05	2,409,797.67	4,904,766.11	664,121.33
July 2031	15,427,477.73	2,372,631.25	4,823,139.74	651,344.98
August 2031	15,189,396.55	2,335,979.97	4,742,764.10	638,800.67
September 2031	14,954,616.62	2,299,837.05	4,663,620.87	626,484.31
October 2031	14,723,094.59	2,264,195.83	4,585,692.00	614,391.91
November 2031	14,494,787.66	2,229,049.71	4,508,959.68	602,519.52
December 2031	14,269,653.57	2,194,392.19	4,433,406.37	590,863.29
January 2032	14,047,650.62	2,160,216.84	4,359,014.78	579,419.40
February 2032	13,828,737.63	2,126,517.31	4,285,767.87	568,184.12
March 2032	13,612,873.93	2,093,287.35	4,213,648.82	557,153.78
April 2032	13,400,019.39	2,060,520.78	4,142,641.08	546,324.77
May 2032	13,190,134.37	2,028,211.48	4,072,728.32	535,693.55
June 2032	12,983,179.76	1,996,353.44	4,003,894.44	525,256.62
July 2032	12,779,116.93	1,964,940.71	3,936,123.58	515,010.56
August 2032	12,577,907.74	1,933,967.42	3,869,400.11	504,952.01
September 2032	12,379,514.56	1,903,427.76	3,803,708.59	495,077.66
October 2032	12,183,900.22	1,873,316.01	3,739,033.85	485,384.25
November 2032	11,991,028.03	1,843,626.52	3,675,360.91	475,868.60
December 2032	11,800,861.76	1,814,353.72	3,612,674.99	466,527.55
January 2033	11,613,365.66	1,785,492.09	3,550,961.56	457,358.03
February 2033	11,428,504.42	1,757,036.20	3,490,206.26	448,357.00
March 2033	11,246,243.19	1,728,980.69	3,430,394.96	439,521.49
April 2033	11,066,547.58	1,701,320.24	3,371,513.73	430,848.55
May 2033	10,889,383.60	1,674,049.64	3,313,548.81	422,335.32
June 2033	10,714,717.73	1,647,163.72	3,256,486.69	413,978.97
July 2033	10,542,516.86	1,620,657.37	3,200,314.01	405,776.72
August 2033	10,372,748.32	1,594,525.57	3,145,017.61	397,725.83
September 2033	10,205,379.84	1,568,763.35	3,090,584.53	389,823.62
October 2033	10,040,379.58	1,543,365.80	3,037,002.00	382,067.45
November 2033	9,877,716.10	1,518,328.08	2,984,257.41	374,454.74
December 2033	9,717,358.35	1,493,645.41	2,932,338.34	366,982.93
January 2034	9,559,275.70	1,469,313.07	2,881,232.57	359,649.51
February 2034	9,403,437.90	1,445,326.40	2,830,928.02	352,452.04
March 2034	9,249,815.09	1,421,680.81	2,781,412.82	345,388.10
April 2034	9,098,377.79	1,398,371.75	2,732,675.24	338,455.30
May 2034	8,949,096.91	1,375,394.75	2,684,703.72	331,651.32
June 2034	8,801,943.72	1,352,745.37	2,637,486.90	324,973.85

Distribution Date	Classes QE, QF and QY (in the aggregate)	Classes MA and MY (in the aggregate)	Classes PB and PC (in the aggregate)	Classes HA and HQ (in the aggregate)
July 2034	\$ 8,656,889.86	\$ 1,330,419.26	\$ 2,591,013.55	\$ 318,420.65
August 2034	8,513,907.34	1,308,412.10	2,545,272.60	311,989.51
September 2034	8,372,968.53	1,286,719.63	2,500,253.17	305,678.24
October 2034	8,234,046.15	1,265,337.65	2,455,944.50	299,484.70
November 2034	8,097,113.27	1,244,262.03	2,412,336.02	293,406.80
December 2034	7,962,143.31	1,223,488.65	2,369,417.27	287,442.47
January 2035	7,829,110.03	1,203,013.49	2,327,177.99	281,589.69
February 2035	7,697,987.52	1,182,832.55	2,285,608.02	275,846.45
March 2035	7,568,750.23	1,162,941.89	2,244,697.39	270,210.80
April 2035	7,441,372.90	1,143,337.64	2,204,436.24	264,680.81
May 2035	7,315,830.63	1,124,015.94	2,164,814.87	259,254.60
June 2035	7,192,098.81	1,104,973.02	2,125,823.72	253,930.30
July 2035	7,070,153.18	1,086,205.13	2,087,453.35	248,706.08
August 2035	6,949,969.76	1,067,708.58	2,049,694.47	243,580.16
September 2035	6,831,524.90	1,049,479.73	2,012,537.93	238,550.77
October 2035	6,714,795.26	1,031,514.99	1,975,974.71	233,616.18
November 2035	6,599,757.77	1,013,810.80	1,939,995.91	228,774.68
December 2035	6,486,389.69	996,363.66	1,904,592.77	224,024.60
January 2036	6,374,668.55	979,170.11	1,869,756.64	219,364.30
February 2036	6,264,572.20	962,226.74	1,835,479.01	214,792.17
March 2036	6,156,078.74	945,530.17	1,801,751.50	210,306.62
April 2036	6,049,166.58	929,077.09	1,768,565.83	205,906.08
May 2036	5,943,814.39	912,864.20	1,735,913.85	201,589.03
June 2036	5,840,001.13	896,888.26	1,703,787.53	197,353.97
July 2036	5,737,706.03	881,146.09	1,672,178.97	193,199.41
August 2036	5,636,908.58	865,634.51	1,641,080.34	189,123.90
September 2036	5,537,588.55	850,350.41	1,610,483.98	185,126.01
October 2036	5,439,725.95	835,290.72	1,580,382.30	181,204.35
November 2036	5,343,301.06	820,452.39	1,550,767.84	177,357.53
December 2036	5,248,294.43	805,832.44	1,521,633.24	173,584.20
January 2037	5,154,686.84	791,427.90	1,492,971.24	169,883.03
February 2037	5,062,459.32	777,235.85	1,464,774.72	166,252.72
March 2037	4,971,593.18	763,253.41	1,437,036.61	162,691.98
April 2037	4,882,069.91	749,477.73	1,409,749.99	159,199.55
May 2037	4,793,871.31	735,906.01	1,382,908.01	155,774.19
June 2037	4,706,979.36	722,535.47	1,356,503.94	152,414.68
July 2037	4,621,376.31	709,363.38	1,330,531.13	149,119.82
August 2037	4,537,044.61	696,387.04	1,304,983.04	145,888.45
September 2037	4,453,966.97	683,603.79	1,279,853.23	142,719.41
October 2037	4,372,126.30	671,010.98	1,255,135.33	139,611.56
November 2037	4,291,505.75	658,606.04	1,230,823.09	136,563.80
December 2037	4,212,088.68	646,386.39	1,206,910.33	133,575.01
January 2038	4,133,858.66	634,349.50	1,183,390.98	130,644.14
February 2038	4,056,799.49	622,492.88	1,160,259.03	127,770.12
March 2038	3,980,895.16	610,814.07	1,137,508.59	124,951.92
April 2038	3,906,129.89	599,310.63	1,115,133.84	122,188.52
May 2038	3,832,488.09	587,980.16	1,093,129.04	119,478.91

