

**\$1,452,515,302**  
**Government National Mortgage Association**  
**GINNIE MAE<sup>®</sup>**  
**Guaranteed REMIC Pass-Through Securities**  
**and MX Securities**  
**Ginnie Mae REMIC Trust 2020-005**

**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-17 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 January 30, 2020.

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

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

Class of REMIC Securities	Original Principal Balance(2)	Interest Rate	Principal Type(3)	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
<b>Security Group 1</b>						
A	\$160,168,965	2.5%	SC/PT	FIX	38382CF00	February 2048
B	100,179,482	2.4	SC/PT	FIX	38382CFD8	October 2047
CI	11,462,627	4.0	NTL(SC/PT)	FIX/IO	38382CFE6	July 2042
DI	7,600,007	5.0	NTL(SC/PT)	FIX/IO	38382CFP3	February 2048
IB	3,700,239	5.5	NTL(SC/PT)	FIX/IO	38382CFG1	October 2047
<b>Security Group 2</b>						
IO	4,036,285	3.5	NTL(PAC/AD)	FIX/IO	38382CFH9	October 2049
LZ(1)	13,530,000	3.5	SUP	FIX/Z	38382CFJ5	January 2050
MC(1)	107,436,000	3.5	PAC/AD	FIX	38382CFK2	March 2048
ME	25,000,000	3.0	PAC/AD	FIX	38382CFL0	March 2048
MU	3,254,000	3.0	PAC/AD	FIX	38382CFM8	October 2049
MW(1)	9,270,000	3.5	PAC/AD	FIX	38382CFN6	April 2049
MY(1)	4,691,000	3.5	PAC/AD	FIX	38382CFP1	October 2049
MZ	1,000,000	3.5	PAC/AD	FIX/Z	38382CFQ9	January 2050
ZL	10,000,000	3.5	SUP	FIX/Z	38382CFR7	January 2050
<b>Security Group 3</b>						
E	45,239,342	2.4	SC/PT	FIX	38382CFS5	June 2047
EI	2,927,296	4.5	NTL(SC/PT)	FIX/IO	38382CFT3	June 2047
<b>Security Group 4</b>						
JA(1)	2,319,500	2.5	SC/SEQ	FIX	38382CFU0	August 2049
JB(1)	2,319,500	4.5	SC/SEQ	FIX	38382CFV8	August 2049
JC(1)	12,680,500	2.5	SC/PT	FIX	38382CFW6	May 2046
JD(1)	12,680,500	4.5	SC/PT	FIX	38382CFX4	May 2046
JH	12,545,337	3.5	SC/SEQ	FIX	38382CFY2	August 2049
<b>Security Group 5</b>						
NA(1)	55,128,779	3.5	PAC/AD	FIX	38382CFZ9	December 2049
NL(1)	537,015	3.5	PAC/AD	FIX	38382CGA3	January 2050
NZ(1)	11,106,951	3.5	SUP	FIX/Z	38382CGB1	January 2050
<b>Security Group 6</b>						
AF	50,000,000	(5)	PT	FLT	38382CGC9	January 2050
AS	50,000,000	(5)	NTL(PT)	INV/IO	38382CGD7	January 2050
<b>Security Group 7</b>						
GA(1)	15,495,291	3.5	PAC/AD	FIX	38382CGE5	December 2049
GL(1)	100,000	3.5	PAC/AD	FIX	38382CGF2	January 2050
GZ(1)	2,917,062	3.5	SUP	FIX/Z	38382CGG0	January 2050
<b>Security Group 8</b>						
DA(1)	75,277,592	2.5	PAC/AD	FIX	38382CGH8	December 2049
DF	64,064,906	(5)	PAC/AD	FLT	38382CGJ4	January 2050
DS	64,064,906	(5)	NTL(PAC/AD)	INV/IO	38382CGK1	January 2050
DY(1)	793,596	2.5	PAC/AD	FIX	38382CGL9	January 2050
PC	30,000,000	2.5	PAC/AD	FIX	38382CGM7	October 2049
PY	703,657	2.5	PAC/AD	FIX	38382CGN5	January 2050
PZ	24,864,302	4.0	SUP	FIX/Z	38382CGP0	January 2050
<b>Security Group 9</b>						
FA	50,000,000	(5)	PT	FLT	38382CGQ8	January 2050
SA(1)	50,000,000	(5)	NTL(PT)	INV/IO	38382CGR6	January 2050
<b>Security Group 10</b>						
AI	21,482,777	3.5	NTL(PT)	FIX/IO	38382CGS4	January 2050
AT	150,379,439	3.0	PT	FIX	38382CGT2	January 2050
<b>Security Group 11</b>						
CF	50,000,000	(5)	PT	FLT	38382CGU9	January 2050
CS(1)	50,000,000	(5)	NTL(PT)	INV/IO	38382CGV7	January 2050
<b>Security Group 12</b>						
ID(1)	552,654	3.5	NTL(SC/PT)	FIX/IO	38382CGW5	June 2045
IQ(1)	5,978,283	3.0	NTL(SC/PT)	FIX/IO	38382CGX3	March 2045
JO(1)	1,000,000	0.0	SC/PT	PO	38382CGY1	September 2049
K(1)	763,167	(5)	SC/PT	WAC/DLY	38382CGZ8	July 2047
KO(1)	949,134	0.0	SC/PT	PO	38382CHA2	November 2049
LO(1)	344,664	0.0	SC/PT	PO	38382CHB0	October 2047
MO(1)	5,808,769	0.0	SC/PT	PO	38382CHC8	January 2048
MS(1)	6,645,575	(5)	NTL(SC/PT)	INV/IO	38382CHD6	October 2047
OL(1)	1,000,000	0.0	SC/PT	PO	38382CHE4	February 2044
PO(1)	2,020,787	0.0	SC/PT	PO	38382CHF1	June 2046
QO(1)	609,549	0.0	SC/PT	PO	38382CHG9	July 2048
QS(1)	1,903,915	(5)	NTL(SC/PT)	INV/IO	38382CHH7	July 2049
SL(1)	4,806,295	(5)	NTL(SC/PT)	INV/IO	38382CHJ3	September 2049
WL(1)	12,383,239	(5)	NTL(SC/PT)	WAC/IO/DLY	38382CHK0	February 2048

(Cover continued on next page)

**Citigroup**

**Mischler Financial Group, Inc.**

The date of this Offering Circular Supplement is January 24, 2020.

Class of REMIC Securities	Original Principal Balance(2)	Interest Rate	Principal Type(3)	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
<b>Security Group 13</b>						
AO(1)	\$ 1,516,975	0.0%	SC/PT	PO	38382CHL8	January 2049
HO(1)	1,644,750	0.0	SC/PT	PO	38382CHM6	November 2049
IA	1,516,975	3.5	NTL(SC/PT)	FIX/IO	38382CHN4	January 2049
IG(1)	3,481,361	3.5	NTL(SC/PT)	FIX/IO	38382CHP9	November 2049
IH	1,644,750	2.5	NTL(SC/PT)	FIX/IO	38382CHQ7	November 2049
IJ	1,035,321	3.5	NTL(SC/PT)	FIX/IO	38382CHR5	December 2049
IM	507,000	2.0	NTL(SC/PT)	FIX/IO	38382CHS3	December 2049
OG(1)	3,481,361	0.0	SC/PT	PO	38382CHT1	November 2049
OJ(1)	1,035,321	0.0	SC/PT	PO	38382CHU8	December 2049
OM(1)	507,000	0.0	SC/PT	PO	38382CHV6	December 2049
OT(1)	856,015	0.0	SC/PT	PO	38382CHW4	November 2049
ST(1)	49,565,568	(5)	NTL(SC/PT)	INV/IO	38382CHX2	October 2049
TI(1)	856,015	3.5	NTL(SC/PT)	FIX/IO	38382CHY0	November 2049
<b>Security Group 14</b>						
HP(1)	29,674,077	3.0	SC/PT	FIX	38382CHZ7	June 2049
<b>Security Group 15</b>						
IT	31,742,403	3.5	NTL(SC/PT)	FIX/IO	38382CJA0	April 2049
<b>Security Group 16</b>						
FH	28,021,554	(5)	SC/PT	FLT	38382CJB8	November 2049
<b>Security Group 17</b>						
JF	53,683,753	(5)	PT	FLT/WAC/DLY	38382CJC6	June 2044
JJ	53,683,753	(5)	NTL(PT)	WAC/IO/DLY	38382CJD4	June 2044
<b>Security Group 18</b>						
AZ	8,964,885	4.0	SUP	FIX/Z	38382CJE2	January 2050
PA(1)	39,938,887	4.0	PAC/AD	FIX	38382CJF9	September 2049
YP	1,233,975	4.0	PAC/AD	FIX	38382CJG7	January 2050
<b>Security Group 19</b>						
JP	10,000,000	3.0	PAC/AD	FIX	38382CJH5	October 2049
JZ(1)	1,470,000	3.5	SUP	FIX/Z	38382CJJ1	January 2050
PI	1,440,142	3.5	NTL(PAC/AD)	FIX/IO	38382CJH8	January 2050
ZJ	81,000	3.0	PAC/AD	FIX/Z	38382CJL6	January 2050
<b>Security Group 20</b>						
CA(1)	41,899,163	3.5	PAC/AD	FIX	38382CJM4	December 2049
CL(1)	367,599	3.5	PAC/AD	FIX	38382CJN2	January 2050
CZ(1)	7,095,776	3.5	SUP	FIX/Z	38382CJP7	January 2050
<b>Security Group 21</b>						
ZG(1)	4,691,496	3.5	SC/PT	FIX/Z	38382CJQ5	December 2049
<b>Security Group 22</b>						
L(1)	172,929	3.5	SC/PT	FIX	38382CJR3	December 2049
<b>Security Group 23</b>						
AK(1)	37,192,000	2.5	PAC I	FIX	38382CJS1	June 2049
FM	50,000,000	(5)	PT	FLT	38382CJT9	January 2050
KA	7,954,000	2.5	PAC II/AD	FIX	38382CJU6	January 2050
KB(1)	2,052,000	2.5	PAC I	FIX	38382CJV4	January 2050
KU	2,541,000	2.5	SUP/AD	FIX	38382CJW2	January 2050
KY	259,000	2.5	PAC I	FIX	38382CJX0	January 2050
KZ	1,000	2.5	PAC II	FIX/Z	38382CJY8	January 2050
SB(1)	16,000,000	(5)	NTL(PT)	INV/IO	38382CJZ5	January 2050
SD(1)	34,000,000	(5)	NTL(PT)	INV/IO	38382CKA8	January 2050
ZK	1,000	2.5	SUP	FIX/Z	38382CKB6	January 2050
<b>Residuals</b>						
R6	0	0.0	NPR	NPR	38382CKC4	January 2050
R9	0	0.0	NPR	NPR	38382CKD2	January 2050
R11	0	0.0	NPR	NPR	38382CKE0	January 2050
R16	0	0.0	NPR	NPR	38382CKF7	November 2049
RR17	0	0.0	NPR	NPR	38382CKG5	June 2044
RR	0	0.0	NPR	NPR	38382CKH3	January 2050