June 2038         \$ 3,759,954,39         \$ 576,820,30         \$ 1,071,488.54         \$ 116,822.11           July 2038         3,688,513.60         565,828.70         1,050,206.78         114,217.15           August 2038         3,618,150.73         555,003.07         1,029,278.26         111,663.10           September 2038         3,480,599.84         533,840.60         988,459.44         106,703.95           November 2038         3,481,587.2         513,315.03         948,989.76         101,297.05           December 2038         3,347,185.72         513,315.03         948,989.76         101,937.40           January 2039         3,281,994.53         503,285.62         299.747.98         99,624.17           February 2039         3,154,574.64         483,682.91         892,225.39         951,334           April 2039         3,031,014.55         464,674.44         855,951.50         90,818.31           June 2039         2,970,648.76         455,387.94         838,270.85         88,724.54           July 2039         2,911,208.47         446,274.94         838,270.85         88,724.54           July 2039         2,852,680.87         437,240.43         803,798.82         84,607.35           September 2039         2,852,680.86         487,240.43 <th>Distribution Date</th> <th>Classes QE, QF and QY (in the aggregate)</th> <th>Classes MA and MY (in the aggregate)</th> <th>Classes PB and PC (in the aggregate)</th> <th>Classes HA and HQ (in the aggregate)</th>	Distribution Date	Classes QE, QF and QY (in the aggregate)	Classes MA and MY (in the aggregate)	Classes PB and PC (in the aggregate)	Classes HA and HQ (in the aggregate)
July 2038         3,688,513,60         565,828.70         1,050,206.78         114,217.15           August 2038         3,618,150.73         555,003.07         1,029,278.26         111,663,10           September 2038         3,548,851.01         544,341.12         1,008,697.59         109,159.00           October 2038         3,480,599.84         533,840.60         988,459.44         106,703.95           November 2038         3,417,185.72         513,315.03         948,989.76         101,937.42           January 2039         3,281,994.53         503,285.62         929,747.98         99,624.17           February 2039         3,217,795.39         493,408.95         910,828.17         97,356.47           March 2039         3,154,574.64         483,682.91         892,225.39         95,133.47           April 2039         3,092,318.80         474,105.43         873,934.77         92,954.35           July 2039         2,970,648.76         455,387.94         838,270.85         88,724.54           July 2039         2,911,208.47         446,243.93         820,888.15         866,727.24           August 2039         2,852,680.87         477,40.43         803,798.82         84,660.73           September 2039         2,759,553.36         428,375.50	June 2038	\$ 3,759,954.39	\$ 576,820.30	\$ 1,071,488.54	\$ 116,822.11
August 2038         3,618,150,73         555,003.07         1,029,278,26         111,663,10           September 2038         3,548,851.01         544,341.12         1,008,697,59         109,159,00           October 2038         3,480,599,84         533,840,60         988,459.44         106,703,95           November 2038         3,413,382.82         523,499,30         968,558,55         104,297,05           December 2039         3,281,994,53         503,285,62         929,747,98         99,624,17           February 2039         3,217,795,39         493,408,95         910,828,17         97,356,47           March 2039         3,154,574,64         483,682,91         892,225,39         95,133,47           April 2039         3,092,318.80         474,105,43         873,994,77         99,624,17           June 2039         2,970,648,76         455,387,94         838,270.85         88,724,54           July 2039         2,911,208,47         446,243,93         820,888,15         86,672,27           August 2039         2,852,680,87         437,240,43         803,798,82         84,607,32           September 2039         2,795,053,36         428,375.50         786,998,32         82,689,16           October 2039         2,682,448,88         411,053,69	•	, ,			
September 2038         3,548,851.01         544,341.12         1,008,697.59         109,159.00           October 2038         3,480,599.84         533,840.60         988,459.44         106,703.95           November 2038         3,413,382.82         523,499.30         968,558.55         104,297.05           December 2038         3,347,185.72         513,315.03         948,989.76         101,937.42           January 2039         3,217,795.39         493,408.95         910,828.17         97,356.47           March 2039         3,154,574.64         483,682.91         892,225.39         95,133.47           April 2039         3,092,318.80         474,105.43         873,934.77         92,954.35           May 2039         3,031,014.55         464,674.44         855,951.50         90,818.31           Julv 2039         2,970,648.76         455,387.94         838,270.85         88,724.54           July 2039         2,911,208.47         446,243.93         820,888.15         86,672.27           August 2039         2,852,680.87         437,240.43         803,798.82         84,660.73           September 2039         2,755,053.66         428,375.50         786,998.32         82,689.16           October 2049         2,738,313.46         419,647.22	• •	, ,	,		
October 2038         3,480,599.84         533,840.60         988,459.44         106,703.95           November 2038         3,413,382.82         523,499.30         968,558.55         104,297.62           December 2038         3,347,185.72         513,315.03         948,989.76         101,937.42           January 2039         3,281,994.53         503,285.62         292,747.98         99,624.17           February 2039         3,217,795.39         493,408.95         910,828.17         97,536.47           March 2039         3,154,574.64         483,682.91         892,225.39         95,133.47         92,594.45           May 2039         3,031,014.55         464,674.44         855,951.50         90,818.31           June 2039         2,970,648.76         455,387.94         838,270.85         88,724.54           July 2039         2,911,208.47         446,243.93         820,888.15         86,672.27           August 2039         2,852,660.87         437,240.43         803,798.82         84,660.73           September 2039         2,783,313.46         419,647.22         770,482.19         80,756.84           November 2039         2,682,448.88         411,053.69         734,826.04         788,863.03           December 2040         2,519,986.50	0				
November 2038         3,413,382.82         523,499.30         968,558.55         104,297.05           December 2038         3,347,185.72         513,315.03         948,989.76         101,937.42           January 2039         3,281,994.53         503,285.62         292,747.98         99,624.17           February 2039         3,217,795.39         493,408.95         910,828.17         97,356.47           March 2039         3,092,318.80         474,105.43         873,934.77         92,954.35           May 2039         3,031,014.55         464,674.44         855,951.50         90,818.31           June 2039         2,970,648.76         455,387.94         832,285.58         88,724.54           July 2039         2,911,208.47         446,43.93         832,088.15         88,724.54           July 2039         2,911,208.47         446,43.93         803,798.82         84,660.73           September 2039         2,795,053.36         428,375.50         786,998.32         82,689.16           October 2039         2,795,053.36         418,375.50         786,998.32         82,689.16           November 2039         2,682,448.88         411,053.69         754,246.04         78,863.03           December 2040         2,519,986.50         386,063.11 <td< td=""><td>-</td><td></td><td></td><td></td><td></td></td<>	-				
December 2038         3,347,185.72         513,315.03         948,989.76         101,937.42           January 2039         3,281,994.53         503,285.62         929,747.98         99,624.17           February 2039         3,217,795.39         493,408.95         910,828.17         97,356.47           March 2039         3,154,574.64         483,682.91         892,225.39         95,133.47           April 2039         3,031,014.55         464,674.44         855,951.50         90,818.31           June 2039         2,970,648.76         455,387.94         838,270.85         88,724.54           July 2039         2,911,208.47         446,243.93         820,888.15         86,672.27           August 2039         2,852,680.87         437,240.43         803,798.82         86,660.73           September 2039         2,795,053.36         428,375.50         786,998.32         82,689.16           October 2039         2,682,448.88         411,053.69         754,246.04         80,756.84           November 2039         2,627,447.49         402,593.06         738,285.54         77,007.02           January 2040         2,573,297.30         394,263.47         722,596.41         75,188.11           February 2040         2,519,986.50         386,063.11					
January 2039         3,281,994.53         503,285.62         929,747.98         99,624.17           February 2039         3,217,795.39         493,408.95         910,828.17         97,356.47           April 2039         3,154,574.64         483,682.91         892,225.39         95,133.47           April 2039         3,092,318.80         474,105.43         873,934.77         92,954.35           May 2039         3,031,014.55         464,674.44         855,951.50         90,818.31           June 2039         2,970,648.76         455,387.94         838,270.85         88,724.54           July 2039         2,911,208.47         446,243.93         820,888.15         86,672.27           August 2039         2,852,680.87         437,240.43         803,798.82         84,660.73           September 2039         2,758,313.46         419,647.22         770,482.19         80,756.84           November 2039         2,682,448.88         411,053.69         754,246.04         78,863.03           December 2039         2,627,447.49         402,593.06         738,285.54         77,007.02           January 2040         2,519,986.50         386,063.11         707,174.46         73,405.60           March 2040         2,467,503.43         377,901.17         692	_		,		
February 2039         3,217,795,39         493,408.95         910,828.17         97,356.47           March 2039         3,154,574.64         483,682.91         892,225,39         95,133.47         29,954.35           April 2039         3,092,318.80         474,105.43         873,934.77         92,954.35           May 2039         3,031,014.55         464,674.44         855,951.50         90,818.31           June 2039         2,970,648.76         455,387.94         838,270.85         88,724.54           July 2039         2,911,208.47         446,243.93         820,888.15         86,672.27           August 2039         2,852,660.87         437,240.43         803,798.82         84,660.73           September 2039         2,758,313.46         419,647.22         770,482.19         80,756.84           November 2039         2,682,448.88         411,053.69         754,246.04         78,863.03           December 2039         2,627,447.49         402,593.06         738,285.54         77,007.02           January 2040         2,573,297.30         394,263.47         722,596.41         75,188.11           February 2040         2,145,836.57         370,042.90         677,115.58         69,947.14           May 2040         2,364,974.57         362,2					· · · · · · · · · · · · · · · · · · ·
March 2039         3,154,574.64         483,682.91         892,225.39         95,133.47           April 2039         3,092,318.80         474,105.43         873,934.77         29,954.55           May 2039         3,031,014.55         464,674.44         855,951.50         90,818.31           June 2039         2,970,648.76         455,387.94         838,270.85         88,724.54           July 2039         2,911,208.47         446,243.93         820,888.15         86,672.27           August 2039         2,852,680.87         437,240.43         803,798.82         84,660.72           September 2039         2,755,053.36         428,375.50         786,998.32         82,689.16           October 2039         2,738,313.46         419,647.22         770,482.19         80,756.84           November 2039         2,682,448.88         411,053.69         754,246.04         73,405.60           December 2039         2,627,447.49         402,593.06         738,285.54         77,007.02           January 2040         2,519,986.50         386,063.11         707,174.46         73,405.60           March 2040         2,467,503.43         377,990.17         692,015.55         71,658.83           April 2040         2,364,974.57         362,219.52         662,47	•		- /		
April 2039         3,092,318.80         474,105.43         873,934.77         92,954.35           May 2039         3,031,014.55         464,674.44         855,951.50         90,818.31           June 2039         2,970,648.76         455,387.94         838,270.85         88,724.54           July 2039         2,911,208.47         446,243.93         820,888.15         86,672.27           August 2039         2,852,680.87         437,240.43         803,798.82         84,660.73           September 2039         2,795,053.36         428,375.50         786,998.32         82,689.16           October 2039         2,738,313.46         419,647.22         770,482.19         80,756.84           November 2039         2,682,448.88         411,053.69         754,246.04         78,863.03           December 2039         2,627,447.49         402,593.06         738,285.54         77,007.02           January 2040         2,573,297.30         394,263.47         722,596.41         75,188.11           February 2040         2,519,986.50         386,063.17         707,174.46         73,405.60           March 2040         2,364,974.57         362,219.52         662,470.55         68,269.86           June 2040         2,364,974.57         362,219.52         662,					
May 2039         3,031,014.55         464,674.44         855,951.50         90,818.31           June 2039         2,970,648.76         455,387.94         838,270.85         88,724.54           July 2039         2,911,208.47         446,243.93         820,888.15         86,672.27           August 2039         2,852,680.87         437,240.43         803,798.82         84,660.73           September 2039         2,795,053.36         428,375.50         786,998.32         82,689.16           October 2039         2,738,313.46         419,647.22         770,482.19         80,756.84           November 2039         2,682,448.88         411,053.69         754,246.04         78,863.03           December 2039         2,627,447.49         402,593.06         738,285.54         77,007.02           January 2040         2,573,297.30         394,263.47         722,596.41         75,188.11           February 2040         2,519,986.50         386,063.11         707,174.46         73,495.60           March 2040         2,467,503.43         377,901.75         692,015.55         71,658.83           April 2040         2,314,906.22         354,518.33         648,076.49         66,626.36           July 2040         2,265,620.46         346,937.62         633,					
June 2039         2,970,648.76         455,387.94         838,270.85         88,724.54           July 2039         2,911,208.47         446,243.93         820,888.15         86,672.27           August 2039         2,852,680.87         437,240.43         803,798.82         84,660.73           September 2039         2,795,053.36         428,375.50         786,998.32         82,689.16           October 2039         2,738,313.46         419,647.22         770,482.19         80,756.84           November 2039         2,682,448.88         411,053.69         754,246.04         78,863.03           December 2039         2,627,447.49         402,593.06         738,285.54         77,007.02           January 2040         2,573,297.30         394,263.47         722,596.41         75,188.11           February 2040         2,519,986.50         386,063.11         707,174.46         73,405.60           March 2040         2,415,836.57         370,042.90         677,115.58         69,947.14           May 2040         2,364,974.57         362,219.52         662,470.55         68,269.86           June 2040         2,314,906.22         354,518.33         648,076.49         66,626.36           Jugust 2040         2,217,106.36         339,475.02         633	_				
July 2039         2,911,208.47         446,243.93         820,888.15         86,672.27           August 2039         2,852,680.87         437,240.43         803,798.82         84,660.73           September 2039         2,795,053.36         428,375.50         786,998.32         82,689.16           October 2039         2,738,313.46         419,647.22         770,482.19         80,756.84           November 2039         2,682,448.88         411,053.69         754,246.04         78,863.03           December 2039         2,627,447.49         402,593.06         738,285.54         77,007.02           January 2040         2,573,297.30         394,263.47         722,596.41         75,188.11           February 2040         2,519,986.50         386,063.11         707,174.46         73,495.60           March 2040         2,467,503.43         377,990.17         692,015.55         71,658.83           April 2040         2,314,906.22         354,518.33         648,076.49         66,626.36           June 2040         2,314,906.22         354,518.33         648,076.49         66,626.36           July 2040         2,265,620.46         346,937.62         633,929.49         65,016.00           August 2040         2,217,106.36         339,475.70         6	•		,		
August 2039         2,852,680.87         437,240.43         803,798.82         84,660.73           September 2039         2,795,053.36         428,375.50         786,998.32         82,689.16           October 2039         2,738,313.46         419,647.22         770,482.19         80,756.84           November 2039         2,682,448.88         411,053.69         754,246.04         78,863.03           December 2039         2,627,447.49         402,593.06         738,285.54         77,007.02           January 2040         2,519,986.50         386,063.11         707,174.46         73,405.60           March 2040         2,467,503.43         377,990.17         692,015.55         71,658.83           April 2040         2,415,836.57         370,042.90         677,115.58         69,947.14           May 2040         2,364,974.57         362,219.52         662,470.55         68,269.86           June 2040         2,314,906.22         354,518.33         648,076.49         66,626.36           July 2040         2,256,620.46         346,937.62         633,929.49         65,016.00           August 2040         2,217,106.36         339,475.70         620,025.72         63,438.18           September 2040         2,169,353.17         332,130.92         6	•		,		
September 2039         2,795,053.36         428,375.50         786,998.32         82,689.16           October 2039         2,7383,313.46         419,647.22         770,482.19         80,756.84           November 2039         2,682,448.88         411,053.69         754,246.04         78,863.03           December 2039         2,627,447.49         402,593.06         738,285.54         77,007.02           January 2040         2,579,297.30         394,263.47         722,596.41         75,188.11           February 2040         2,519,986.50         386,063.11         707,174.46         73,405.60           March 2040         2,467,503.43         377,990.17         692,015.55         71,658.83           April 2040         2,415,836.57         370,042.90         677,115.58         69,947.14           May 2040         2,364,974.57         362,219.52         662,470.55         68,269.86           June 2040         2,314,906.22         354,518.33         648,076.49         66,626.36           July 2040         2,265,620.46         346,937.62         633,292.49         65,016.00           August 2040         2,171,06.36         339,475.70         620,025.72         63,438.18           September 2040         2,169,353.17         332,130.92 <td< td=""><td></td><td></td><td></td><td>,</td><td></td></td<>				,	
October 2039         2,738,313.46         419,647.22         770,482.19         80,756.84           November 2039         2,682,448.88         411,053.69         754,246.04         78,863.03           December 2039         2,627,447.49         402,593.06         738,285.54         77,007.02           January 2040         2,573,297.30         394,263.47         722,596.41         75,188.11           February 2040         2,519,986.50         386,063.11         707,174.46         73,405.60           March 2040         2,467,503.43         377,990.17         692,015.55         71,658.83           April 2040         2,415,836.57         370,042.90         677,115.58         69,947.14           May 2040         2,364,974.57         362,219.52         662,470.55         68,269.86           June 2040         2,314,906.22         354,518.33         648,076.49         66,626.36           July 2040         2,265,620.46         346,937.62         633,929.49         65,016.00           August 2040         2,217,106.36         339,475.70         620,025.72         63,438.18           September 2040         2,169,353.17         332,130.92         606,361.38         61,892.28           October 2040         2,122,350.24         324,901.64         5			,	· · · · · · · · · · · · · · · · · · ·	, -
November 2039         2,682,448.88         411,053.69         754,246.04         78,863.03           December 2039         2,627,447.49         402,593.06         738,285.54         77,007.02           January 2040         2,573,297.30         394,263.47         722,596.41         75,188.11           February 2040         2,519,986.50         386,063.11         707,174.46         73,405.60           March 2040         2,467,503.43         377,990.17         692,015.55         71,658.83           April 2040         2,415,836.57         370,042.90         677,115.58         69,947.14           May 2040         2,364,974.57         362,219.52         662,470.55         68,269.86           June 2040         2,314,906.22         354,518.33         648,076.49         66,626.36           July 2040         2,265,620.46         346,937.62         633,929.49         65,016.00           August 2040         2,217,106.36         339,475.70         620,025.72         63,438.18           September 2040         2,169,353.17         332,130.92         606,361.38         61,892.28           October 2040         2,076,087.09         317,786.24         579,736.13         58,893.89           December 2040         2,030,553.36         310,783.14				· · · · · · · · · · · · · · · · · · ·	
December 2039         2,627,447.49         402,593.06         738,285.54         77,007.02           January 2040         2,573,297.30         394,263.47         722,596.41         75,188.11           February 2040         2,519,986.50         386,063.11         707,174.46         73,405.60           March 2040         2,467,503.43         377,990.17         692,015.55         71,658.83           April 2040         2,415,836.57         370,042.90         677,115.58         69,947.14           May 2040         2,364,974.57         362,219.52         662,470.55         68,269.86           June 2040         2,314,906.22         354,518.33         648,076.49         66,626.36           July 2040         2,265,620.46         346,937.62         633,929.49         65,016.00           August 2040         2,217,106.36         339,475.70         620,025.72         63,438.18           September 2040         2,169,353.17         332,130.92         606,361.38         61,892.28           October 2040         2,076,087.09         317,786.24         579,736.13         58,893.89           December 2040         2,030,553.36         310,783.14         566,767.92         57,440.23           January 2041         1,981,633.46         297,107.52         5					
January 2040         2,573,297.30         394,263.47         722,596.41         75,188.11           February 2040         2,519,986.50         386,063.11         707,174.46         73,405.60           March 2040         2,467,503.43         377,990.17         692,015.55         71,658.83           April 2040         2,415,836.57         370,042.90         677,115.58         69,947.14           May 2040         2,364,974.57         362,219.52         662,470.55         68,269.86           June 2040         2,314,906.22         354,518.33         648,076.49         66,626.36           July 2040         2,265,620.46         346,937.62         633,929.49         65,016.00           August 2040         2,217,106.36         339,475.70         620,025.72         63,438.18           September 2040         2,169,353.17         332,130.92         606,361.38         61,892.28           October 2040         2,122,350.24         324,901.64         592,932.75         60,377.71           November 2040         2,076,087.09         317,786.24         579,736.13         58,893.89           December 2040         2,030,553.36         310,783.14         566,767.92         57,440.23           January 2041         1,985,738.84         303,890.75         5					
February 2040         2,519,986.50         386,063.11         707,174.46         73,405.60           March 2040         2,467,503.43         377,990.17         692,015.55         71,658.83           April 2040         2,415,836.57         370,042.90         677,115.58         69,947.14           May 2040         2,364,974.57         362,219.52         662,470.55         68,269.86           June 2040         2,314,906.22         354,518.33         648,076.49         66,626.36           July 2040         2,265,620.46         346,937.62         633,929.49         65,016.00           August 2040         2,217,106.36         339,475.70         620,025.72         63,438.18           September 2040         2,169,353.17         332,130.92         606,361.38         61,892.28           October 2040         2,122,350.24         324,901.64         592,932.75         60,377.71           November 2040         2,076,087.09         317,786.24         579,736.13         58,893.89           December 2040         2,030,553.36         310,783.14         566,767.92         57,402.33           January 2041         1,985,738.84         303,890.75         554,024.54         56,016.17           February 2041         1,941,633.46         297,107.52					· · · · · · · · · · · · · · · · · · ·
March 2040         2,467,503.43         377,990.17         692,015.55         71,658.83           April 2040         2,415,836.57         370,042.90         677,115.58         69,947.14           May 2040         2,364,974.57         362,219.52         662,470.55         68,269.86           June 2040         2,314,906.22         354,518.33         648,076.49         66,626.36           July 2040         2,265,620.46         346,937.62         633,929.49         65,016.00           August 2040         2,217,106.36         339,475.70         620,025.72         63,438.18           September 2040         2,169,353.17         332,130.92         606,361.38         61,892.28           October 2040         2,122,350.24         324,901.64         592,932.75         60,377.71           November 2040         2,076,087.09         317,786.24         579,736.13         58,893.89           December 2040         2,030,553.36         310,783.14         566,767.92         57,440.23           January 2041         1,985,738.84         303,890.75         554,024.54         56,016.17           February 2041         1,941,633.46         297,107.52         541,502.47         54,621.16           March 2041         1,889,227.26         290,431.94         529	•				
April 2040         2,415,836.57         370,042.90         677,115.58         69,947.14           May 2040         2,364,974.57         362,219.52         662,470.55         68,269.86           June 2040         2,314,906.22         354,518.33         648,076.49         66,626.36           July 2040         2,265,620.46         346,937.62         633,929.49         65,016.00           August 2040         2,217,106.36         339,475.70         620,025.72         63,438.18           September 2040         2,169,353.17         332,130.92         606,361.38         61,892.28           October 2040         2,122,350.24         324,901.64         592,932.75         60,377.71           November 2040         2,076,087.09         317,786.24         579,736.13         58,893.89           December 2040         2,030,553.36         310,783.14         566,767.92         57,440.23           January 2041         1,985,738.84         303,890.75         554,024.54         56,016.17           February 2041         1,941,633.46         297,107.52         541,502.47         54,621.16           March 2041         1,898,227.26         290,431.94         529,198.26         53,254.66           April 2041         1,813,473.27         277,397.63         505	•		,		
May 2040         2,364,974.57         362,219.52         662,470.55         68,269.86           June 2040         2,314,906.22         354,518.33         648,076.49         66,626.36           July 2040         2,265,620.46         346,937.62         633,929.49         65,016.00           August 2040         2,217,106.36         339,475.70         620,025.72         63,438.18           September 2040         2,169,353.17         332,130.92         606,361.38         61,892.28           October 2040         2,122,350.24         324,901.64         592,932.75         60,377.71           November 2040         2,076,087.09         317,786.24         579,736.13         58,893.89           December 2040         2,030,553.36         310,783.14         566,767.92         57,440.23           January 2041         1,985,738.84         303,890.75         554,024.54         56,016.17           February 2041         1,941,633.46         297,107.52         541,502.47         54,621.16           March 2041         1,898,227.26         290,431.94         529,198.26         53,254.66           April 2041         1,813,473.27         277,397.63         505,229.78         50,605.04           June 2041         1,772,106.24         271,035.95         493,					
June 2040         2,314,906.22         354,518.33         648,076.49         66,626.36           July 2040         2,265,620.46         346,937.62         633,929.49         65,016.00           August 2040         2,217,106.36         339,475.70         620,025.72         63,438.18           September 2040         2,169,353.17         332,130.92         606,361.38         61,892.28           October 2040         2,122,350.24         324,901.64         592,932.75         60,377.71           November 2040         2,076,087.09         317,786.24         579,736.13         58,893.89           December 2040         2,030,553.36         310,783.14         566,767.92         57,440.23           January 2041         1,985,738.84         303,890.75         554,024.54         56,016.17           February 2041         1,941,633.46         297,107.52         541,502.47         54,621.16           March 2041         1,888,227.26         290,431.94         529,198.26         53,254.66           April 2041         1,813,473.27         277,397.63         505,229.78         50,605.04           June 2041         1,772,106.24         271,035.95         493,558.84         49,320.87           July 2041         1,731,399.90         264,775.98         482	_				
July 2040         2,265,620.46         346,937.62         633,929.49         65,016.00           August 2040         2,217,106.36         339,475.70         620,025.72         63,438.18           September 2040         2,169,353.17         332,130.92         606,361.38         61,892.28           October 2040         2,122,350.24         324,901.64         592,932.75         60,377.71           November 2040         2,076,087.09         317,786.24         579,736.13         58,893.89           December 2040         2,030,553.36         310,783.14         566,767.92         57,440.23           January 2041         1,985,738.84         303,890.75         554,024.54         56,016.17           February 2041         1,941,633.46         297,107.52         541,502.47         54,621.16           March 2041         1,898,227.26         290,431.94         529,198.26         53,254.66           April 2041         1,855,510.42         283,862.47         517,108.48         51,916.13           May 2041         1,813,473.27         277,397.63         505,229.78         50,605.04           June 2041         1,772,106.24         271,035.95         493,558.84         49,320.87           July 2041         1,731,399.90         264,775.98         482,		, ,		· · · · · · · · · · · · · · · · · · ·	
August 2040       2,217,106.36       339,475.70       620,025.72       63,438.18         September 2040       2,169,353.17       332,130.92       606,361.38       61,892.28         October 2040       2,122,350.24       324,901.64       592,932.75       60,377.71         November 2040       2,076,087.09       317,786.24       579,736.13       58,893.89         December 2040       2,030,553.36       310,783.14       566,767.92       57,440.23         January 2041       1,985,738.84       303,890.75       554,024.54       56,016.17         February 2041       1,941,633.46       297,107.52       541,502.47       54,621.16         March 2041       1,898,227.26       290,431.94       529,198.26       53,254.66         April 2041       1,855,510.42       283,862.47       517,108.48       51,916.13         May 2041       1,813,473.27       277,397.63       505,229.78       50,605.04         June 2041       1,772,106.24       271,035.95       493,558.84       49,320.87         July 2041       1,731,399.90       264,775.98       482,092.41       48,063.13         August 2041       1,691,344.95       258,616.28       470,827.25       46,831.32         September 2041       1,613,152.59				· · · · · · · · · · · · · · · · · · ·	
September 2040         2,169,353.17         332,130.92         606,361.38         61,892.28           October 2040         2,122,350.24         324,901.64         592,932.75         60,377.71           November 2040         2,076,087.09         317,786.24         579,736.13         58,893.89           December 2040         2,030,553.36         310,783.14         566,767.92         57,440.23           January 2041         1,985,738.84         303,890.75         554,024.54         56,016.17           February 2041         1,941,633.46         297,107.52         541,502.47         54,621.16           March 2041         1,898,227.26         290,431.94         529,198.26         53,254.66           April 2041         1,855,510.42         283,862.47         517,108.48         51,916.13           May 2041         1,813,473.27         277,397.63         505,229.78         50,605.04           June 2041         1,772,106.24         271,035.95         493,558.84         49,320.87           July 2041         1,731,399.90         264,775.98         482,092.41         48,063.13           August 2041         1,651,932.20         252,555.44         459,760.22         45,624.93           October 2041         1,613,152.59         246,592.06         4				· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
October 2040         2,122,350.24         324,901.64         592,932.75         60,377.71           November 2040         2,076,087.09         317,786.24         579,736.13         58,893.89           December 2040         2,030,553.36         310,783.14         566,767.92         57,440.23           January 2041         1,985,738.84         303,890.75         554,024.54         56,016.17           February 2041         1,941,633.46         297,107.52         541,502.47         54,621.16           March 2041         1,898,227.26         290,431.94         529,198.26         53,254.66           April 2041         1,855,510.42         283,862.47         517,108.48         51,916.13           May 2041         1,813,473.27         277,397.63         505,229.78         50,605.04           June 2041         1,772,106.24         271,035.95         493,558.84         49,320.87           July 2041         1,731,399.90         264,775.98         482,092.41         48,063.13           August 2041         1,691,344.95         258,616.28         470,827.25         46,831.32           September 2041         1,651,932.20         252,555.44         459,760.22         45,624.93           October 2041         1,574,997.18         240,724.77         4				· · · · · · · · · · · · · · · · · · ·	
November 2040         2,076,087.09         317,786.24         579,736.13         58,893.89           December 2040         2,030,553.36         310,783.14         566,767.92         57,440.23           January 2041         1,985,738.84         303,890.75         554,024.54         56,016.17           February 2041         1,941,633.46         297,107.52         541,502.47         54,621.16           March 2041         1,898,227.26         290,431.94         529,198.26         53,254.66           April 2041         1,855,510.42         283,862.47         517,108.48         51,916.13           May 2041         1,813,473.27         277,397.63         505,229.78         50,605.04           June 2041         1,772,106.24         271,035.95         493,558.84         49,320.87           July 2041         1,731,399.90         264,775.98         482,092.41         48,063.13           August 2041         1,691,344.95         258,616.28         470,827.25         46,831.32           September 2041         1,651,932.20         252,555.44         459,760.22         45,624.93           October 2041         1,574,997.18         240,724.77         438,208.08         43,286.56           December 2041         1,537,457.15         234,952.21					
December 2040         2,030,553.36         310,783.14         566,767.92         57,440.23           January 2041         1,985,738.84         303,890.75         554,024.54         56,016.17           February 2041         1,941,633.46         297,107.52         541,502.47         54,621.16           March 2041         1,898,227.26         290,431.94         529,198.26         53,254.66           April 2041         1,855,510.42         283,862.47         517,108.48         51,916.13           May 2041         1,813,473.27         277,397.63         505,229.78         50,605.04           June 2041         1,772,106.24         271,035.95         493,558.84         49,320.87           July 2041         1,731,399.90         264,775.98         482,092.41         48,063.13           August 2041         1,691,344.95         258,616.28         470,827.25         46,831.32           September 2041         1,651,932.20         252,555.44         459,760.22         45,624.93           October 2041         1,513,7457.15         234,952.21         427,716.87         42,153.64           December 2041         1,537,457.15         234,952.21         427,716.87         42,153.64           January 2042         1,500,523.79         229,273.03					
January 2041         1,985,738.84         303,890.75         554,024.54         56,016.17           February 2041         1,941,633.46         297,107.52         541,502.47         54,621.16           March 2041         1,898,227.26         290,431.94         529,198.26         53,254.66           April 2041         1,855,510.42         283,862.47         517,108.48         51,916.13           May 2041         1,813,473.27         277,397.63         505,229.78         50,605.04           June 2041         1,772,106.24         271,035.95         493,558.84         49,320.87           July 2041         1,731,399.90         264,775.98         482,092.41         48,063.13           August 2041         1,691,344.95         258,616.28         470,827.25         46,831.32           September 2041         1,651,932.20         252,555.44         459,760.22         45,624.93           October 2041         1,513,152.59         246,592.06         448,888.19         44,443.51           November 2041         1,574,997.18         240,724.77         438,208.08         43,286.56           December 2041         1,537,457.15         234,952.21         427,716.87         42,153.64           January 2042         1,500,523.79         229,273.03         4					
February 2041         1,941,633.46         297,107.52         541,502.47         54,621.16           March 2041         1,898,227.26         290,431.94         529,198.26         53,254.66           April 2041         1,855,510.42         283,862.47         517,108.48         51,916.13           May 2041         1,813,473.27         277,397.63         505,229.78         50,605.04           June 2041         1,772,106.24         271,035.95         493,558.84         49,320.87           July 2041         1,731,399.90         264,775.98         482,092.41         48,063.13           August 2041         1,691,344.95         258,616.28         470,827.25         46,831.32           September 2041         1,651,932.20         252,555.44         459,760.22         45,624.93           October 2041         1,613,152.59         246,592.06         448,888.19         44,443.51           November 2041         1,574,997.18         240,724.77         438,208.08         43,286.56           December 2041         1,537,457.15         234,952.21         427,716.87         42,153.64           January 2042         1,500,523.79         229,273.03         417,411.57         41,044.29           February 2042         1,464,188.51         223,685.92					
March 20411,898,227.26290,431.94529,198.2653,254.66April 20411,855,510.42283,862.47517,108.4851,916.13May 20411,813,473.27277,397.63505,229.7850,605.04June 20411,772,106.24271,035.95493,558.8449,320.87July 20411,731,399.90264,775.98482,092.4148,063.13August 20411,691,344.95258,616.28470,827.2546,831.32September 20411,651,932.20252,555.44459,760.2245,624.93October 20411,513,152.59246,592.06448,888.1944,443.51November 20411,574,997.18240,724.77438,208.0843,286.56December 20411,537,457.15234,952.21427,716.8742,153.64January 20421,500,523.79229,273.03417,411.5741,044.29February 20421,464,188.51223,685.92407,289.2539,958.06March 20421,428,442.83218,189.57397,347.0138,894.51	•		,		
April 20411,855,510.42283,862.47517,108.4851,916.13May 20411,813,473.27277,397.63505,229.7850,605.04June 20411,772,106.24271,035.95493,558.8449,320.87July 20411,731,399.90264,775.98482,092.4148,063.13August 20411,691,344.95258,616.28470,827.2546,831.32September 20411,651,932.20252,555.44459,760.2245,624.93October 20411,613,152.59246,592.06448,888.1944,443.51November 20411,574,997.18240,724.77438,208.0843,286.56December 20411,537,457.15234,952.21427,716.8742,153.64January 20421,500,523.79229,273.03417,411.5741,044.29February 20421,464,188.51223,685.92407,289.2539,958.06March 20421,428,442.83218,189.57397,347.0138,894.51					
May 20411,813,473.27277,397.63505,229.7850,605.04June 20411,772,106.24271,035.95493,558.8449,320.87July 20411,731,399.90264,775.98482,092.4148,063.13August 20411,691,344.95258,616.28470,827.2546,831.32September 20411,651,932.20252,555.44459,760.2245,624.93October 20411,613,152.59246,592.06448,888.1944,443.51November 20411,574,997.18240,724.77438,208.0843,286.56December 20411,537,457.15234,952.21427,716.8742,153.64January 20421,500,523.79229,273.03417,411.5741,044.29February 20421,464,188.51223,685.92407,289.2539,958.06March 20421,428,442.83218,189.57397,347.0138,894.51					
June 2041       1,772,106.24       271,035.95       493,558.84       49,320.87         July 2041       1,731,399.90       264,775.98       482,092.41       48,063.13         August 2041       1,691,344.95       258,616.28       470,827.25       46,831.32         September 2041       1,651,932.20       252,555.44       459,760.22       45,624.93         October 2041       1,613,152.59       246,592.06       448,888.19       44,443.51         November 2041       1,574,997.18       240,724.77       438,208.08       43,286.56         December 2041       1,537,457.15       234,952.21       427,716.87       42,153.64         January 2042       1,500,523.79       229,273.03       417,411.57       41,044.29         February 2042       1,464,188.51       223,685.92       407,289.25       39,958.06         March 2042       1,428,442.83       218,189.57       397,347.01       38,894.51	-				
July 2041       1,731,399.90       264,775.98       482,092.41       48,063.13         August 2041       1,691,344.95       258,616.28       470,827.25       46,831.32         September 2041       1,651,932.20       252,555.44       459,760.22       45,624.93         October 2041       1,613,152.59       246,592.06       448,888.19       44,443.51         November 2041       1,574,997.18       240,724.77       438,208.08       43,286.56         December 2041       1,537,457.15       234,952.21       427,716.87       42,153.64         January 2042       1,500,523.79       229,273.03       417,411.57       41,044.29         February 2042       1,464,188.51       223,685.92       407,289.25       39,958.06         March 2042       1,428,442.83       218,189.57       397,347.01       38,894.51	•				
August 2041       1,691,344.95       258,616.28       470,827.25       46,831.32         September 2041       1,651,932.20       252,555.44       459,760.22       45,624.93         October 2041       1,613,152.59       246,592.06       448,888.19       44,443.51         November 2041       1,574,997.18       240,724.77       438,208.08       43,286.56         December 2041       1,537,457.15       234,952.21       427,716.87       42,153.64         January 2042       1,500,523.79       229,273.03       417,411.57       41,044.29         February 2042       1,464,188.51       223,685.92       407,289.25       39,958.06         March 2042       1,428,442.83       218,189.57       397,347.01       38,894.51			,		
September 2041       1,651,932.20       252,555.44       459,760.22       45,624.93         October 2041       1,613,152.59       246,592.06       448,888.19       44,443.51         November 2041       1,574,997.18       240,724.77       438,208.08       43,286.56         December 2041       1,537,457.15       234,952.21       427,716.87       42,153.64         January 2042       1,500,523.79       229,273.03       417,411.57       41,044.29         February 2042       1,464,188.51       223,685.92       407,289.25       39,958.06         March 2042       1,428,442.83       218,189.57       397,347.01       38,894.51					
October 2041       1,613,152.59       246,592.06       448,888.19       44,443.51         November 2041       1,574,997.18       240,724.77       438,208.08       43,286.56         December 2041       1,537,457.15       234,952.21       427,716.87       42,153.64         January 2042       1,500,523.79       229,273.03       417,411.57       41,044.29         February 2042       1,464,188.51       223,685.92       407,289.25       39,958.06         March 2042       1,428,442.83       218,189.57       397,347.01       38,894.51	0				· · · · · · · · · · · · · · · · · · ·
November 2041       1,574,997.18       240,724.77       438,208.08       43,286.56         December 2041       1,537,457.15       234,952.21       427,716.87       42,153.64         January 2042       1,500,523.79       229,273.03       417,411.57       41,044.29         February 2042       1,464,188.51       223,685.92       407,289.25       39,958.06         March 2042       1,428,442.83       218,189.57       397,347.01       38,894.51	*	, ,			
December 2041       1,537,457.15       234,952.21       427,716.87       42,153.64         January 2042       1,500,523.79       229,273.03       417,411.57       41,044.29         February 2042       1,464,188.51       223,685.92       407,289.25       39,958.06         March 2042       1,428,442.83       218,189.57       397,347.01       38,894.51					· · · · · · · · · · · · · · · · · · ·
January 2042       1,500,523.79       229,273.03       417,411.57       41,044.29         February 2042       1,464,188.51       223,685.92       407,289.25       39,958.06         March 2042       1,428,442.83       218,189.57       397,347.01       38,894.51		, ,			
February 2042       1,464,188.51       223,685.92       407,289.25       39,958.06         March 2042       1,428,442.83       218,189.57       397,347.01       38,894.51					
March 2042	•			,	
	•				
April 2042	April 2042	1,393,278.39	212,782.68	387,582.00	37,853.21

Distribution Date	Classes QE, QF and QY (in the aggregate)	Classes MA and MY (in the aggregate)	Classes PB and PC (in the aggregate)	Classes HA and HQ (in the aggregate)
May 2042	\$ 1,358,686.94	\$ 207,464.00	\$ 377,991.42	\$ 36,833.74
June 2042	1,324,660.34	202,232.27	368,572.49	35,835.68
July 2042	1,291,190.55	197,086.24	359,322.49	34,858.64
August 2042	1,258,269.64	192,024.71	350,238.73	33,902.20
September 2042	1,225,889.80	187,046.46	341,318.58	32,965.97
October 2042	1,194,043.30	182,150.30	332,559.42	32,049.58
November 2042	1,162,722.53	177,335.07	323,958.69	31,152.63
December 2042	1,131,919.98	172,599.60	315,513.86	30,274.76
January 2043	1,101,628.24	167,942.76	307,222.45	29,415.60
February 2043	1,071,839.98	163,363.41	299,081.99	28,574.80
March 2043	1,042,548.00	158,860.46	291,090.08	27,752.00
April 2043	1,013,745.18	154,432.79	283,244.34	26,946.85
May 2043	985,424.48	150,079.34	275,542.41	26,159.03
June 2043	957,578.99	145,799.03	267,982.00	25,388.18
July 2043	930,201.86	141,590.80	260,560.82	24,634.00
August 2043	903,286.35	137,453.63	253,276.65	23,896.14
September 2043	876,825.79	133,386.48	246,127.27	23,174.31
October 2043	850,813.64	129,388.35	239,110.51	22,468.19
November 2043	825,243.40	125,458.23	232,224.23	21,777.47
December 2043	800,108.68	121,595.15	225,466.32	21,101.86
January 2044	775,403.19	117,798.13	218,834.71	20,441.06
February 2044	751,120.69	114,066.21	212,327.36	19,794.80
March 2044	727,255.06	110,398.46	205,942.24	19,162.77
April 2044	703,800.23	106,793.93	199,677.38	18,544.71
May 2044	680,750.24	103,251.70	193,530.83	17,940.35
June 2044	658,099.19	99,770.88	187,500.65	17,349.42
July 2044	635,841.27	96,350.56	181,584.96	16,771.65
August 2044	613,970.74	92,989.86	175,781.88	16,206.79
September 2044	592,481.95	89,687.91	170,089.59	15,654.58
October 2044		86,443.85	164,506.27	15,034.38
November 2044	571,369.31		,	13,114.78
December 2044	550,627.32	83,256.84	159,030.14	*
	530,250.55	80,126.03	153,659.44	14,071.43
January 2045	510,233.63	77,050.61	148,392.45	13,567.41
February 2045	490,571.30	74,029.75	143,227.47	13,074.84
March 2045	471,258.32	71,062.66	138,162.81	12,593.51
April 2045	452,289.56	68,148.54	133,196.82	12,123.19
May 2045	433,659.94	65,286.61	128,327.89	11,663.66
June 2045	415,364.46	62,476.10	123,554.41	11,214.71
July 2045	397,398.18	59,716.26	118,874.80	10,776.13
August 2045	379,756.23	57,006.32	114,287.51	10,347.71
September 2045	362,433.81	54,345.56	109,791.02	9,929.25
October 2045	345,426.18	51,733.24	105,383.81	9,520.56
November 2045	328,728.67	49,168.64	101,064.41	9,121.43
December 2045	312,336.66	46,651.06	96,831.35	8,731.68
January 2046	296,245.61	44,179.78	92,683.20	8,351.11
February 2046	280,451.03	41,754.13	88,618.55	7,979.55
March 2046	264,948.49	39,373.42	84,635.99	7,616.82