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

## AVAILABLE INFORMATION

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

- this Offering Circular Supplement (this “Supplement”),
- the Base Offering Circular and
- in the case of the Group 1, 3, 4, 12, 13, 14, 15, 16, 21 and 22 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.

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## TERMS SHEET

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

**Sponsor:** Citigroup Global Markets Inc.

**Co-Sponsor:** Mischler Financial Group, Inc.

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

**Tax Administrator:** The Trustee

**Closing Date:** January 30, 2020

**Distribution Dates:** For the Group 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22 and 23 Securities, the 20th day of each month or, if the 20th day is not a Business Day, the first Business Day thereafter, commencing in February 2020. For the Group 3 Securities, the 16th day of each month or, if the 16th day is not a Business Day, the first Business Day thereafter, commencing in February 2020.

**Trust Assets:**

<u>Trust Asset Group or Subgroup<sup>(2)</sup></u>	<u>Trust Asset Type</u>	<u>Certificate Rate</u>	<u>Original Term To Maturity (in years)</u>
1A	Underlying Certificate	(1)	(1)
1B	Underlying Certificate	(1)	(1)
1C	Underlying Certificate	(1)	(1)
1D	Underlying Certificate	(1)	(1)
1E	Underlying Certificate	(1)	(1)
1F	Underlying Certificate	(1)	(1)
1G	Underlying Certificate	(1)	(1)
1H	Underlying Certificate	(1)	(1)
1I	Underlying Certificate	(1)	(1)
1J	Underlying Certificate	(1)	(1)
2	Ginnie Mae II	3.5%	30
3A	Underlying Certificate	(1)	(1)
3B	Underlying Certificate	(1)	(1)
4A	Underlying Certificate	(1)	(1)
4B	Underlying Certificate	(1)	(1)
5	Ginnie Mae II	3.5%	30
6	Ginnie Mae II	3.5%	30
7	Ginnie Mae II	3.5%	30
8	Ginnie Mae II	4.0%	30
9	Ginnie Mae II	3.5%	30
10	Ginnie Mae II	3.5%	30
11	Ginnie Mae II	3.5%	30
12A	Underlying Certificate	(1)	(1)
12B	Underlying Certificate	(1)	(1)

<u>Trust Asset Group or Subgroup<sup>(2)</sup></u>	<u>Trust Asset Type</u>	<u>Certificate Rate</u>	<u>Original Term To Maturity (in years)</u>
12C	Underlying Certificate	(1)	(1)
12D	Underlying Certificate	(1)	(1)
12E	Underlying Certificate	(1)	(1)
12F	Underlying Certificate	(1)	(1)
12G	Underlying Certificate	(1)	(1)
12H	Underlying Certificate	(1)	(1)
12I	Underlying Certificate	(1)	(1)
12J	Underlying Certificate	(1)	(1)
12K	Underlying Certificate	(1)	(1)
12L	Underlying Certificate <sup>(3)</sup>	(1)	(1)
12M	Underlying Certificate	(1)	(1)
12N	Underlying Certificate	(1)	(1)
13A	Underlying Certificate	(1)	(1)
13B	Underlying Certificate	(1)	(1)
13C	Underlying Certificate	(1)	(1)
13D	Underlying Certificate	(1)	(1)
13E	Underlying Certificate	(1)	(1)
13F	Underlying Certificate	(1)	(1)
13G	Underlying Certificate	(1)	(1)
14	Underlying Certificate	(1)	(1)
15	Underlying Certificates	(1)	(1)
16	Underlying Certificates	(1)	(1)
17	Ginnie Mae II <sup>(4)</sup>	(5)	30
18	Ginnie Mae II	4.0%	30
19	Ginnie Mae II	3.5%	30
20	Ginnie Mae II	3.5%	30
21	Underlying Certificate	(1)	(1)
22	Underlying Certificate	(1)	(1)
23A	Ginnie Mae II	4.5%	30
23B	Ginnie Mae II	4.5%	30

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

<sup>(2)</sup> The Group 1, 3, 4, 12, 13 and 23 Trust Assets consist of subgroups, Subgroups 1A, 1B, 1C, 1D, 1E, 1F, 1G, 1H, 1I, 1J, 3A, 3B, 4A, 4B, 12A, 12B, 12C, 12D, 12E, 12F, 12G, 12H, 12I, 12J, 12K, 12L, 12M, 12N, 13A, 13B, 13C, 13D, 13E, 13F, 13G, 23A and 23B (each, a “Subgroup”).

<sup>(3)</sup> The Subgroup 12L Trust Asset consists of an Underlying Certificate backed by previously issued certificates, certain of which are backed by adjustable rate Ginnie Mae II MBS Certificates.

- (4) The Group 17 Trust Assets consist of adjustable rate Ginnie Mae II MBS Certificates.
- (5) Each Ginnie Mae Certificate included in Trust Asset Group 17 bears interest at a Certificate Rate, adjusted annually, equal to One Year Treasury Index (“CMT”) plus 1.50% (the “Certificate Margin”), subject to annual and lifetime adjustment caps and floors, which may limit whether the Certificate Rate for each Trust Asset remains at CMT plus the Certificate Margin. The annual and lifetime adjustment caps and floors for each of the Group 17 Trust Assets are set forth in Exhibit B to this Supplement. The Group 17 Trust Assets have Certificate Rates ranging from 3.500% to 4.000% as of January 1, 2020, as identified in Exhibit B. For the Group 17 Trust Assets, all of the initial fixed rate periods have expired. See “*The Trust Assets — The Trust MBS*” in this Supplement.

**Security Groups:** This series of Securities consists of multiple Security Groups (each, a “Group”), as shown on the front cover of this Supplement and on Schedule I to this Supplement. Except in the case of certain MX Classes in Groups 2, 5, 7, 9, 11, 19, 20, 21 and 22, 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 2, 5, 6, 7, 8, 9, 10, 11, 18, 19, 20 and 23 Trust Assets<sup>(1)</sup>:**

<u>Principal Balance</u>	<u>Weighted Average Remaining Term to Maturity (in months)</u>	<u>Weighted Average Loan Age (in months)</u>	<u>Weighted Average Mortgage Rate<sup>(2)</sup></u>
<b>Group 2 Trust Assets</b> \$174,181,000	357	1	3.900%
<b>Group 5 Trust Assets</b> \$66,772,745	352	1	4.037%
<b>Group 6 Trust Assets</b> \$50,000,000	359	1	4.165%
<b>Group 7 Trust Assets</b> \$18,512,353 <sup>(3)</sup>	358	2	3.999%
<b>Group 8 Trust Assets</b> \$195,704,053	356	3	4.448%
<b>Group 9 Trust Assets</b> \$50,000,000	357	3	3.956%
<b>Group 10 Trust Assets</b> \$150,379,439	359	0	4.005%
<b>Group 11 Trust Assets</b> \$50,000,000	356	3	3.975%
<b>Group 18 Trust Assets</b> \$50,137,747 <sup>(3)</sup>	359	1	4.538%
<b>Group 19 Trust Assets</b> \$11,551,000	357	3	3.954%
<b>Group 20 Trust Assets</b> \$49,362,538	359	1	4.021%

<u>Principal Balance</u>	<u>Weighted Average Remaining Term to Maturity (in months)</u>	<u>Weighted Average Loan Age (in months)</u>	<u>Weighted Average Mortgage Rate<sup>(2)</sup></u>
<b>Subgroup 23A Trust Assets</b>			
\$68,000,000	358	2	4.990%
<b>Subgroup 23B Trust Assets</b>			
\$32,000,000	358	2	4.990%

<sup>(1)</sup> As of January 1, 2020.

<sup>(2)</sup> The Mortgage Loans underlying the Group 2, 5, 6, 7, 8, 9, 10, 11, 18, 19, 20 and 23 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 7 and 18 Trust Assets may be higher balance Mortgage Loans. See “*Risk Factors*” in this Supplement.