Distribution Date	Classes QE, QF and QY (in the aggregate)	Classes MA and MY (in the aggregate)	Classes PB and PC (in the aggregate)	Classes HA and HQ (in the aggregate)	
April 2046	\$ 249,733.64	\$ 37,036.98	\$ 80,734.16	\$ 7,262.73	
May 2046	234,802.17	34,744.14	76,911.71	6,917.11	
June 2046	220,149.83	32,494.25	73,167.30	6,579.79	
July 2046	205,772.44	30,286.68	69,499.63	6,250.61	
August 2046	191,665.86	28,120.77	65,907.40	5,929.39	
September 2046	177,826.03	25,995.91	62,389.35	5,615.99	
October 2046	164,248.92	23,911.47	58,944.23	5,310.23	
November 2046	150,930.56	21,866.84	55,570.80	5,011.96	
December 2046	137,867.06	19,861.43	52,267.85	4,721.04	
January 2047	125,054.56	17,894.64	49,034.20	4,437.30	
February 2047	112,489.25	15,965.89	45,868.66	4,160.62	
March 2047	100,167.38	14,074.59	42,770.08	3,890.83	
April 2047	88,085.27	12,220.18	39,737.32	3,627.79	
May 2047	76,239.25	10,454.88	36,769.25	3,371.38	
June 2047	64,625.73	8,724.27	33,864.79	3,121.46	
July 2047	53,241.17	7,027.83	31,022.83	2,877.88	
August 2047	42,082.07	5,365.04	28,242.31	2,640.52	
September 2047	31,144.97	3,735.38	25,522.17	2,409.25	
October 2047	20,426.47	2,138.35	22,861.39	2,183.95	
November 2047	9,923.23	832.46	20,258.93	1,964.48	
December 2047	0.00	0.00	17,713.80	1,750.74	
January 2048	0.00	0.00	15,225.00	1,542.59	
February 2048	0.00	0.00	12,791.56	1,339.92	
March 2048	0.00	0.00	10,412.52	1,142.63	
April 2048	0.00	0.00	8,086.95	950.59	
May 2048	0.00	0.00	5,813.90	763.69	
June 2048	0.00	0.00	3,592.48	581.83	
July 2048	0.00	0.00	1,421.76	404.90	
August 2048	0.00	0.00	0.00	232.80	
September 2048	0.00	0.00	0.00	65.42	
October 2048 and thereafter	0.00	0.00	0.00	0.00	