The actual remaining terms to maturity, loan ages and Mortgage Rates of many of the Mortgage Loans underlying the Group 2, 5, 6, 7, 8, 9, 10, 11, 18, 19, 20 and 23 Trust Assets will differ from the weighted averages shown above, perhaps significantly. See “*The Trust Assets — The Mortgage Loans*” in this Supplement.

**Assumed Characteristics of the Mortgage Loans Underlying the Group 17 Trust Assets:** The assumed characteristics of the Mortgage Loans underlying the Group 17 Trust Assets are identified in Exhibit B to this Supplement. There can be no assurance that the actual characteristics of the Mortgage Loans underlying the Group 17 Trust Assets will be the same as the assumed characteristics identified in Exhibit B to this Supplement. More than 10% of the Mortgage Loans underlying the Group 17 Trust Assets may be higher balance Mortgage Loans. See “*Risk Factors*” in this Supplement.

**Characteristics of the Mortgage Loans Underlying the Group 1, 3, 4, 12, 13, 14, 15, 16, 21 and 22 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. Under certain circumstances, an MX Class that is a Weighted Average Coupon Class will be subject to mandatory exchange, with no exchange fee, for its related REMIC Securities. See “*Description of the Securities — Modification and Exchange*” in this Supplement.

**Increased Minimum Denomination Classes:** Each Class that constitutes a Principal Only or Interest Only Class and Classes K, WA and WL. See “*Description of the Securities — Form of Securities*” in this Supplement.

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

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

<u>Class</u>	<u>Interest Rate Formula(1)</u>	<u>Initial Interest Rate(2)</u>	<u>Minimum Rate</u>	<u>Maximum Rate</u>	<u>Delay (in days)</u>	<u>LIBOR for Minimum Interest Rate</u>
<b>Security Group 6</b>						
AF .....	LIBOR + 0.68%	2.37213%	0.68%	3.50%	0	0.00%
AS .....	2.82% – LIBOR	1.12787%	0.00%	2.82%	0	2.82%
<b>Security Group 8</b>						
DF .....	LIBOR + 0.40%	2.18088%	0.40%	6.50%	0	0.00%
DS .....	6.10% – LIBOR	4.31912%	0.00%	6.10%	0	6.10%
<b>Security Group 9</b>						
FA .....	LIBOR + 0.70%	2.37713%	0.70%	3.50%	0	0.00%
SA .....	2.80% – LIBOR	1.12287%	0.00%	2.80%	0	2.80%
<b>Security Group 11</b>						
CF .....	LIBOR + 0.70%	2.37663%	0.70%	3.50%	0	0.00%
CS .....	2.80% – LIBOR	1.12337%	0.00%	2.80%	0	2.80%
<b>Security Groups 9 and 11</b>						
SC .....	2.80% – LIBOR	1.12312%	0.00%	2.80%	0	2.80%
<b>Security Group 12</b>						
MS .....	3.50% – LIBOR	1.84225%	0.00%	2.50%	0	3.50%
QS .....	6.15% – LIBOR	4.49225%	0.00%	6.15%	0	6.15%
SL .....	3.41% – LIBOR	1.75225%	0.00%	3.41%	0	3.41%
<b>Security Group 13</b>						
ST .....	3.35% – LIBOR	1.69225%	0.00%	3.35%	0	3.35%
<b>Security Group 16</b>						
FH .....	LIBOR + 0.45%	2.21463%	0.45%	6.50%	0	0.00%
<b>Security Group 17</b>						
JF .....	LIBOR + 0.40%	2.07000%	0.40%	(3)	19	0.00%
<b>Security Group 23</b>						
FM .....	LIBOR + 0.45%	2.12625%	0.45%	6.50%	0	0.00%
SB .....	6.05% – LIBOR	4.37375%	0.00%	6.05%	0	6.05%
SD .....	6.05% – LIBOR	4.37375%	0.00%	6.05%	0	6.05%
SM .....	6.05% – LIBOR	4.37375%	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.
- (3) The maximum rate for Class JF for any Accrual Period is the Weighted Average Certificate Rate (“WACR”) of the Group 17 Trust Assets.

Each of Classes JI, K, WA, WI and WL is a Weighted Average Coupon Class. Class JI will accrue interest during each Accrual Period at a per annum Interest Rate equal to the WACR of the Group 17 Trust Assets less the Interest Rate for Class JF for that Accrual Period. Class K will accrue interest during each Accrual Period at an equivalent annualized rate derived by aggregating the accrued interest on the Subgroup 12A Trust Asset for such Accrual Period expressed as a percentage of its outstanding principal balance for such Accrual Period. Each of Classes WA and WL will accrue interest during each Accrual



Period at an equivalent annualized rate derived by aggregating the accrued interest on its related REMIC Classes for such Accrual Period expressed as a percentage of its outstanding principal balance for such Accrual Period, subject to certain limitations as set forth under “Description of the Securities — Modification and Exchange” in this Supplement. Class WI will accrue interest during each Accrual Period at an equivalent annualized rate derived by aggregating the accrued interest on the Subgroup 12L Trust Asset for such Accrual Period expressed as a percentage of its outstanding notional balance for such Accrual Period. The approximate initial Interest Rate for each Weighted Average Coupon Class, which will be in effect for the first Accrual Period, is as follows:

<u>Class</u>	<u>Approximate Initial Interest Rate</u>
Jl .....	1.61898%
K .....	1.96066%
WA .....	5.67611%
WI .....	1.64304%
WL .....	9.27700%

**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 Subgroup 1A Principal Distribution Amount, the Subgroup 1B Principal Distribution Amount, the Subgroup 1C Principal Distribution Amount, the Subgroup 1D Principal Distribution Amount, the Subgroup 1E Principal Distribution Amount, the Subgroup 1F Principal Distribution Amount, the Subgroup 1G Principal Distribution Amount, the Subgroup 1H Principal Distribution Amount, the Subgroup 1I Principal Distribution Amount and the Subgroup 1J Principal Distribution Amount will be allocated as follows:

- The Subgroup 1A Principal Distribution Amount, the Subgroup 1B Principal Distribution Amount, the Subgroup 1C Principal Distribution Amount, the Subgroup 1D Principal Distribution Amount and the Subgroup 1E Principal Distribution Amount to A, until retired
- The Subgroup 1F Principal Distribution Amount, the Subgroup 1G Principal Distribution Amount, the Subgroup 1H Principal Distribution Amount, the Subgroup 1I Principal Distribution Amount and the Subgroup 1J Principal Distribution Amount to B, until retired

#### **SECURITY GROUP 2**

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

- The MZ Accrual Amount in the following order of priority:
  1. Concurrently, as follows:
    - a. 18.8799272975%, sequentially, to ME and MU, in that order, until retired
    - b. 81.1200727025%, sequentially, to MC, MW and MY, in that order, until retired
  2. To MZ, until retired

- The Group 2 Principal Distribution Amount, the LZ Accrual Amount and the ZL Accrual Amount in the following order of priority:

1. To MC, ME, MU, MW, MY and MZ, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date in the following order of priority:

a. Concurrently, as follows:

- i. 18.8799272975%, sequentially, to ME and MU, in that order, until retired
- ii. 81.1200727025%, sequentially, to MC, MW and MY, in that order, until retired

b. To MZ, until retired

2. Concurrently, to LZ and ZL, pro rata, until retired

3. To MC, ME, MU, MW, MY and MZ, in the same manner and priority as step 1 above, but without regard to their Aggregate Scheduled Principal Balance, until retired

### **SECURITY GROUP 3**

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

### **SECURITY GROUP 4**

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

- The Subgroup 4A Principal Distribution Amount in the following order of priority:

1. Concurrently, to JA and JB, pro rata, until retired
2. To JH, until retired

- The Subgroup 4B Principal Distribution Amount, concurrently, to JC and JD, pro rata, until retired

### **SECURITY GROUP 5**

The Group 5 Principal Distribution Amount and the NZ Accrual Amount will be allocated in the following order of priority:

1. Sequentially, to NA and NL, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date

2. To NZ, until retired

3. Sequentially, to NA and NL, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired

### **SECURITY GROUP 6**

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

### **SECURITY GROUP 7**

The Group 7 Principal Distribution Amount and the GZ Accrual Amount will be allocated in the following order of priority:

1. Sequentially, to GA and GL, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date

2. To GZ, until retired
3. Sequentially, to GA and GL, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired

#### **SECURITY GROUP 8**

The Group 8 Principal Distribution Amount and the PZ Accrual Amount will be allocated in the following order of priority:

1. To DA, DF, DY, PC and PY, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date, concurrently, as follows:
  - a. 37.4999996341% to DF, until retired
  - b. 17.9721972318%, sequentially, to PC and PY, in that order, until retired
  - c. 44.5278031341%, sequentially, to DA and DY, in that order, until retired
2. To PZ, until retired
3. To DA, DF, DY, PC and PY, in the same manner and priority as step 1 above, but without regard to their Aggregate Scheduled Principal Balance, until retired

#### **SECURITY GROUP 9**

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

#### **SECURITY GROUP 10**

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

#### **SECURITY GROUP 11**

The Group 11 Principal Distribution Amount will be allocated to CF, until retired

#### **SECURITY GROUP 12**

The Subgroup 12A Principal Distribution Amount, the Subgroup 12C Principal Distribution Amount, the Subgroup 12F Principal Distribution Amount, the Subgroup 12H Principal Distribution Amount, the Subgroup 12J Principal Distribution Amount, the Subgroup 12K Principal Distribution Amount, the Subgroup 12M Principal Distribution Amount and the Subgroup 12N Principal Distribution Amount will be allocated as follows:

- The Subgroup 12A Principal Distribution Amount to K, until retired
- The Subgroup 12C Principal Distribution Amount to JO, until retired
- The Subgroup 12F Principal Distribution Amount to MO, until retired
- The Subgroup 12H Principal Distribution Amount to OL, until retired
- The Subgroup 12J Principal Distribution Amount to KO, until retired
- The Subgroup 12K Principal Distribution Amount to LO, until retired
- The Subgroup 12M Principal Distribution Amount to PO, until retired

- The Subgroup 12N Principal Distribution Amount to QO, until retired

#### **SECURITY GROUP 13**

The Subgroup 13A Principal Distribution Amount, the Subgroup 13B Principal Distribution Amount, the Subgroup 13C Principal Distribution Amount, the Subgroup 13D Principal Distribution Amount, the Subgroup 13E Principal Distribution Amount and the Subgroup 13F Principal Distribution Amount will be allocated as follows:

- The Subgroup 13A Principal Distribution Amount to AO, until retired
- The Subgroup 13B Principal Distribution Amount to OG, until retired
- The Subgroup 13C Principal Distribution Amount to HO, until retired
- The Subgroup 13D Principal Distribution Amount to OJ, until retired
- The Subgroup 13E Principal Distribution Amount to OM, until retired
- The Subgroup 13F Principal Distribution Amount to OT, until retired

#### **SECURITY GROUP 14**

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

#### **SECURITY GROUP 16**

The Group 16 Principal Distribution Amount will be allocated to FH, until retired

#### **SECURITY GROUP 17**

The Group 17 Principal Distribution Amount will be allocated to JF, until retired

#### **SECURITY GROUP 18**

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

1. Sequentially, to PA and YP, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
2. To AZ, until retired
3. Sequentially, to PA and YP, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired

#### **SECURITY GROUP 19**

The Group 19 Principal Distribution Amount, the JZ Accrual Amount and the ZJ Accrual Amount will be allocated as follows:

- The ZJ Accrual Amount, sequentially, to JP and ZJ, in that order, until retired
- The Group 19 Principal Distribution Amount and the JZ Accrual Amount in the following order of priority:

1. Sequentially, to JP and ZJ, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
2. To JZ, until retired
3. Sequentially, to JP and ZJ, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired

#### **SECURITY GROUP 20**

The Group 20 Principal Distribution Amount and the CZ Accrual Amount will be allocated in the following order of priority:

1. Sequentially, to CA and CL, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
2. To CZ, until retired
3. Sequentially, to CA and CL, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired

#### **SECURITY GROUP 21**

The Group 21 Principal Distribution Amount will be allocated to ZG, until retired

#### **SECURITY GROUP 22**

The Group 22 Principal Distribution Amount will be allocated to L, until retired

#### **SECURITY GROUP 23**

The Group 23 Principal Distribution Amount, the KZ Accrual Amount and the ZK Accrual Amount will be allocated as follows:

- The KZ Accrual Amount, sequentially, to KA and KZ, in that order, until retired
- The ZK Accrual Amount, sequentially, to KU and ZK, in that order, until retired
- The Group 23 Principal Distribution, concurrently, as follows:
  1. 50% to FM, until retired
  2. 50%, in the following order of priority:
    - a. Sequentially, to AK, KB and KY, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
    - b. Sequentially, to KA and KZ, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
    - c. Sequentially, to KU and ZK, in that order, until retired
    - d. Sequentially, to KA and KZ, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired
    - e. Sequentially, to AK, KB and KY, in that order, 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:

	<u>Structuring Ranges</u>
<b>PAC Classes</b>	
CA and CL (in the aggregate) .....	200% PSA through 335% PSA
DA, DF, DY, PC and PY (in the aggregate) .....	149% PSA through 250% PSA
GA and GL (in the aggregate) .....	200% PSA through 350% PSA
JP and ZJ (in the aggregate) .....	188% PSA through 300% PSA
MC, ME, MU, MW, MY and MZ (in the aggregate) .....	181% PSA through 300% PSA
NA and NL (in the aggregate) .....	175% PSA through 325% PSA
PA and YP (in the aggregate) .....	350% PSA through 600% PSA
<b>PAC I Classes</b>	
AK, KB and KY (in the aggregate) .....	286% PSA through 500% PSA
<b>PAC II Classes</b>	
KA and KZ (in the aggregate) .....	440% PSA through 500% 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, with respect to each Class other than Class ZG, will be distributable as principal as set forth in this Terms Sheet under "Allocation of Principal."

Principal will be distributed to Class ZG, when received as principal from the related Underlying Certificate, as set forth in this Terms Sheet under "Allocation of Principal." The related Underlying Certificate is also an Accrual Class. Interest will accrue on the Underlying Certificate at the rate set forth on the front cover of the related Underlying Certificate Disclosure Document. However, no interest will be distributed to the Underlying Certificate as interest, but will constitute an Accrual Amount with respect to the related Underlying Trust, which will be added to the Class Principal Balance of the related Underlying Certificate on each Distribution Date and will be distributable as principal as set forth in the Terms Sheet of the related Underlying Certificate Disclosure Document.

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

<u>Class</u>	<u>Original Class Notional Balance</u>	<u>Represents Approximately</u>
<b>Security Group 1</b>		
CI .....	\$ 4,646,439	12.5% of the Subgroup 1C Trust Assets
	6,816,188	12.5% of the Subgroup 1D Trust Assets
	<u>\$ 11,462,627</u>	

<b>Class</b>	<b>Original Class Notional Balance</b>	<b>Represents Approximately</b>
DI .....	\$ 1,317,282	5% of the Subgroup 1A Trust Assets
	1,959,154	10% of the Subgroup 1B Trust Assets
	2,253,074	10% of the Subgroup 1E Trust Assets
	2,070,497	17% of the Subgroup 1J Trust Assets
	<u>\$ 7,600,007</u>	
IB .....	\$ 1,155,151	4.5454545455% of the Subgroup 1F Trust Assets
	862,541	4.0909090909% of the Subgroup 1G Trust Assets
	568,997	1.8181818182% of the Subgroup 1H Trust Assets
	1,113,550	10.9090909091% of the Subgroup 1I Trust Assets
	<u>\$ 3,700,239</u>	
<b>Security Group 2</b>		
IL .....	\$ 50,016,857	42.8571428571% of MC and MW (in the aggregate) (PAC/AD Classes)
IO .....	4,036,285	14.2857142857% of ME and MU (in the aggregate) (PAC/AD Classes)
LI .....	52,027,285	42.8571428571% of MC, MW and MY (in the aggregate) (PAC/AD Classes)
MI .....	46,044,000	42.8571428571% of MC (PAC/AD Class)
<b>Security Group 3</b>		
EI .....	\$ 2,306,373	13.3333333333% of the Subgroup 3A Trust Assets
	620,923	2.2222222222% of the Subgroup 3B Trust Assets
	<u>\$ 2,927,296</u>	
<b>Security Group 5</b>		
NI .....	\$ 23,626,619	42.8571428571% of NA (PAC/AD Class)
<b>Security Group 6</b>		
AS .....	\$ 50,000,000	100% of AF (PT Class)
<b>Security Group 7</b>		
GI .....	\$ 6,640,839	42.8571428571% of GA (PAC/AD Class)
<b>Security Group 8</b>		
DS .....	\$ 64,064,906	100% of DF (PAC/AD Class)
IY .....	9,508,898	12.5% of DA and DY (in the aggregate) (PAC/AD Classes)
YI .....	18,819,398	25% of DA (PAC/AD Class)
<b>Security Group 9</b>		
SA .....	\$ 50,000,000	100% of FA (PT Class)
<b>Security Group 10</b>		
AI .....	\$ 21,482,777	14.2857142857% of AT (PT Class)
<b>Security Group 11</b>		
CS .....	\$ 50,000,000	100% of CF (PT Class)
<b>Security Groups 9 and 11</b>		
SC .....	\$100,000,000	100% of CF and FA (in the aggregate) (PT Classes)
<b>Security Group 12</b>		
ID .....	\$ 552,654	100% of the Subgroup 12B Trust Assets
IQ .....	5,978,283	100% of the Subgroup 12E Trust Assets
MS .....	6,645,575	100% of the Subgroup 12G Trust Assets
QS .....	1,903,915	100% of the Subgroup 12D Trust Assets
SL .....	4,806,295	100% of the Subgroup 12I Trust Assets
WI .....	12,383,239	100% of the Subgroup 12L Trust Assets

<u>Class</u>	<u>Original Class Notional Balance</u>	<u>Represents Approximately</u>
<b>Security Group 13</b>		
IA .....	\$ 1,516,975	100% of AO (SC/PT Class)
IG .....	3,481,361	100% of OG (SC/PT Class)
IH .....	1,644,750	100% of HO (SC/PT Class)
IJ .....	1,035,321	100% of OJ (SC/PT Class)
IM .....	507,000	100% of OM (SC/PT Class)
IN .....	4,337,376	100% of OG and OT (in the aggregate) (SC/PT Classes)
ST .....	49,565,568	100% of the Subgroup 13G Trust Assets
TI .....	856,015	100% of OT (SC/PT Class)
<b>Security Group 14</b>		
HI .....	\$ 8,242,799	27.777777778% of HP (SC/PT Class)
<b>Security Group 15</b>		
IT .....	\$ 31,742,403	100% of the Group 15 Trust Assets
<b>Security Group 17</b>		
JL .....	\$ 53,683,753	100% of JF (PT Class)
<b>Security Group 18</b>		
IP .....	\$ 22,465,623	56.25% of PA (PAC/AD Class)
<b>Security Group 19</b>		
PI .....	\$ 1,440,142	14.2857142857% of JP and ZJ (in the aggregate) (PAC/AD Classes)
<b>Security Group 20</b>		
IC .....	\$ 17,956,784	42.8571428571% of CA (PAC/AD Class)
<b>Security Group 23</b>		
IK .....	\$ 4,360,444	11.1111111111% of AK and KB (in the aggregate) (PAC I Classes)
KI .....	4,132,444	11.1111111111% of AK (PAC I Class)
SB .....	16,000,000	50% of the Subgroup 23B Trust Assets
SD .....	34,000,000	50% of the Subgroup 23A Trust Assets
SM .....	\$ 34,000,000	50% of the Subgroup 23A Trust Assets
	<u>16,000,000</u>	50% of the Subgroup 23B Trust Assets
	<u>\$ 50,000,000</u>	