Distribution Date	Classes BK and BP (in the aggregate)	Classes EK and EP (in the aggregate)	Classes UA and UQ (in the aggregate)
Initial Balance	\$40,495,875.00	\$34,774,444.00	\$4,906,000.00
April 2019	40,266,983.99	34,629,366.40	4,893,965.70
May 2019	40,022,437.72	34,470,908.16	4,880,147.51
June 2019	39,762,374.97	34,299,128.73	4,864,551.34
July 2019	39,486,949.30	34,114,099.46	4,847,184.67
August 2019	39,196,328.93	33,915,903.58	4,828,056.60
September 2019	38,890,696.57	33,704,636.12	4,807,177.82
October 2019	38,570,249.18	33,480,403.84	4,784,560.59
November 2019	38,235,197.83	33,243,325.16	4,760,218.77
December 2019	37,885,767.36	32,993,530.05	4,734,167.78
January 2020	37,522,196.21	32,731,159.88	4,706,424.59
February 2020	37,144,736.07	32,456,367.32	4,677,007.71
March 2020	36,753,651.59	32,169,316.14	4,645,937.17
April 2020	36,349,220.07	31,870,181.06	4,613,234.51
May 2020	35,931,731.08	31,559,147.55	4,578,922.74
June 2020	35,501,486.10	31,236,411.61	4,543,026.31
July 2020	35,058,798.12	30,902,179.56	4,505,571.11
August 2020	34,603,991.26	30,556,667.78	4,466,584.41
September 2020	34,137,400.29	30,200,102.46	4,426,094.87
October 2020	33,659,370.24	29,832,719.33	4,384,132.44
November 2020	33,170,255.90	29,454,763.35	4,340,728.39
December 2020	32,670,421.34	29,066,488.45	4,295,915.23
January 2021	32,160,239.43	28,668,157.15	4,249,726.70
February 2021	31,640,091.34	28,260,040.29	4,202,197.70
March 2021	31,124,945.64	27,842,416.66	4,153,364.26
April 2021	30,614,749.54	27,415,572.61	4,103,263.49
May 2021	30,109,450.79	26,979,801.75	4,051,933.55
June 2021	29,608,997.66	26,535,404.53	3,999,413.56
July 2021	29,113,338.93	26,094,832.45	3,945,743.61
August 2021	28,622,423.90	25,658,046.94	3,892,598.78
September 2021	28,136,202.34	25,225,009.77	3,839,974.09
October 2021	27,654,624.56	24,795,683.04	3,787,864.60
November 2021	27,177,641.35	24,370,029.25	3,736,265.44
December 2021	26,705,203.97	23,948,011.19	3,685,171.75
January 2022	26,237,264.18	23,529,592.03	3,634,578.75
February 2022	25,773,774.23	23,114,735.26	3,584,481.68
March 2022	25,314,686.82	22,703,404.71	3,534,875.83
April 2022	24,859,955.14	22,295,564.54	3,485,756.54
May 2022	24,409,532.83	21,891,179.24	3,437,119.20
June 2022	23,963,374.00	21,490,213.62	3,388,959.23
July 2022	23,521,433.21	21,092,632.82	3,341,272.09
August 2022	23,083,665.48	20,698,402.31	3,294,053.29
September 2022	22,650,026.26	20,307,487.85	3,247,298.38
October 2022	22,220,471.46	19,919,855.53	3,201,002.96
November 2022	21,794,957.42	19,535,471.74	3,155,162.67
December 2022	21,373,440.91	19,154,303.21	3,109,773.17
January 2023	20,955,879.13	18,776,316.93	3,064,830.17
February 2023	20,542,229.72	18,401,480.22	3,020,329.45

Distribution Date	Classes BK and BP (in the aggregate)	Classes EK and EP (in the aggregate)	Classes UA and UQ (in the aggregate)
March 2023	\$20,132,450.71	\$18,029,760.69	\$2,976,266.78
April 2023	19,726,500.58	17,661,126.25	2,932,638.01
May 2023	19,324,338.19	17,295,545.10	2,889,439.01
June 2023	18,925,922.84	16,932,985.73	2,846,665.69
July 2023	18,531,214.22	16,573,416.93	2,804,314.00
August 2023	18,140,172.41	16,216,807.76	2,762,379.93
September 2023	17,752,757.89	15,863,127.56	2,720,859.50
October 2023	17,368,931.54	15,512,345.97	2,679,748.78
November 2023	16,988,654.64	15,164,432.89	2,639,043.86
December 2023	16,611,888.81	14,819,358.51	2,598,740.89
January 2024	16,238,596.11	14,477,093.26	2,558,836.03
February 2024	15,868,738.92	14,137,607.89	2,519,325.50
March 2024	15,505,945.94	13,800,873.36	2,480,205.53
April 2024	15,151,286.05	13,466,860.95	2,441,472.40
May 2024	14,804,579.48	13,139,579.36	2,403,122.43
June 2024	14,465,650.42	12,820,120.40	2,365,151.98
July 2024	14,134,326.88	12,508,299.35	2,327,557.41
August 2024	13,810,440.65	12,203,935.82	2,290,335.14
September 2024	13,493,827.20	11,906,853.65	2,253,481.63
October 2024	13,184,325.57	11,616,880.78	2,216,993.36
November 2024	12,881,778.38	11,333,849.21	2,180,866.84
December 2024	12,586,031.64	11,057,594.85	2,145,098.63
January 2025	12,296,934.76	10,787,957.45	2,109,685.30
February 2025	12,014,340.45	10,524,780.54	2,074,623.46
March 2025	11,738,104.64	10,267,911.29	2,039,909.77
April 2025	11,468,086.41	10,017,200.45	2,005,540.90
May 2025	11,204,147.94	9,772,502.29	1,971,513.55
June 2025	10,946,154.42	9,533,674.47	1,937,824.46
July 2025	10,693,974.00	9,300,578.00	1,904,470.40
August 2025	10,447,477.73	9,073,077.16	1,871,448.18
September 2025	10,206,539.46	8,851,039.38	1,838,754.61
October 2025	9,971,035.85	8,634,335.23	1,806,386.57
November 2025	9,740,846.23	8,422,838.30	1,774,340.93
December 2025	9,515,852.60	8,216,425.15	1,742,614.61
January 2026	9,295,939.52	8,014,975.25	1,711,204.57
February 2026	9,080,994.12	7,818,370.87	1,680,107.77
March 2026	8,870,905.98	7,626,497.07	1,649,503.76
April 2026	8,665,567.13	7,439,241.60	1,619,438.01
May 2026	8,464,871.96	7,256,494.84	1,589,901.26
June 2026	8,268,717.17	7,078,149.76	1,560,884.40
July 2026	8,077,001.73	6,904,101.82	1,532,378.49
August 2026	7,889,626.86	6,734,248.96	1,504,374.73
September 2026	7,706,495.92	6,568,491.51	1,476,864.47
October 2026	7,527,514.41	6,406,732.13	1,449,839.20
November 2026	7,352,589.89	6,248,875.81	1,423,290.56
December 2026	7,181,631.99	6,094,829.72	1,397,210.35
January 2027	7,014,552.29	5,944,503.24	1,371,590.47
February 2027	6,851,264.33	5,797,807.90	1,346,423.00

Distribution Date	Classes BK and BP (in the aggregate)	Classes EK and EP (in the aggregate)	Classes UA and UQ (in the aggregate)
March 2027	\$ 6,691,683.57	\$ 5,654,657.27	\$1,321,700.13
April 2027	6,535,727.29	5,514,966.99	1,297,414.19
May 2027	6,383,314.65	5,378,654.67	1,273,557.63
June 2027	6,234,366.53	5,245,639.87	1,250,123.03
July 2027	6,088,805.59	5,115,844.02	1,227,103.13
August 2027	5,946,556.19	4,989,190.42	1,204,490.74
September 2027	5,807,544.35	4,865,604.19	1,182,278.82
October 2027	5,671,697.72	4,745,012.18	1,160,460.47
November 2027	5,538,945.54	4,627,342.99	1,139,028.86
December 2027	5,409,218.64	4,512,526.90	1,117,977.31
January 2028	5,282,449.34	4,400,495.82	1,097,299.26
February 2028	5,158,571.46	4,291,183.29	1,076,988.22
March 2028	5,037,520.31	4,184,524.38	1,057,037.86
April 2028	4,919,232.59	4,080,455.74	1,037,441.92
May 2028	4,803,646.42	3,978,915.47	1,018,194.28
June 2028	4,690,701.28	3,879,843.16	999,288.89
July 2028	4,580,337.99	3,783,179.81	980,719.82
August 2028	4,472,498.67	3,688,867.83	962,481.24
September 2028	4,367,126.73	3,596,850.98	944,567.43
October 2028	4,264,166.83	3,507,074.34	926,972.75
November 2028	4,163,564.83	3,419,484.30	909,691.67
December 2028	4,065,267.82	3,334,028.51	892,718.74
January 2029	3,969,224.05	3,250,655.88	876,048.60
February 2029	3,875,382.90	3,169,316.48	859,676.02
March 2029	3,783,694.89	3,089,961.62	843,595.81
April 2029	3,694,111.63	3,012,543.71	827,802.89
May 2029	3,606,585.79	2,937,016.32	812,292.27
June 2029	3,521,071.11	2,863,334.10	797,059.05
July 2029	3,437,522.33	2,791,452.79	782,098.40
August 2029	3,355,895.21	2,721,329.16	767,405.57
September 2029	3,276,146.49	2,652,921.01	752,975.91
October 2029	3,198,233.86	2,586,187.15	738,804.84
November 2029	3,122,115.96	2,521,087.36	724,887.84
December 2029	3,047,752.33	2,457,582.36	711,220.50
January 2030	2,975,103.42	2,395,633.82	697,798.47
February 2030	2,904,130.56	2,335,204.31	684,617.47
March 2030	2,834,795.94	2,276,257.30	671,673.29
April 2030	2,767,062.57	2,218,757.09	658,961.80
May 2030	2,700,894.31	2,162,668.88	646,478.95
June 2030	2,636,255.81	2,107,958.66	634,220.75
July 2030	2,573,112.49	2,054,593.23	622,183.27
August 2030	2,511,430.57	2,002,540.19	610,362.65
September 2030	2,451,176.98	1,951,767.90	598,755.11
October 2030	2,392,319.44	1,902,245.49	587,356.93
November 2030	2,334,826.34	1,853,942.80	576,164.44
December 2030	2,278,666.79	1,806,830.39	565,174.04
January 2031	2,223,810.60	1,760,879.54	554,382.20
February 2031	2,170,228.23	1,716,062.20	543,785.45

Distribution Date	Classes BK and BP (in the aggregate)	Classes EK and EP (in the aggregate)	Classes UA and UQ (in the aggregate)
March 2031	\$ 2,117,890.82	\$ 1,672,350.98	\$ 533,380.36
April 2031	2,066,770.13	1,629,719.15	523,163.59
May 2031	2,016,838.57	1,588,140.62	513,131.83
June 2031	1,968,069.16	1,547,589.92	503,281.83
July 2031	1,920,435.51	1,508,042.18	493,610.42
August 2031	1,873,911.83	1,469,473.12	484,114.46
September 2031	1,828,472.90	1,431,859.05	474,790.86
October 2031	1,784,094.07	1,395,176.84	465,636.61
November 2031	1,740,751.23	1,359,403.91	456,648.74
December 2031	1,698,420.81	1,324,518.22	447,824.31
January 2032	1,657,079.79	1,290,498.26	439,160.45
February 2032	1,616,705.62	1,257,323.01	430,654.35
March 2032	1,577,276.29	1,224,972.00	422,303.23
April 2032	1,538,770.27	1,193,425.19	414,104.35
May 2032	1,501,166.52	1,162,663.06	406,055.06
June 2032	1,464,444.45	1,132,666.55	398,152.69
July 2032	1,428,583.95	1,103,417.04	390,394.68
August 2032	1,393,565.35	1,074,896.38	382,778.48
September 2032	1,359,369.43	1,047,086.81	375,301.58
October 2032	1,325,977.39	1,019,971.05	367,961.53
November 2032	1,293,370.86	993,532.20	360,755.92
December 2032	1,261,531.87	967,753.76	353,682.37
January 2033	1,230,442.87	942,619.65	346,738.55
February 2033	1,200,086.70	918,114.16	339,922.16
March 2033	1,170,446.56	894,221.95	333,230.97
April 2033	1,141,506.06	870,928.07	326,662.75
May 2033	1,113,249.16	848,217.89	320,215.33
June 2033	1,085,660.19	826,077.18	313,886.57
July 2033	1,058,723.82	804,492.01	307,674.37
August 2033	1,032,425.08	783,448.80	301,576.66
September 2033	1,006,749.31	762,934.31	295,591.42
October 2033	981,682.22	742,935.59	289,716.66
November 2033	957,209.80	723,440.03	283,950.42
December 2033	933,318.38	704,435.29	278,290.76
January 2034	909,994.60	685,909.35	272,735.80
February 2034	887,225.39	667,850.49	267,283.68
March 2034	864,997.97	650,247.23	261,932.58
April 2034	843,299.85	633,088.41	256,680.69
May 2034	822,118.85	616,363.11	251,526.25
June 2034	801,443.02	600,060.69	246,467.53
July 2034	781,260.71	584,170.76	241,502.83
August 2034	761,560.52	568,683.17	236,630.47
September 2034	742,331.32	553,588.03	231,848.81
October 2034	723,562.21	538,875.68	227,156.23
November 2034	705,242.55	524,536.71	222,551.14
December 2034	687,361.96	510,561.90	218,031.99
January 2035	669,910.25	496,942.29	213,597.23
February 2035	652,877.49	483,669.12	209,245.36