**Tax Status:** Single REMIC Series as to the Group 6 Trust Assets (the “Group 6 REMIC”), Single REMIC Series as to the Group 9 Trust Assets (the “Group 9 REMIC”), Single REMIC Series as to the Group 11 Trust Assets (the “Group 11 REMIC”) and Single REMIC Series as to the Group 16 Trust Assets (the “Group 16 REMIC”). Double REMIC Series as to the Group 17 Trust Assets and Double REMIC Series as to the Group 1, 2, 3, 4, 5, 7, 8, 10, 12, 13, 14, 15, 18, 19, 20, 21, 22 and 23 Trust Assets. Separate REMIC elections will be made as to the Group 6 REMIC, as to the Group 9 REMIC, as to the Group 11 REMIC, as to the Group 16 REMIC, as to the Issuing REMIC and the Pooling REMIC with respect to the Group 17 Trust Assets (the “Group 17 Issuing REMIC” and the “Group 17 Pooling REMIC,” respectively) and as to the Issuing REMIC and the Pooling REMIC with respect to the Group 1, 2, 3, 4, 5, 7, 8, 10, 12, 13, 14, 15, 18, 19, 20, 21, 22 and 23 Trust Assets (the “Group 1, 2, 3, 4, 5, 7, 8, 10, 12, 13, 14, 15, 18, 19, 20, 21, 22 and 23 Issuing REMIC” and the “Group 1, 2, 3, 4, 5, 7, 8, 10, 12, 13, 14, 15, 18, 19, 20, 21, 22 and 23 Pooling REMIC,” respectively). See “*Certain United States Federal Income Tax Consequences*” in this Supplement and in the Base Offering Circular.



**Regular and Residual Classes:** Classes RR, R6, R9, R11, R16 and RR17 are Residual Classes. Class RR represents the Residual Interest of the Group 1, 2, 3, 4, 5, 7, 8, 10, 12, 13, 14, 15, 18, 19, 20, 21, 22 and 23 Issuing and Pooling REMICs. Class R6 represents the Residual Interest of the Group 6 REMIC. Class R9 represents the Residual Interest of the Group 9 REMIC. Class R11 represents the Residual Interest of the Group 11 REMIC. Class R16 represents the Residual Interest of the Group 16 REMIC. Class RR17 represents the Residual Interest of the Group 17 Issuing and Pooling REMICs. 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 (principal only securities, for example) and

principal payments are slower than you expected.

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

***Adjustable rate mortgage loans may exhibit general prepayment characteristics that are different than those of fixed rate mortgage loans.***

In general, as prevailing mortgage interest rates decline, borrowers with fixed rate mortgage loans are more likely to refinance their current, higher rate mortgages, which may result in faster prepayment rates. Additionally, as prevailing mortgage interest rates rise, borrowers with fixed rate mortgage loans are less likely to refinance their current, lower rate mortgages, which may result in slower prepayment rates. In contrast, as prevailing mortgage interest rates decline, borrowers with adjustable rate mortgage loans are less likely to refinance their current mortgages, which may result in slower prepayment rates. Additionally, as prevailing mortgage interest rates rise, borrowers with adjustable rate mortgage loans are more likely to refinance their current mortgages, which may result in faster prepayment rates. Finally, increases in prevailing mortgage interest rates may result in increases in the required monthly payments on adjustable rate mortgage loans. This may result in higher default rates on adjustable rate mortgage loans which could lead to faster prepayment rates and reduce the yield on the related securities.

***After the initial fixed rate period of the mortgage loans underlying the group 17 trust assets, the mortgage rates on such mortgage loans adjust annually based on CMT, the level of which will affect the yield on the related securities.*** After any applicable initial fixed rate period of the mortgage loans underlying the group 17 trust assets, the yield on the related securities depends, in part, on the level of CMT. CMT will be determined annually and the rate of CMT used with respect to the mortgage loans underlying the group 17 trust assets will not necessarily reflect current levels of CMT. If CMT performs differently from what you

expect, the yield on your securities may be lower than you expect. Lower levels of CMT will generally reduce the weighted average certificate rate on the group 17 trust assets, which will reduce or cap the interest rate on the related securities. You should bear in mind that the timing of changes in the level of CMT may affect your yield: generally, the earlier a change, the greater the effect on your yield. It is doubtful that CMT will remain constant.

***Adjustable rate mortgage loans are subject to certain caps, which may limit the amount of interest payable on such mortgage loans and may limit the WACR on the group 17 trust assets and the interest rates on the related securities after any applicable initial fixed rate period of the related mortgage loans.***

After any applicable initial fixed rate period of the mortgage loans underlying the group 17 trust assets, if CMT increases to a sufficiently high level, the mortgage rates on such mortgage loans may be limited by annual and lifetime adjustment caps. As a result, the WACR on the group 17 trust assets, as well as the interest rates on the related securities, may be limited. The application of any caps on the mortgage loans may significantly impact the interest rate on class JI because the interest entitlement of such class of securities is entirely dependent on the excess of the WACR of the group 17 trust assets over the interest rate applicable to class JF.

***The mortgage rate index for the mortgage loans underlying the group 17 trust assets is different than the interest rate index for the related securities, which may impact, perhaps significantly, the amount of interest distributable to the related securities.***

CMT is the mortgage rate index for the mortgage loans underlying the group 17 trust assets and LIBOR is the interest rate index for the related securities. Because these indices are determined in a different manner and at different times, and because the certificate rates on the group 17 trust assets adjust annually and the interest rates on the related securities adjust monthly, there may be a mismatch between the certificate rates on the group 17 trust assets and the interest rates on the

related securities. If CMT for the group 17 trust assets is lower than LIBOR for the related securities for any accrual period, interest accruals with respect to the related notional class will be reduced because such class is entitled to receive the excess of interest accrued in respect of the group 17 trust assets over the interest distributable to the related floating rate class. In addition, if CMT for the group 17 trust assets is significantly lower than LIBOR for the related securities for any accrual period, interest accruing on the related floating rate class will be reduced because the interest rate on such class is capped at a rate equal to the WACR of the group 17 trust assets. In the event that CMT for the group 17 trust assets is higher than LIBOR for the related securities, interest accruing on the related floating rate class will not be affected but interest accruals with respect to the related notional class will be increased. Because the index on the group 17 trust assets adjusts annually after the initial fixed rate period of the related mortgage loans but the index on the related securities will adjust monthly, this effect could be magnified during periods of significant volatility of short-term interest rates.

***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 and the class JI, K, WA, WI and WL 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 and the class JI, K, WA, WI and WL securities. You should bear in mind that the timing of changes in the level of LIBOR may affect your yield: generally, the earlier a change, the greater the effect on your yield. It is doubtful that LIBOR will remain constant.

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

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

to produce scheduled payments on the related PAC classes for that distribution date, this excess will be distributed to the related support classes.

***The rate of payments on the underlying certificates will directly affect the rate of payments on the group 1, 3, 4, 12, 13, 14, 15, 16, 21 and 22 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 underlying certificate disclosure documents, certain of the trust assets underlying the underlying certificate included in trust asset subgroup 12L consist of adjustable rate mortgage loans, certain characteristics and associated risks of which differ from those of fixed rate mortgage loans, as described in this supplement and in the related underlying certificate disclosure documents.

In addition, the underlying certificates included in trust asset groups 4 and 22 and subgroups 12J, 13A, 13B, 13C, 13D, 13E and 13F 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.

The underlying certificate included in trust asset group 21 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.

The principal entitlements of and the reductions in notional balances of certain of the underlying certificates included in trust asset groups 15 and 22 and Subgroups 3A, 12J, 13A, 13B, 13C, 13D, 13E and 13F on any payment date are calculated, directly or indirectly, on the basis of schedules; no assurance can be given that the underlying certificates will adhere to their schedules. Further, prepayments on the related mortgage loans may have occurred at rates faster or slower than those initially assumed.

The trust assets underlying the underlying certificates included in trust asset subgroups 1A, 1B, 1E, 1G, 1H, 1I, 12A, 12B, 12C, 12D, 12E, 12F, 12G, 12H, 12I, 12K, 12L, 12M and 12N are also previously issued certificates that represent beneficial ownership interests in separate trusts. The rate of payments on the previously issued certificates backing these underlying certificates will directly affect the timing and rate of payments on the group 1 and 12 securities. You should read the related underlying certificate disclosure documents, including the risk factors contained therein, to understand the payments on and related risks of the previously issued certificates backing these underlying certificates.

This supplement contains no information as to whether the underlying certificates or the related classes with which the notional underlying certificates reduce have adhered to any applicable principal balance schedules, whether 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, 5, 6, 8, 9, 10, 11, 14, 16, 19, 20 and 23 and subgroup 12A, 12B, 12C, 12D, 12G, 12J, 13A, 13C, 13D and 13E trust assets and up to 100% of the mortgage loans underlying the group 4, 7, 15, 17, 18, 21 and 22 and subgroup 12E, 12F, 12H, 12I, 12K,***

**12L, 12M, 12N, 13B, 13F, 13G 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 1, 3, 4, 12, 13, 14, 15, 16, 21 and 22 securities and, in particular, the support, interest only, principal only, accrual and residual classes and classes K, WA and WL, 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 2, 5, 6, 7, 8, 9, 10, 11, 17, 18, 19, 20 and 23)**

The Group 2, 5, 6, 7, 8, 9, 10, 11, 18, 19, 20 and 23 Trust Assets are either:

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

The Group 17 Trust Assets consist of adjustable rate Ginnie Mae II MBS Certificates guaranteed by Ginnie Mae. Each adjustable rate Ginnie Mae Certificate has an initial fixed rate period. After the initial fixed rate period, the Certificate Rate for each such adjustable rate Ginnie Mae Certificate will adjust annually to a rate equal to the sum, rounded to the nearest 1/8 of one percent, of (i) CMT and (ii) the Certificate Margin, subject to annual and lifetime adjustment caps and floors. The Certificate Margin and the annual and lifetime adjustment caps and floors for each such Ginnie Mae Certificate are set forth in Exhibit B to this Supplement. Adjustments to the Mortgage Rates will be made in the same manner as adjustments to the Certificate Rate. See *“The Trust Assets — The Mortgage Loans” in this Supplement.*

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

### **The Underlying Certificates (Groups 1, 3, 4, 12, 13, 14, 15, 16, 21 and 22)**

The Group 1, 3, 4, 12, 13, 14, 15, 16, 21 and 22 Trust Assets are Underlying Certificates that represent beneficial ownership interests in one or more separate trusts, the assets of which evidence direct or

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

Each Underlying Certificate provides for monthly distributions and is further described in the table contained in Exhibit A to this Supplement. The table also sets forth information regarding approximate weighted average remaining terms to maturity, loan ages and mortgage rates of the Mortgage Loans underlying the related Ginnie Mae Certificates.

### **The Mortgage Loans**

The Mortgage Loans underlying the Group 2, 5, 6, 7, 8, 9, 10, 11, 18, 19, 20 and 23 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 2, 5, 6, 7, 8, 9, 10, 11, 18, 19, 20 and 23 Trust Assets” and the general characteristics described in the Base Offering Circular. The Mortgage Loans underlying the Group 17 Trust Assets are expected to have, on a weighted average basis, the characteristics set forth in Exhibit B to this Supplement. 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 or adjustable 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*.

The Mortgage Loans underlying the Group 17 Trust Assets are adjustable rate mortgage loans with initial fixed rate periods. After the initial fixed rate period, the Mortgage Rate on each of these Mortgage Loans adjusts annually, rounded to the nearest 1/8 of one percent, based on CMT plus a specified margin (the “Mortgage Margin”), subject to annual and lifetime adjustment caps and floors. Ginnie Mae pooling specifications require that all adjustable rate Mortgage Loans backing a particular Ginnie Mae Certificate have the same index, first Mortgage Rate adjustment date, annual Mortgage Rate adjustment date, mortgage payment adjustment date and index reference date. One month after each Mortgage Rate adjustment date, the payment amount of the related Mortgage Loan will be reset so that the remaining principal balance of that Mortgage Loan will fully amortize in equal monthly payments over its remaining term to maturity, assuming its Mortgage Rate remains constant at the new rate. See *“Risk Factors — Adjustable rate mortgage loans are subject to certain caps, which may limit the amount of interest payable on such mortgage loans and may limit the WACR on the group 17 trust assets and the interest rates on the related securities after any applicable initial fixed rate period of the related mortgage loans” in this Supplement*.

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, Mortgage Rates and, in the case of the Group 17 Trust Assets, Mortgage Margins and next Mortgage Rate adjustment dates of the Mortgage Loans underlying the Trust MBS. However, the actual remaining terms to maturity, loan ages, Mortgage Rates and, in the case of the Group 17 Trust Assets, Mortgage Margins and next Mortgage Rate adjustment dates of many of the



Mortgage Loans will differ from the characteristics assumed, perhaps significantly. This will be the case even if the weighted average characteristics of the Mortgage Loans are the same as the assumed characteristics. Small differences in the characteristics of the Mortgage Loans can have a significant effect on the Weighted Average Lives and yields of the Securities. See *“Risk Factors” and “Yield, Maturity and Prepayment Considerations” in this Supplement.*

### **The Trustee Fee**

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

## **GINNIE MAE GUARANTY**

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

## **DESCRIPTION OF THE SECURITIES**

### **General**

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

### **Form of Securities**

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

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

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

## Distributions

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

## Interest Distributions

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

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

### *Categories of Classes*

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

### *Accrual Periods*

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

<u>Class</u>	<u>Accrual Period</u>
Fixed Rate and Delay Classes	The calendar month preceding the related Distribution Date
Floating Rate, Inverse Floating Rate and Weighted Average Coupon Classes other than Delay 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. In the case of the Group 12, 13, and 16 Securities, the Trustee will use the same values of LIBOR as are used for the related Underlying Certificates (which will be determined on the basis of the ICE LIBOR method).

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 on Ginnie Mae’s website or by calling the Information Agent at (800) 234-GNMA.

### *Accrual Classes*

Each of Classes AZ, CZ, GZ, JZ, KZ, LZ, MZ, NZ, PZ, ZG, ZJ, ZK and ZL 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. With respect to Security Group 21, the related Principal Distribution Amount shall include any Accrual Amount distributed as principal on the related Underlying Certificate as described in the related Underlying Certificate Disclosure Document. 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 Group 1, 2, 3, 4, 5, 7, 8, 10, 12, 13, 14, 15, 18, 19, 20, 21, 22 and 23 Issuing REMIC and the beneficial ownership of the Residual Interest in the Group 1, 2, 3, 4, 5, 7, 8, 10, 12, 13, 14, 15, 18, 19, 20, 21, 22 and 23 Pooling REMIC, as described in “Certain United States Federal Income Tax Consequences” in the Base Offering Circular. The Class R6 Securities will represent the beneficial ownership of the Residual Interest in the Group 6 REMIC, as described in “Certain United States Federal Income Tax Consequences” in the Base Offering Circular. The Class R9 Securities will represent the beneficial ownership of the Residual Interest in the Group 9 REMIC, as described in “Certain United States Federal Income Tax Consequences” in the Base Offering Circular. The Class R11 Securities will represent the beneficial ownership of the Residual Interest in the Group 11 REMIC, as described in “Certain United States Federal Income Tax Consequences” in the Base Offering Circular. The Class R16 Securities will represent the beneficial ownership of the Residual Interest in the Group 16 REMIC, as described in “Certain United States Federal Income Tax Consequences” in the Base Offering Circular. The Class RR17 Securities will represent the beneficial ownership of the Residual Interest in the Group 17 Issuing REMIC and the beneficial ownership of the Residual Interest in the Group 17 Pooling REMIC, as described in “Certain United States Federal Income Tax Consequences” in the Base Offering Circular. The Class RR, R6, R9, R11, R16 and RR17 Securities have no Class Principal Balance and do not accrue interest. The Class RR, R6, R9, R11, R16 and RR17 Securities will be entitled to receive the proceeds of the disposition of any assets remaining in the related Trust REMICs after the Class Principal Balance or Class Notional Balance of each Class of Regular Securities in the related Security Group or Groups 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 applicable Distribution Date, the factor (carried out to eight decimal places) that when multiplied by the Original Class Principal Balance (or original Class Notional Balance) of that Class, determines the Class Principal Balance (or Class Notional Balance) after giving effect to the distribution of principal to be made on the Securities (and any addition to the Class Principal Balance of an Accrual Class) or any reduction of Class Notional Balance on that Distribution Date (each, a “Class Factor”).

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

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

## Termination

The Trustee, at its option, may purchase or cause the sale of the Trust Assets and thereby terminate the Trust on any Distribution Date on which the aggregate of the Class Principal Balances of the Securities is less than 1% of the aggregate Original Class Principal Balances of the Securities. On any Distribution Date upon the Trustee's determination that the REMIC status of any Trust REMIC has been lost or that a substantial risk exists that this status will be lost for the then current taxable year, the Trustee will terminate such Trust REMIC and any related Trust REMIC and retire the related Securities. For these purposes, the Trust REMICs and the Securities with corresponding numerical designations are related as follows:

<u>Trust REMICs</u>	<u>Related Securities</u>
Group 1, 2, 3, 4, 5, 7, 8, 10, 12, 13, 14, 15, 18, 19, 20, 21, 22 and 23 Issuing and Pooling REMICs	Group 1, 2, 3, 4, 5, 7, 8, 10, 12, 13, 14, 15, 18, 19, 20, 21, 22 and 23 Securities
Group 6 REMIC	Group 6 Securities
Group 9 REMIC	Group 9 Securities
Group 11 REMIC	Group 11 Securities
Group 16 REMIC	Group 16 Securities
Group 17 Issuing and Pooling REMICs	Group 17 Securities

Upon any termination of the Trust (or one or more related Trust REMICs), the Holder of any related 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 related 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 related Trust REMICs after payment in full of the amounts described in the foregoing sentence. However, any remaining assets are not likely to be significant.