Distribution Date	sses BK and BP the aggregate)	sses EK and EP the aggregate)	Clas	ses UA and UQ the aggregate)
March 2035	\$ 636,253.98	\$ 470,733.84	\$	204,974.90
April 2035	620,030.21	458,128.11		200,784.39
May 2035	604,196.93	445,843.79		196,672.41
June 2035	588,745.05	433,872.94		192,637.55
July 2035	573,665.72	422,207.81		188,678.43
August 2035	558,950.29	410,840.84		184,793.70
September 2035	544,590.27	399,764.64		180,982.01
October 2035	530,577.42	388,972.02		177,242.06
November 2035	516,903.63	378,455.95		173,572.57
December 2035	503,561.02	368,209.57		169,972.26
January 2036	490,541.86	358,226.20		166,439.90
February 2036	477,838.61	348,499.31		162,974.27
March 2036	465,443.89	339,022.52		159,574.17
April 2036	453,350.50	329,789.62		156,238.41
May 2036	441,551.39	320,794.56		152,965.84
June 2036	430,039.69	312,031.40		149,755.33
July 2036	418,808.67	303,494.38		146,605.75
August 2036	407,851.75	295,177.88		143,516.00
September 2036	397,162.53	287,076.38		140,485.01
October 2036	386,734.71	279,184.53		137,511.72
November 2036	376,562.17	271,497.10		134,595.09
December 2036	366,638.92	264,008.99		131,734.08
January 2037	356,959.10	256,715.21		128,927.70
February 2037	347,517.00	249,610.91		126,174.96
March 2037	338,307.01	242,691.35		123,474.89
April 2037	329,323.67	235,951.90		120,826.53
May 2037	320,561.66	229,388.05		118,228.95
June 2037	312,015.75	222,995.41		115,681.22
July 2037	303,680.84	216,769.67		113,182.44
August 2037	295,551.96	210,706.65		110,731.73
September 2037	287,624.24	204,802.26		108,328.21
October 2037	279,892.93	199,052.52		105,971.02
November 2037	272,353.38	193,453.54		103,659.33
December 2037	265,001.05	188,001.52		101,392.29
January 2038	257,831.51	182,692.77		99,169.10
February 2038	250,840.43	177,523.67		96,988.97
March 2038	244,023.57	172,490.70		94,851.10
April 2038	237,376.80	167,590.42		92,754.72
May 2038	230,896.07	162,819.50		90,699.09
June 2038	224,577.45	158,174.65		88,683.44
July 2038	218,417.08	153,652.69		86,707.06
August 2038	212,411.17	149,250.51		84,769.22
September 2038	206,556.07	144,965.07		82,869.22
October 2038	200,848.17	140,793.42		81,006.37
November 2038	195,283.95	136,732.68		79,179.98
December 2038	189,859.99	132,780.02		77,389.39
January 2039	184,572.93	128,932.69		75,633.94
February 2039	179,419.51	125,188.04		73,912.98

Distribution Date	sses BK and BP the aggregate)	sses EK and EP the aggregate)	Class (in t	ses UA and UQ the aggregate)
March 2039	\$ 174,396.51	\$ 121,543.43	\$	72,225.88
April 2039	169,500.81	117,996.32		70,572.02
May 2039	164,729.37	114,544.24		68,950.79
June 2039	160,079.19	111,184.75		67,361.58
July 2039	155,547.37	107,915.49		65,803.81
August 2039	151,131.07	104,734.15		64,276.89
September 2039	146,827.49	101,638.50		62,780.25
October 2039	142,633.93	98,626.33		61,313.35
November 2039	138,547.73	95,695.52		59,875.62
December 2039	134,566.31	92,843.96		58,466.52
January 2040	130,687.13	90,069.64		57,085.54
February 2040	126,907.72	87,370.57		55,732.14
March 2040	123,225.68	84,744.81		54,405.81
April 2040	119,638.63	82,190.48		53,106.06
May 2040	116,144.29	79,705.74		51,832.39
June 2040	112,740.39	77,288.80		50,584.31
July 2040	109,424.75	74,937.90		49,361.35
August 2040	106,195.22	72,651.35		48,163.04
September 2040	103,049.70	70,427.49		46,988.93
October 2040	99,986.15	68,264.68		45,838.55
November 2040	97,002.57	66,161.35		44,711.47
December 2040	94,097.02	64,115.97		43,607.26
January 2041	91,267.57	62,127.02		42,525.48
February 2041	88,512.38	60,193.04		41,465.71
March 2041	85,829.62	58,312.60		40,427.55
April 2041	83,217.53	56,484.32		39,410.59
May 2041	80,674.36	54,706.83		38,414.43
June 2041	78,198.43	52,978.80		37,438.68
July 2041	75,788.08	51,298.96		36,482.96
August 2041	73,441.70	49,666.04		35,546.89
September 2041	71,157.72	48,078.81		34,630.10
October 2041	68,934.59	46,536.07		33,732.23
November 2041	66,770.81	45,036.67		32,852.92
December 2041	64,664.93	43,579.47		31,991.82
January 2042	62,615.49	42,163.35		31,148.59
February 2042	60,621.12	40,787.24		30,322.89
March 2042	58,680.44	39,450.09		29,514.38
April 2042	56,792.11	38,150.86		28,722.75
May 2042	54,954.84	36,888.56		27,947.67
June 2042	53,167.36	35,662.22		27,188.83
July 2042	51,428.43	34,470.88		26,445.91
August 2042	49,736.83	33,313.61		25,718.63
September 2042	48,091.39	32,189.52		25,006.67
October 2042	46,490.95	31,097.72		24,309.75
November 2042	44,934.38	30,037.36		23,627.58
December 2042	43,420.58	29,007.60		22,959.87
January 2043	41,948.48	28,007.62		22,306.36
February 2043	40,517.03	27,036.64		21,666.77

Distribution Date	ses BK and BP he aggregate)	ses EK and EP he aggregate)	ses UA and UQ the aggregate)
March 2043	\$ 39,125.22	\$ 26,093.87	\$ 21,040.84
April 2043	37,772.03	25,178.57	20,428.30
May 2043	36,456.50	24,289.99	19,828.89
June 2043	35,177.67	23,427.43	19,242.36
July 2043	33,934.62	22,590.18	18,668.47
August 2043	32,726.44	21,777.57	18,106.98
September 2043	31,552.24	20,988.92	17,557.63
October 2043	30,411.16	20,223.60	17,020.21
November 2043	29,302.37	19,480.98	16,494.47
December 2043	28,225.02	18,760.44	15,980.20
January 2044	27,178.33	18,061.39	15,477.16
February 2044	26,161.52	17,383.23	14,985.15
March 2044	25,173.80	16,725.42	14,503.95
April 2044	24,214.45	16,087.39	14,033.34
May 2044	23,282.73	15,468.60	13,573.13
June 2044	22,377.93	14,868.54	13,123.11
July 2044	21,499.36	14,286.68	12,683.07
August 2044	20,646.34	13,722.54	12,252.84
September 2044	19,818.21	13,175.62	11,832.21
October 2044	19,014.33	12,645.46	11,421.00
November 2044	18,234.07	12,131.59	11,019.01
December 2044	17,476.81	11,633.57	10,626.08
January 2045	16,741.96	11,150.96	10,242.03
February 2045	16,028.94	10,683.33	9,866.67
March 2045	15,337.17	10,230.27	9,499.84
April 2045	14,666.10	9,791.38	9,141.37
May 2045	14,015.19	9,366.26	8,791.09
June 2045	13,383.91	8,954.53	8,448.85
July 2045	12,771.74	8,555.82	8,114.47
August 2045	12,178.17	8,169.77	7,787.82
September 2045	11,602.73	7,796.01	7,468.73
October 2045	11,044.93	7,434.21	7,157.05
November 2045	10,504.30	7,084.03	6,852.63
December 2045	9,980.39	6,745.15	6,555.34
January 2046	9,472.75	6,417.24	6,265.03
February 2046	8,980.95	6,100.00	5,981.55
March 2046	8,504.57	5,793.12	5,704.78
April 2046	8,043.19	5,496.32	5,434.57
May 2046	7,596.42	5,209.30	5,170.80
June 2046	7,163.86	4,931.79	4,913.34
July 2046	6,745.12	4,663.51	4,662.05
August 2046	6,339.84	4,404.21	4,416.82
September 2046	5,947.66	4,153.63	4,177.52
October 2046	5,568.21	3,911.51	3,944.03
November 2046	5,201.15	3,677.61	3,716.24
December 2046	4,846.15	3,451.70	3,494.02
January 2047	4,502.87	3,233.55	3,277.27
February 2047	4,171.00	3,022.92	3,065.87

Distribution Date	es BK and BP ne aggregate)	Classes EK and EP (in the aggregate)		es UA and UQ ne aggregate)
March 2047	\$ 3,850.22	\$ 2,819.61	\$	2,859.72
April 2047	3,540.23	2,623.40		2,658.70
May 2047	3,240.73	2,434.08		2,462.71
June 2047	2,951.43	2,251.45		2,271.66
July 2047	2,672.06	2,075.32		2,085.43
August 2047	2,402.32	1,905.49		1,903.92
September 2047	2,141.97	1,741.78		1,727.05
October 2047	1,890.73	1,584.01		1,554.71
November 2047	1,648.34	1,432.00		1,386.81
December 2047	1,414.57	1,285.59		1,223.26
January 2048	1,189.17	1,144.60		1,063.97
February 2048	971.91	1,008.87		908.85
March 2048	762.54	878.25		757.81
April 2048	560.86	752.58		610.76
May 2048	366.64	631.71		467.63
June 2048	179.67	515.50		328.33
July 2048	0.00	403.81		192.78
August 2048	0.00	296.51		60.91
September 2048	0.00	193.44		0.00
October 2048	0.00	94.50		0.00
November 2048 and thereafter	0.00	0.00		0.00

Distribution Date	Classes JA and JZ (in the aggregate)	Classes PA, PE, PF and PG (in the aggregate)	Classes KA, KE and KF (in the aggregate)
Initial Balance	\$81,310,000.00	\$114,715,000.00	\$39,167,000.00
April 2019	80,669,219.24	113,670,564.45	38,883,736.77
May 2019	79,991,150.62	112,577,429.33	38,588,136.13
June 2019	79,276,318.52	111,436,347.78	38,280,349.47
July 2019	78,525,290.19	110,248,121.82	37,960,537.43
August 2019	77,738,674.97	109,013,601.34	37,628,869.76
September 2019	76,917,123.49	107,733,682.98	37,285,525.15
October 2019	76,061,326.72	106,409,308.93	36,930,691.04
November 2019	75,172,015.01	105,041,465.69	36,564,563.42
December 2019	74,249,956.97	103,631,182.64	36,187,346.67
January 2020	73,295,958.32	102,179,530.70	35,799,253.30
February 2020	72,310,860.66	100,687,620.74	35,400,503.71
March 2020	71,295,540.17	99,156,602.05	34,991,326.02
April 2020	70,250,906.20	97,587,660.67	34,571,955.76
May 2020	69,177,899.86	95,982,017.67	34,142,635.64
June 2020	68,077,492.46	94,340,927.40	33,703,615.28
July 2020	66,950,684.00	92,665,675.61	33,255,150.94
August 2020	65,798,501.46	90,957,577.61	32,797,505.21
September 2020	64,621,997.18	89,266,294.24	32,343,057.91
October 2020	63,422,247.08	87,591,631.35	31,891,780.94
November 2020	62,236,562.04	85,933,396.83	31,443,646.42
December 2020	61,064,764.39	84,291,400.61	30,998,626.66
January 2021	59,906,678.58	82,665,454.63	30,556,694.21
February 2021	58,762,131.23	81,055,372.83	30,117,821.80
March 2021	57,630,951.03	79,460,971.11	29,681,982.38
April 2021	56,512,968.80	77,882,067.32	29,249,149.11
May 2021	55,408,017.36	76,318,481.22	28,819,295.34
June 2021	54,315,931.61	74,770,034.50	28,392,394.61
July 2021	53,236,548.43	73,236,550.72	27,968,420.69
August 2021	52,169,706.68	71,717,855.31	27,547,347.51
September 2021	51,115,247.20	70,213,775.54	27,129,149.22
October 2021	50,073,012.74	68,724,140.51	26,713,800.17
November 2021	49,042,847.98	67,248,781.11	26,301,274.88
December 2021	48,024,599.47	65,787,530.03	25,891,548.08
January 2022	47,018,115.64	64,340,221.73	25,484,594.66
February 2022	46,023,246.75	62,906,692.40	25,080,389.75
March 2022	45,039,844.88	61,486,779.97	24,678,908.60
April 2022	44,067,763.93	60,080,324.07	24,280,126.71
May 2022	43,106,859.54	58,687,166.03	23,884,019.72
June 2022	42,156,989.13	57,307,148.83	23,490,563.46
July 2022	41,218,011.83	55,940,117.15	23,099,733.95
August 2022	40,289,788.51	54,585,917.25	22,711,507.38
September 2022	39,372,181.72	53,244,397.05	22,325,860.13
October 2022	38,465,055.66	51,915,406.05	21,942,768.74
November 2022	37,568,276.20	50,598,795.34	21,562,209.93
December 2022	36,681,710.83	49,294,417.59	21,184,160.60
January 2023	35,805,228.67	48,002,126.98	20,808,597.81