With respect to each of Security Groups 6, 9, 11, 16 and 17, a Holder of all of the outstanding Regular Securities of any such Security Group and the related Class of Residual Securities shall have the right to purchase the related Trust Assets upon three Business Days' notice (the "Notice Period"). The purchase shall be for cash in an amount equal to (A)(i) the aggregate remaining principal balance of the assets of such Security Group, but in no event less than the aggregate outstanding principal amount of the Securities of such Security Group, plus (ii) accrued interest on the Securities of such Security Group, less (B) amounts on deposit in the related Trust REMIC or Trust REMICs, for distribution on the Securities of such Security Group, plus (C) a \$5,000 termination fee payable to the Trustee in connection with each Security Group to be terminated. After the Notice Period, and upon such purchase, the Trustee will terminate the related Trust REMIC or Trust REMICs. Upon such termination, the Trustee will distribute the cash proceeds of the sale of the related Trust Assets to the Holder of the related Securities (which distribution may be offset against amounts due on the sale of such assets), will cancel the Securities of the related Security Group and cause the removal from the Book-Entry Depository Account of all Classes of the related Security Group, will cancel the related Class of Residual Securities, and will credit the remaining Trust Assets in the related Security Group to the account of the surrendering Holder. Notwithstanding anything to the contrary contained herein, no such termination will be allowed unless the Trustee and Ginnie Mae are provided, at no cost to either the Trustee or Ginnie Mae, an Opinion of Counsel, acceptable to the Trustee and Ginnie Mae, to the effect that such termination constitutes a "qualified liquidation" under the REMIC Provisions, including Section 860F(a)(4) of the Code, and such termination will not result in a disqualification of any Trust REMIC that is not terminated at such time or the imposition of any "prohibited transactions" or "contributions" tax under the REMIC Provisions on any Trust REMIC that is not terminated at such time.

## Modification and Exchange

All or a portion of the Classes of REMIC Securities specified on the front cover may be exchanged for a proportionate interest in the related MX Class or Classes shown on Schedule I to this Supplement. Similarly, all or a portion of the related MX Class or Classes may be exchanged for proportionate interests in the related Class or Classes of REMIC Securities and, in the case of Combinations 1, 2, 3, 6, 7, 8, 9, 14, 15, 17, 21 and 22, other related MX Classes. This process may occur repeatedly.

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

In the case of Combinations 1, 2, 3, 6, 7, 8, 9, 14, 15, 17, 21 and 22, the related REMIC Securities may be exchanged for proportionate interests in various subcombinations of MX Classes. Similarly, all or a portion of these MX Classes may be exchanged for proportionate interests in the related REMIC Securities or in other subcombinations of the related MX Classes. Each subcombination may be effected only in proportions that result in the principal and interest entitlements of the Securities received being equal to the entitlements of the Securities surrendered. *See the example under “Description of the Securities — Modification and Exchange” in the Base Offering Circular.*

In the case of Combinations 11 and 12, each of the MX Securities is a Weighted Average Coupon Class that will accrue interest as described under “Terms Sheet — Interest Rates” in this Supplement. In the event that either (1) the Interest Rate of any such MX Class will equal or exceed 1,200% per annum for any Accrual Period or (2) the Class Principal Balance of any such MX Class will be reduced to zero on any Distribution Date, the Trustee will, prior to the close of business on the last Business Day of the calendar month immediately preceding the related Distribution Date in the first case, and prior to the related Distribution Date on which the Class Principal Balance of any such MX Class would be reduced to zero in the second case, effect a mandatory exchange of such MX Class for its related REMIC Securities. Thereafter, no further exchanges of such REMIC Securities will be permitted for the related Combination.

A Beneficial Owner proposing to effect an exchange must notify the Trustee through the Beneficial Owner’s Book-Entry Depository participant. This notice must be received by the Trustee not later than two Business Days before the proposed exchange date. The exchange date can be any Business Day other than the last Business Day of the month. The notice must contain the outstanding principal or notional balances of the Securities to be included in the exchange and the proposed exchange date. The notice is required to be delivered to the Trustee by email to USBGNMATEam@USBank.com or in writing at its Corporate Trust Office at U.S. Bank National Association, One Federal Street, 3rd Floor, Boston, MA 02110, Attention: Ginnie Mae REMIC Program Agency Group 2020-005. The Trustee may be contacted by telephone at (617) 603-6451 and by fax at (617) 603-6644.

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

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

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

## YIELD, MATURITY AND PREPAYMENT CONSIDERATIONS

### General

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

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

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

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

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

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

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

Investors in the Group 1, 3, 4, 12, 13, 14, 15, 16, 21 and 22 Securities are urged to review the discussion under “Risk Factors — *The rate of payments on the underlying certificates will directly affect the rate of payments on the group 1, 3, 4, 12, 13, 14, 15, 16, 21 and 22 securities*” in this Supplement.

### Accretion Directed Classes

Classes CA, CL, DA, DF, DY, GA, GL, JP, KA, KU, MC, ME, MU, MW, MY, MZ, NA, NL, PA, PC, PY, YP and ZJ 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 DS, IO and PI is a Notional Class whose Class Notional Balance is determined by reference to the Class Principal Balance of the related Accretion Directed Class or Classes shown under “Terms Sheet — Notional Classes” in this Supplement.

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

**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:

	<u>Initial Effective Ranges</u>
<b>PAC Classes</b>	
CA and CL (in the aggregate) . . . . .	200% PSA through 335% PSA
DA, DF, DY, PC and PY (in the aggregate) . . . . .	149% PSA through 250% PSA
GA and GL (in the aggregate) . . . . .	200% PSA through 350% PSA
JP and ZJ (in the aggregate) . . . . .	188% PSA through 300% PSA
MC, ME, MU, MW, MY and MZ (in the aggregate) . . . . .	181% PSA through 300% PSA
NA and NL (in the aggregate) . . . . .	175% PSA through 325% PSA
PA and YP (in the aggregate) . . . . .	350% PSA through 600% PSA
<b>PAC I Classes</b>	
AK, KB and KY (in the aggregate) . . . . .	286% PSA through 500% PSA
<b>PAC II Classes</b>	
KA and KZ (in the aggregate) . . . . .	440% PSA through 500% PSA

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

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



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

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

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

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

### **Assumability**

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

### **Final Distribution Date**

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

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

### **Modeling Assumptions**

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

1. The Mortgage Loans underlying the Group 2, 5, 6, 7, 8, 9, 10, 11, 18, 19, 20 and 23 Trust Assets have the assumed characteristics shown under “Assumed Characteristics of the Mortgage Loans Underlying the Group 2, 5, 6, 7, 8, 9, 10, 11, 18, 19, 20 and 23 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 2, 5, 6, 7, 8, 9, 10, 11, 18, 19, 20 or 23 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. The Group 17 Trust Assets and the Mortgage Loans underlying the Group 17 Trust Assets have the assumed characteristics shown in Exhibit B.

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

3. Distributions on the Group 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22 and 23 Securities are always received on the 20th day of the month, and distributions on the Group 3 Securities are always received on the 16th day of the month, in each case, whether or not a Business Day, commencing in February 2020.

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

5. The Closing Date for the Securities is January 30, 2020.

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

7. Distributions on the Underlying Certificates are made as described in the related Underlying Certificate Disclosure Documents.

8. Each Class is held from the Closing Date and is not exchanged in whole or in part, including that there is no mandatory exchange of any MX Class that is a Weighted Average Coupon Class.

9. The Certificate Rate on each Group 17 Trust Asset for the first Distribution Date is based on the information set forth in Exhibit B. The Mortgage Margin, lifetime Mortgage Loan interest rate cap and lifetime Mortgage Loan interest rate floor will equal the related Certificate Margin, Lifetime Certificate Interest Rate Cap and Lifetime Certificate Interest Rate Floor, as applicable, plus the Servicing and Guaranty Fee Rate, each as shown in Exhibit B.

10. For purposes of the decrement tables for Security Group 17 and the Class WI Securities, on all Distribution Dates occurring after the next Mortgage Rate adjustment date for the related Mortgage Loans, the constant value of CMT shown with respect to any decrement table is used to calculate the Mortgage Rate with respect to the Mortgage Loans, subject to any applicable caps and floors.

11. With respect to the Group 17 and Subgroup 12L Trust Assets, one month after each Mortgage Rate adjustment date the payment amount of the related Mortgage Loan will be reset so that the remaining principal balance of that Mortgage Loan will fully amortize in equal monthly payments over its remaining term to maturity, assuming its Mortgage Rate remains constant.

12. When calculating the Mortgage Rate (for the adjustable rate mortgage loans only) or Certificate Rate with respect to the Group 17 and Subgroup 12L Trust Assets, the rate is not rounded to the nearest 1/8 of one percent.

13. For the purposes of determining the Interest Rate for the Subgroup 12L Trust Asset with respect to the first Distribution Date, LIBOR is equal to 1.78088% for Ginnie Mae 2017-139 Class JI and Ginnie Mae 2018-011 Class NS and LIBOR is equal to 1.65775% for Ginnie Mae 2018-018 Class SH.