Distribution Date	Classes JA and JZ (in the aggregate)	Classes PA, PE, PF and PG (in the aggregate)	Classes KA, KE and KF (in the aggregate)
February 2023	\$34,938,700.41	\$ 46,721,779.27	\$20,435,498.80
March 2023	34,081,998.30	45,453,231.71	20,064,840.98
April 2023	33,234,996.17	44,206,255.58	19,696,601.91
May 2023	32,397,569.37	42,993,068.70	19,330,759.34
June 2023	31,569,594.77	41,812,764.01	18,967,291.16
July 2023	30,758,914.15	40,664,458.61	18,606,175.46
August 2023	29,968,763.96	39,547,293.12	18,247,390.45
September 2023	29,198,629.54	38,460,431.10	17,890,914.53
October 2023	28,448,009.01	37,403,058.40	17,536,726.24
November 2023	27,716,412.97	36,374,382.57	17,184,804.29
December 2023	27,003,364.23	35,373,632.34	16,835,127.56
January 2024	26,308,397.45	34,400,056.96	16,487,675.05
February 2024	25,631,058.89	33,452,925.74	16,144,702.61
March 2024	24,970,906.10	32,531,527.51	15,808,697.22
April 2024	24,327,507.65	31,635,170.03	15,479,519.63
May 2024	23,700,442.86	30,763,179.59	15,157,033.30
June 2024	23,089,301.52	29,914,900.44	14,841,104.44
July 2024	22,493,683.64	29,089,694.34	14,531,601.86
August 2024	21,913,199.21	28,286,940.10	14,228,396.98
September 2024	21,347,467.93	27,506,033.14	13,931,363.78
October 2024	20,796,118.97	26,746,385.01	13,640,378.72
November 2024	20,258,790.76	26,007,422.99	13,355,320.69
December 2024	19,735,130.73	25,288,589.67	13,076,070.99
January 2025	19,224,795.13	24,589,342.54	12,802,513.28
February 2025	18,727,448.74	23,909,153.60	12,534,533.51
March 2025	18,242,764.74	23,247,508.95	12,272,019.88
April 2025	17,770,424.45	22,603,908.45	12,014,862.82
May 2025	17,310,117.13	21,977,865.32	11,762,954.92
June 2025	16,861,539.82	21,368,905.84	11,516,190.90
July 2025	16,424,397.10	20,776,568.92	11,274,467.58
August 2025	15,998,400.94	20,200,405.85	11,037,683.79
September 2025	15,583,270.50	19,639,979.90	10,805,740.41
October 2025	15,178,731.94	19,094,866.05	10,578,540.24
November 2025	14,784,518.27	18,564,650.65	10,355,988.04
December 2025	14,400,369.18	18,048,931.15	10,137,990.45
January 2026	14,026,030.85	17,547,315.75	9,924,455.94
February 2026	13,661,255.80	17,059,423.18	9,715,294.84
March 2026	13,305,802.75	16,584,882.36	9,510,419.22
April 2026	12,959,436.45	16,123,332.17	9,309,742.90
May 2026	12,621,927.52	15,674,421.18	9,113,181.43
June 2026	12,293,052.32	15,237,807.36	8,920,652.02
July 2026	11,972,592.82	14,813,157.86	8,732,073.54
August 2026	11,660,336.43	14,400,148.77	8,547,366.45
September 2026	11,356,075.87	13,998,464.85	8,366,452.79
October 2026	11,059,609.07	13,607,799.35	8,189,256.18
November 2026	10,770,739.01	13,227,853.70	8,015,701.72
December 2026	10,489,273.58	12,858,337.41	7,845,716.03

Distribution Date	Classes JA and JZ (in the aggregate)	Classes PA, PE, PF and PG (in the aggregate)	Classes KA, KE and KF (in the aggregate)
January 2027	\$10,215,025.53	\$ 12,498,967.73	\$ 7,679,227.16
February 2027	9,947,812.25	12,149,469.54	7,516,164.61
March 2027	9,687,455.72	11,809,575.10	7,356,459.27
April 2027	9,433,782.40	11,479,023.86	7,200,043.42
May 2027	9,186,623.08	11,157,562.26	7,046,850.67
June 2027	8,945,812.79	10,844,943.59	6,896,815.97
July 2027	8,711,190.71	10,540,927.72	6,749,875.54
August 2027	8,482,600.02	10,245,281.03	6,605,966.89
September 2027	8,259,887.88	9,957,776.14	6,465,028.77
October 2027	8,042,905.25	9,678,191.80	6,327,001.15
November 2027	7,831,506.83	9,406,312.74	6,191,825.18
December 2027	7,625,550.99	9,141,929.43	6,059,443.20
January 2028	7,424,899.63	8,884,838.02	5,929,798.70
February 2028	7,229,418.12	8,634,840.14	5,802,836.28
March 2028	7,038,975.23	8,391,742.75	5,678,501.66
April 2028	6,853,443.01	8,155,358.02	5,556,741.65
May 2028	6,672,696.71	7,925,503.17	5,437,504.08
June 2028	6,496,614.75	7,702,000.35	5,320,737.88
July 2028	6,325,078.58	7,484,676.50	5,206,392.94
August 2028	6,157,972.63	7,273,363.25	5,094,420.20
September 2028	5,995,184.25	7,067,896.72	4,984,771.54
October 2028	5,836,603.60	6,868,117.50	4,877,399.82
November 2028	5,682,123.63	6,673,870.44	4,772,258.85
December 2028	5,531,639.97	6,485,004.60	4,669,303.34
January 2029	5,385,050.86	6,301,373.11	4,568,488.91
February 2029	5,242,257.13	6,122,833.06	4,469,772.10
March 2029	5,103,162.08	5,949,245.40	4,373,110.27
April 2029	4,967,671.47	5,780,474.83	4,278,461.65
May 2029	4,835,693.41	5,616,389.71	4,185,785.33
June 2029	4,707,138.35	5,456,861.97	4,095,041.18
July 2029	4,581,918.97	5,301,766.97	4,006,189.90
August 2029	4,459,950.16	5,150,983.46	3,919,192.96
September 2029	4,341,148.97	5,004,393.47	3,834,012.61
October 2029	4,225,434.52	4,861,882.22	3,750,611.86
November 2029	4,112,727.98	4,723,338.01	3,668,954.45
December 2029	4,002,952.50	4,588,652.21	3,589,004.85
January 2030	3,896,033.19	4,457,719.08	3,510,728.24
February 2030	3,791,897.03	4,330,435.77	3,434,090.51
March 2030	3,690,472.85	4,206,702.22	3,359,058.22
April 2030	3,591,691.27	4,086,421.06	3,285,598.60
May 2030	3,495,484.68	3,969,497.57	3,213,679.55
June 2030	3,401,787.16	3,855,839.60	3,143,269.59
July 2030	3,310,534.45	3,745,357.49	3,074,337.91
August 2030	3,221,663.95	3,637,964.01	3,006,854.28
September 2030	3,135,114.60	3,533,574.31	2,940,789.09
October 2030	3,050,826.90	3,432,105.81	2,876,113.34
November 2030	2,968,742.87	3,333,478.22	2,812,798.59

Distribution Date	Classes JA and JZ (in the aggregate)	Classes PA, PE, PF and PG (in the aggregate)	Classes KA, KE and KF (in the aggregate)
December 2030	\$ 2,888,805.98	\$ 3,237,613.37	\$ 2,750,816.98
January 2031	2,810,961.14	3,144,435.27	2,690,141.22
February 2031	2,735,154.63	3,053,869.96	2,630,744.56
March 2031	2,661,334.13	2,965,845.49	2,572,600.77
April 2031	2,589,448.61	2,880,291.87	2,515,684.18
May 2031	2,519,448.35	2,797,141.02	2,459,969.61
June 2031	2,451,284.89	2,716,326.70	2,405,432.41
July 2031	2,384,910.99	2,637,784.48	2,352,048.41
August 2031	2,320,280.61	2,561,451.68	2,299,793.92
September 2031	2,257,348.89	2,487,267.31	2,248,645.75
October 2031	2,196,072.09	2,415,172.07	2,198,581.16
November 2031	2,136,407.59	2,345,108.25	2,149,577.87
December 2031	2,078,313.84	2,277,019.71	2,101,614.05
January 2032	2,021,750.37	2,210,851.87	2,054,668.32
February 2032	1,966,677.71	2,146,551.61	2,008,719.72
March 2032	1,913,057.41	2,084,067.25	1,963,747.72
April 2032	1,860,851.98	2,023,348.55	1,919,732.19
May 2032	1,810,024.91	1,964,346.61	1,876,653.42
June 2032	1,760,540.58	1,907,013.90	1,834,492.10
July 2032	1,712,364.32	1,851,304.14	1,793,229.30
August 2032	1,665,462.31	1,797,172.35	1,752,846.47
September 2032	1,619,801.60	1,744,574.76	1,713,325.45
October 2032	1,575,350.08	1,693,468.82	1,674,648.44
November 2032	1,532,076.45	1,643,813.10	1,636,797.99
December 2032	1,489,950.22	1,595,567.35	1,599,757.02
January 2033	1,448,941.67	1,548,692.38	1,563,508.78
February 2033	1,409,021.84	1,503,150.10	1,528,036.87
March 2033	1,370,162.50	1,458,903.45	1,493,325.22
April 2033	1,332,336.14	1,415,916.38	1,459,358.08
May 2033	1,295,515.97	1,374,153.84	1,426,120.02
June 2033	1,259,675.86	1,333,581.74	1,393,595.93
July 2033	1,224,790.37	1,294,166.90	1,361,771.00
August 2033	1,190,834.68	1,255,877.07	1,330,630.71
September 2033	1,157,784.64	1,218,680.89	1,300,160.87
October 2033	1,125,616.68	1,182,547.85	1,270,347.53
November 2033	1,094,307.86	1,147,448.27	1,241,177.06
December 2033	1,063,835.81	1,113,353.29	1,212,636.09
January 2034	1,034,178.75	1,080,234.85	1,184,711.53
February 2034	1,005,315.44	1,048,065.65	1,157,390.54
March 2034	977,225.18	1,016,819.15	1,130,660.56
April 2034	949,887.82	986,469.54	1,104,509.28
May 2034	923,283.72	956,991.69	1,078,924.63
June 2034	897,393.72	928,361.21	1,053,894.80
July 2034	872,199.19	900,554.35	1,029,408.21
August 2034	847,681.94	873,548.01	1,005,453.52
September 2034	823,824.27	847,319.74	982,019.62
October 2034	800,608.92	821,847.70	959,095.63

Distribution Date	Classes JA and JZ (in the aggregate)	Classes PA, PE, PF and PG (in the aggregate)	Classes KA, KE and KF (in the aggregate)
November 2034	\$ 778,019.09	\$ 797,110.66	\$ 936,670.88
December 2034	756,038.40	773,087.98	914,734.93
January 2035	734,650.89	749,759.56	893,277.55
February 2035	713,841.01	727,105.89	872,288.72
March 2035	693,593.62	705,107.97	851,758.61
April 2035	673,893.94	683,747.35	831,677.62
May 2035	654,727.61	663,006.06	812,036.31
June 2035	636,080.61	642,866.66	792,825.46
July 2035	617,939.30	623,312.16	774,036.03
August 2035	600,290.38	604,326.07	755,659.16
September 2035	583,120.88	585,892.33	737,686.19
October 2035	566,418.20	567,995.34	720,108.60
November 2035	550,170.03	550,619.92	702,918.08
December 2035	534,364.39	533,751.33	686,106.48
January 2036	518,989.62	517,375.21	669,665.81
February 2036	504,034.34	501,477.63	653,588.25
March 2036	489,487.48	486,045.01	637,866.14
April 2036	475,338.26	471,064.19	622,491.97
May 2036	461,576.15	456,522.34	607,458.38
June 2036	448,190.92	442,407.00	592,758.19
July 2036	435,172.60	428,706.05	578,384.34
August 2036	422,511.47	415,407.72	564,329.93
September 2036	410,198.07	402,500.55	550,588.17
October 2036	398,223.17	389,973.42	537,152.46
November 2036	386,577.79	377,815.49	524,016.30
December 2036	375,253.19	366,016.25	511,173.34
January 2037	364,240.85	354,565.47	498,617.34
February 2037	353,532.46	343,453.20	486,342.22
March 2037	343,119.94	332,669.78	474,341.99
April 2037	332,995.41	322,205.81	462,610.81
May 2037	323,151.21	312,052.16	451,142.96
June 2037	313,579.86	302,199.95	439,932.82
July 2037	304,274.08	292,640.54	428,974.90
August 2037	295,226.80	283,365.54	418,263.81
September 2037	286,431.09	274,366.81	407,794.30
October 2037	277,880.24	265,636.41	397,561.18
November 2037	269,567.71	257,166.63	387,559.42
December 2037	261,487.11	248,949.99	377,784.07
January 2038	253,632.23	240,979.21	368,230.27
February 2038	245,997.02	233,247.21	358,893.28
March 2038	238,575.59	225,747.11	349,768.44
April 2038	231,362.20	218,472.23	340,851.22
May 2038	224,351.26	211,416.08	332,137.14
June 2038	217,537.34	204,572.32	323,621.85
July 2038	210,915.12	197,934.84	315,301.07
August 2038	204,479.46	191,497.67	307,170.61
September 2038	198,225.32	185,255.00	299,226.37

Distribution Date	Cla (in	sses JA and JZ the aggregate)	Classes PA, PE, PF and PG (in the aggregate)		Classes KA, KE and KF in the aggregate)
October 2038	\$	192,147.80	\$ 179,201.2	1 \$	391,464.34
November 2038		186,242.15	173,330.8	3	283,880.59
December 2038		180,503.72	167,638.5	2	276,471.27
January 2039		174,927.99	162,119.1	2	269,232.61
February 2039		169,510.55	156,767.6	1	262,160.93
March 2039		164,247.13	151,579.1	O	255,252.59
April 2039		159,133.56	146,548.8	5	248,504.08
May 2039		154,165.75	141,672.2	5	241,911.92
June 2039		149,339.77	136,944.8	1	235,472.72
July 2039		144,651.76	132,362.1	9	229,183.17
August 2039		140,097.97	127,920.1	5	223,040.00
September 2039		135,674.74	123,614.5	8	217,040.04
October 2039		131,378.51	119,441.5	0	211,180.16
November 2039		127,205.84	115,397.0	1	205,457.32
December 2039		123,153.34	111,477.3	5	199,868.52
January 2040		119,217.74	107,678.8	5	194,410.85
February 2040		115,395.83	103,997.9	6	189,081.43
March 2040		111,684.51	100,431.2	2	183,877.46
April 2040		108,080.75	96,975.2	6	178,796.20
May 2040		104,581.61	93,626.8	3	173,834.95
June 2040		101,184.20	90,382.7	5	168,991.09
July 2040		97,885.74	87,239.9	4	164,262.04
August 2040		94,683.51	84,195.4	1	159,645.28
September 2040		91,574.86	81,246.2	5	155,138.33
October 2040		88,557.21	78,389.6	4	150,738.79
November 2040		85,628.05	75,622.8	3	146,444.28
December 2040		82,784.95	72,943.1	6	142,252.49
January 2041		80,025.51	70,348.0	5	138,161.15
February 2041		77,347.44	67,834.9	6	134,168.03
March 2041		74,748.47	65,401.4	7	130,270.98
April 2041		72,226.41	63,045.2	1	126,467.86
May 2041		69,779.13	60,763.8	5	122,756.59
June 2041		67,404.55	58,555.1	8	119,135.12
July 2041		65,100.66	56,417.0	1	115,601.48
August 2041		62,865.48	54,347.2	3	112,153.69
September 2041		60,697.09	52,343.8	O	108,789.86
October 2041		58,593.64	50,404.7	2	105,508.11
November 2041		56,553.31	48,528.0	5	102,306.61
December 2041		54,574.34	46,711.9		99,183.56
January 2042		52,655.00	44,954.5		96,137.22
February 2042		50,793.63	43,254.0	5	93,165.87
March 2042		48,988.60	41,608.8	1	90,267.82
April 2042		47,238.33	40,017.1	3	87,441.43
May 2042		45,541.27	38,477.3		84,685.10
June 2042		43,895.92	36,987.9		81,997.24
July 2042		42,300.84	35,547.4		79,376.32
August 2042		40,754.59	34,154.1	9	76,820.82

Distribution Date	Classes JA and JZ (in the aggregate)	Classes PA, PE, PF and PG (in the aggregate)	Classes KA, KE and KF (in the aggregate)
September 2042	\$ 39,255.80	\$ 32,806.87	\$ 74,329.27
October 2042	37,803.12	31,504.06	71,900.23
November 2042	36,395.25	30,244.39	69,532.28
December 2042	35,030.91	29,026.55	67,224.03
January 2043	33,708.87	27,849.26	64,974.14
February 2043	32,427.93	26,711.26	62,781.28
March 2043	31,186.90	25,611.36	60,644.14
April 2043	29,984.65	24,548.39	58,561.47
May 2043	28,820.08	23,521.20	56,532.02
June 2043	27,692.10	22,528.70	54,554.57
July 2043	26,599.67	21,569.81	52,627.94
August 2043	25,541.76	20,643.49	50,750.96
September 2043	24,517.39	19,748.73	48,922.50
October 2043	23,525.58	18,884.55	47,141.44
November 2043	22,565.40	18,050.00	45,406.69
December 2043	21,635.92	17,244.17	43,717.19
January 2044	20,736.28	16,466.14	42,071.89
February 2044	19,865.59	15,715.06	40,469.78
March 2044	19,023.03	14,990.08	38,909.84
April 2044	18,207.76	14,290.38	37,391.12
May 2044	17,419.01	13,615.16	35,912.65
June 2044	16,655.98	12,963.67	34,473.49
July 2044	15,917.94	12,335.14	33,072.74
August 2044	15,204.15	11,728.86	31,709.49
September 2044	14,513.89	11,144.11	30,382.88
October 2044	13,846.49	10,580.22	29,092.05
November 2044	13,201.26	10,036.52	27,836.15
December 2044	12,577.55	9,512.38	26,614.38
January 2045	11,974.73	9,007.16	25,425.92
February 2045	11,392.17	8,520.26	24,270.00
March 2045	10,829.29	8,051.10	23,145.85
April 2045	10,285.48	7,599.11	22,052.72
May 2045	9,760.19	7,163.72	20,989.87
June 2045	9,252.86	6,744.42	19,956.60
July 2045	8,762.96	6,340.68	18,952.19
August 2045	8,289.96	5,951.99	17,975.96
September 2045	7,833.36	5,577.86	17,027.24
October 2045	7,392.67	5,217.83	16,105.37
November 2045	6,967.39	4,871.44	15,209.72
December 2045	6,557.08	4,538.23	14,339.65
January 2046	6,161.27	4,217.77	13,494.55
February 2046	5,779.53	3,909.66	12,673.82
March 2046	5,411.43	3,613.47	11,876.88
April 2046	5,056.54	3,328.82	11,103.14
May 2046	4,714.48	3,055.33	10,352.06
June 2046	4,384.85	2,792.62	9,623.07
July 2046	4,067.25	2,540.34	8,915.65

Distribution Date	Classes JA and JZ (in the aggregate)		Classes PA, PE, PF and PG (in the aggregate)		Classes KA, KE and KF (in the aggregat	
August 2046	\$	3,761.34	\$	2,298.14	\$	8,229.26
September 2046		3,466.74		2,065.68		7,563.40
October 2046		3,183.10		1,842.64		6,917.57
November 2046		2,910.09		1,628.69		6,291.27
December 2046		2,647.37		1,423.54		5,684.03
January 2047		2,394.62		1,226.88		5,095.37
February 2047		2,151.54		1,038.42		4,524.84
March 2047		1,917.82		857.90		3,971.99
April 2047		1,693.16		685.02		3,436.38
May 2047		1,477.28		519.55		2,917.59
June 2047		1,269.90		361.21		2,415.19
July 2047		1,070.76		209.77		1,928.78
August 2047		879.59		64.98		1,457.96
September 2047		696.13		0.00		1,002.34
October 2047		520.14		0.00		561.53
November 2047		351.39		0.00		135.17
December 2047		189.63		0.00		0.00
January 2048		34.64		0.00		0.00
February 2048 and thereafter		0.00		0.00		0.00

# **Underlying Certificates**

	Ginnie Mae Lor II		ш	Ħ	Ħ	Ħ	Ħ	Ħ	Ħ	=	Ξ
Weighted Average Loan Age of											
Remaining Term to Maturity of	Mortgage Loans (in months)(3)	CCC	344	2	9	353	354	351	6	(8)	(8)
Approximate Weighted Average	Coupon of Mortgage Loans(3)	Common	4.437%	(2)	9	4.918	4.923	4.471	6	8	(8)
	Percentage of Class in Trust		100.0000000000%	100.0000000000	100.0000000000	73.8821562892	40.3188563768	73.2421875000	100.0000000000	9.2309312551	60.2136181575
	Principal Balance in Trust		\$18,887,570	4,786,000	5,494,001	7,072,000	6,917,103	1,500,000	000,759	392,000	451,000
	Underlying Certificate Factor(2)	(=)	0.94437852	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	0.99828965	1.000000000
Original	Principal Balance of Class		\$20,000,000	4,786,000	5,494,001	9,572,000	17,156,000	2,048,000	000,759	4,253,872	749,000
	Principal Type(1)		PT	SEQ/AD	SEQ/AD	SEQ/AD	SEQ/AD	PACI/AD	SC/PAC	SC/SUP	SC/SCH
	Final Distribution Date		January 2048	March 2037	February 2039	November 2038	December 2038	November 2035	November 2047	April 2048	April 2048
	Interest Tyne(1)		FIX	FIX	FIX	FIX	FIX	FIX	FIX	FIX	FIX
	Interest Rate		3.0%	3.5	3.5	3.5	3.5	4.0	3.0	3.0	3.0
	CUSIP		38380UF99	38380WZ44	38381ANW2	38381AX43	38381BDE1	38381AVZ6	38381AWP7	38381BJT2	38381BJV7
	Kerne Date	The Paris	January 30, 2018	May 30, 2018	October 30, 2018	November 30, 2018	December 28, 2018	November 30, 2018	November 30, 2018	January 30, 2019	January 30, 2019
			HC(4)								
	Sories		2018-001	2018-067	2018-139	2018-153	2018-164	2018-154	2018-154	2019-003	2019-003
	Issuer	TOPOGET	Ginnie Mae	Ginnie Mae	Ginnie Mae	Ginnie Mae	Ginnie Mae	Ginnie Mae	Ginnie Mae	Ginnie Mae	Ginnie Mae
	Trust Asset Group or Suboroup	dnorson in	4	9	9	9	9	10B	10B	10B	10B

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

Underlying Certificate Factors are as of March 2019.

Based on information as of March 2019.

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

Ginnie Mae 2018-067 Class VQ is backed by the Subgroup 5A, 5B and 5C Trust Assets whose approximate weighted average characteristics are as follows: (2)

Approximated Weighted Average Loan Age of Morgage Loans (in months)(3)	11	11	11
Approximated Weighted Weighted Average Remaining Term to Mauurity of Mortgage Loans (in months)(3)	346	342	348
Approxinated Weighted Average Coupon of Mortgage Loans(3)	4.943%	4.926	4.938
Trust Asset Subgroup	5A	5B	5C
Series	2018-067	2018-067	2018-067

(6) Ginnie Mae 2018-139 Class VK is backed by the Subgroup 12H, 12I, 12J, 12K and 12L Trust Assets whose approximate weighted average characteristics are as follows:

	Approximated Weighted	Average Loan Age of	Mortgage Loans (in	months)(3)	9	9	9	9	9
Approximated Weighted	Average Remaining	Term to Maturity of	Mortgage Loans (in	months)(3)	353	354	353	352	352
	Approximated	Weighted Average	Coupon of Mortgage	Loans(3)	4.943%	4.907	4.941	4.942	4 058
			Trust	Subgroup	12H	121	12J	12K	121
				Series	2018-139	2018-139	2018-139	2018-139	2018-139

(7) Ginnie Mae 2018-154 Class QY is backed by previously issued REMIC certificates, Class JL from Ginnie Mae 2018-055 and Class HK from Ginnie Mae 2018-120. These previously issued certificates are backed by certain mortgage loans whose approximate weighted average

characteristics are as follows:

Approximated Weighted Average Loan Age of Mortgage Loans (in months)(3)	12
Approximated Weighted Average Remaining Term to Maturity of Mortgage Loans (in months) (3)	346
Approximated Weighted Average Coupon of Mortgage Loans(3)	3.921%
Class	Д Н
Series	2018-055

from Ginnie Mae 2018-055, Classes AB and AL from Ginnie Mae 2018-115, Class HK from Ginnie Mae 2018-120 and Class HK from Ginnie Mae 2018-138. Class VA from Ginnie Mae 2018-008 is in turn backed by a previously issued MX certificate, Class KL from Ginnie Mae 2017-036. Classes AB and AL from Ginnie Mae 2018-115 are in turn backed by previously issued REMIC certificates, Class LJ from Ginnie Class AL from Ginnie Mae 2017-184, and a previously issued MX certificate, Class KD from Ginnie Mae 2017-087. Class AL from Ginnie Mae 2018-031, Class MA from Ginnie Mae 2018-034 and Classes JB and JY from Ginnie Mae 2018-055, and a previously issued MX certifi-Mae 2017-184 is in turn backed by previously issued MX certificates, Classes EC and EI from Ginnie Mae 2017-065 and Class PE from Ginnie Mae 2017-098. These previously issued certificates are backed by certain mortgage loans whose approximate weighted average Ginnie Mae 2019-003 Classes M and MY are backed by previously issued REMIC certificates, Class VA from Ginnie Mae 2018-008, Class JL cate, Class BJ from Ginnie Mae 2017-080. Class MA from Ginnie Mae 2018-034 is in turn backed by a previously issued REMIC certificate, characteristics are as follows: 8

Average Loan Age of Mortgage Loans (in months)(3)	56	23	22	22	22	15	12	12	11
Appro Wei Avera Ag Mon Loa Inon	•	. •	. •	. •	. •				
Weighted Average Remaining Term to Maturity of Mortgage Loans (in months)(3)	332	334	336	336	337	343	346	346	346
Approximated Weighted Average Coupon of Mortgage Loans(3)	3.886%	3.886	3.886	3.887	3.888	3.899	3.921	3.910	3.957
Class or Classes	KL	EC and EI	BJ	KD	PE	ĹĴ	JB, JL and JY	HK	HK
Series	2017-036	2017-065	2017-080	2017-087	2017-098	2018-031	2018-055	2018-120	2018-138



\$1,486,395,649

**Government National Mortgage Association** 

## **GINNIE MAE**®

Guaranteed REMIC
Pass-Through Securities
and MX Securities
Ginnie Mae REMIC Trust 2019-031

OFFERING CIRCULAR SUPPLEMENT March 22, 2019

Wells Fargo Securities Tribal Capital Markets