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 16th or 20th day of the month, as applicable, 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 models used in this Supplement, Prepayment Speed Assumption (“PSA”) and Constant Prepayment Rate (“CPR”), are the standard prepayment assumption models 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. CPR represents a constant rate of prepayment on the Mortgage Loans each month relative to the then outstanding aggregate principal balance of the Mortgage Loans for the life of those Mortgage Loans. *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”) or CPR (the “CPR Prepayment Assumption Rates”), as applicable. As used in the tables, each of the PSA Prepayment Assumption Rates or CPR Prepayment Assumption Rates reflects a percentage of the 100% PSA or CPR assumed prepayment rate. **The Mortgage Loans will not prepay at any of the PSA Prepayment Assumption Rates or CPR 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 or CPR 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 or CPR Prepayment Assumption Rates, as applicable, and, in the case of the Group 17 Securities and the Class WI Securities, that CMT is at the specified level. 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 or CPR Prepayment Assumption Rate, as applicable. 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. In addition, the Weighted Average Lives of the Group 17 Securities and the Class WI Securities are likely to vary due to differences between actual CMT and the assumed constant levels of CMT.**

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

Security Group 1 PSA Prepayment Assumption Rates															
Distribution Date	Class A					Class B					Class CI				
	0%	100%	250%	400%	500%	0%	100%	250%	400%	500%	0%	100%	250%	400%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
January 2021	97	88	76	64	56	96	90	81	71	65	97	87	73	59	50
January 2022	93	77	56	37	25	92	81	65	50	42	93	75	49	26	12
January 2023	89	67	39	16	12	88	72	52	35	27	90	63	29	1	0
January 2024	85	57	25	11	8	84	64	41	24	17	86	52	12	0	0
January 2025	81	48	14	8	5	80	57	32	17	11	82	42	0	0	0
January 2026	77	40	11	5	3	75	50	25	12	7	78	32	0	0	0
January 2027	73	32	9	3	2	70	43	19	8	4	74	23	0	0	0
January 2028	68	25	7	2	1	65	37	15	5	3	70	15	0	0	0
January 2029	63	18	5	2	1	59	31	11	4	2	65	7	0	0	0
January 2030	59	12	4	1	0	53	26	8	2	1	60	0	0	0	0
January 2031	53	10	3	1	0	47	21	6	2	1	55	0	0	0	0
January 2032	48	8	2	0	0	40	17	4	1	0	50	0	0	0	0
January 2033	42	7	1	0	0	33	13	3	1	0	45	0	0	0	0
January 2034	36	5	1	0	0	27	10	2	0	0	39	0	0	0	0
January 2035	30	3	1	0	0	20	7	1	0	0	33	0	0	0	0
January 2036	23	2	0	0	0	13	4	1	0	0	27	0	0	0	0
January 2037	17	1	0	0	0	6	1	0	0	0	20	0	0	0	0
January 2038	10	1	0	0	0	2	0	0	0	0	13	0	0	0	0
January 2039	4	0	0	0	0	0	0	0	0	0	6	0	0	0	0
January 2040	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
January 2041	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
January 2042	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
January 2043	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
January 2044	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
January 2045	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
January 2046	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
January 2047	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
January 2048	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
January 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	11.0	5.5	3.0	2.0	1.6	10.0	6.7	4.2	2.8	2.3	11.4	4.5	2.1	1.4	1.1

PSA Prepayment Assumption Rates										
Distribution Date	Class DI					Class IB				
	0%	100%	250%	400%	500%	0%	100%	250%	400%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100
January 2021	96	90	81	72	66	96	89	80	70	64
January 2022	93	81	65	51	43	92	80	63	48	39
January 2023	89	73	52	36	27	87	70	49	33	25
January 2024	85	65	42	25	17	82	62	38	23	16
January 2025	81	58	33	17	9	77	54	29	16	11
January 2026	76	51	26	11	5	72	46	23	11	7
January 2027	72	45	19	6	3	67	39	18	8	4
January 2028	67	39	14	3	2	61	33	14	6	3
January 2029	62	33	10	2	1	54	27	11	4	2
January 2030	57	28	7	2	1	48	22	8	2	1
January 2031	51	23	4	1	0	40	18	6	2	1
January 2032	45	18	3	1	0	33	14	4	1	0
January 2033	39	14	2	0	0	26	11	3	1	0
January 2034	33	10	2	0	0	21	8	2	0	0
January 2035	26	6	1	0	0	15	5	1	0	0
January 2036	19	4	1	0	0	9	3	1	0	0
January 2037	11	2	0	0	0	3	1	0	0	0
January 2038	4	1	0	0	0	1	0	0	0	0
January 2039	0	0	0	0	0	0	0	0	0	0
January 2040	0	0	0	0	0	0	0	0	0	0
January 2041	0	0	0	0	0	0	0	0	0	0
January 2042	0	0	0	0	0	0	0	0	0	0
January 2043	0	0	0	0	0	0	0	0	0	0
January 2044	0	0	0	0	0	0	0	0	0	0
January 2045	0	0	0	0	0	0	0	0	0	0
January 2046	0	0	0	0	0	0	0	0	0	0
January 2047	0	0	0	0	0	0	0	0	0	0
January 2048	0	0	0	0	0	0	0	0	0	0
January 2049	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	10.6	6.9	4.1	2.8	2.2	9.4	6.3	4.0	2.7	2.2



**Security Group 2  
PSA Prepayment Assumption Rates**

Distribution Date	Class MW					Class MY					Class MZ				
	0%	181%	225%	300%	500%	0%	181%	225%	300%	500%	0%	181%	225%	300%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
January 2021	100	100	100	100	100	100	100	100	100	100	104	104	104	104	104
January 2022	100	100	100	100	100	100	100	100	100	100	107	107	107	107	107
January 2023	100	100	100	100	100	100	100	100	100	100	111	111	111	111	111
January 2024	100	100	100	100	100	100	100	100	100	100	115	115	115	115	115
January 2025	100	100	100	100	100	100	100	100	100	100	119	119	119	119	119
January 2026	100	100	100	100	100	100	100	100	100	100	123	123	123	123	123
January 2027	100	100	100	100	100	100	100	100	100	100	128	128	128	128	128
January 2028	100	100	100	100	50	100	100	100	100	100	132	132	132	132	132
January 2029	100	100	100	100	14	100	100	100	100	100	137	137	137	137	137
January 2030	100	100	100	100	0	100	100	100	100	78	142	142	142	142	142
January 2031	100	100	100	100	0	100	100	100	100	44	147	147	147	147	147
January 2032	100	65	65	65	0	100	100	100	100	20	152	152	152	152	152
January 2033	100	37	37	37	0	100	100	100	100	4	158	158	158	158	158
January 2034	100	15	15	15	0	100	100	100	100	0	163	163	163	163	121
January 2035	100	0	0	0	0	100	94	94	94	0	169	169	169	169	81
January 2036	100	0	0	0	0	100	66	66	66	0	175	175	175	175	54
January 2037	100	0	0	0	0	100	43	43	43	0	181	181	181	181	35
January 2038	100	0	0	0	0	100	25	25	25	0	188	188	188	188	23
January 2039	100	0	0	0	0	100	10	10	10	0	194	194	194	194	15
January 2040	100	0	0	0	0	100	0	0	0	0	201	191	191	191	10
January 2041	100	0	0	0	0	100	0	0	0	0	208	143	143	143	6
January 2042	100	0	0	0	0	100	0	0	0	0	216	106	106	106	4
January 2043	49	0	0	0	0	100	0	0	0	0	223	77	77	77	2
January 2044	0	0	0	0	0	23	0	0	0	0	231	55	55	55	1
January 2045	0	0	0	0	0	0	0	0	0	0	38	38	38	38	1
January 2046	0	0	0	0	0	0	0	0	0	0	25	25	25	25	0
January 2047	0	0	0	0	0	0	0	0	0	0	15	15	15	15	0
January 2048	0	0	0	0	0	0	0	0	0	0	8	8	8	8	0
January 2049	0	0	0	0	0	0	0	0	0	0	3	3	3	3	0
January 2050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	23.0	12.7	12.7	12.7	8.1	23.9	16.9	16.9	16.9	11.0	24.7	22.8	22.8	22.8	15.8

**Security Group 3  
PSA Prepayment Assumption Rates**

Distribution Date	Class E					Class EI				
	0%	100%	250%	400%	500%	0%	100%	250%	400%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100
January 2021	96	90	81	72	66	96	90	81	71	65
January 2022	92	81	65	51	42	93	81	64	49	40
January 2023	88	72	52	35	26	89	72	51	33	24
January 2024	83	64	41	24	16	85	64	39	22	13
January 2025	78	56	32	16	9	80	56	30	13	5
January 2026	73	49	24	10	4	76	49	22	6	2
January 2027	67	42	18	5	3	71	43	16	2	1
January 2028	62	35	13	3	1	66	36	11	1	0
January 2029	56	30	9	2	1	61	31	6	1	0
January 2030	49	24	5	1	0	55	25	3	0	0
January 2031	44	20	3	0	0	50	20	1	0	0
January 2032	40	16	2	0	0	45	16	1	0	0
January 2033	36	13	2	0	0	39	12	1	0	0
January 2034	31	10	1	0	0	34	8	0	0	0
January 2035	26	7	1	0	0	28	5	0	0	0
January 2036	21	4	0	0	0	21	1	0	0	0
January 2037	16	3	0	0	0	14	1	0	0	0
January 2038	10	2	0	0	0	7	1	0	0	0
January 2039	4	1	0	0	0	2	0	0	0	0
January 2040	3	0	0	0	0	1	0	0	0	0
January 2041	2	0	0	0	0	1	0	0	0	0
January 2042	0	0	0	0	0	0	0	0	0	0
January 2043	0	0	0	0	0	0	0	0	0	0
January 2044	0	0	0	0	0	0	0	0	0	0
January 2045	0	0	0	0	0	0	0	0	0	0
January 2046	0	0	0	0	0	0	0	0	0	0
January 2047	0	0	0	0	0	0	0	0	0	0
January 2048	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	10.3	6.7	4.0	2.7	2.1	10.6	6.6	3.7	2.5	2.0



**Security Group 6  
PSA Prepayment Assumption Rates**

Distribution Date	Classes AF and AS				
	0%	100%	250%	400%	500%
Initial Percent	100	100	100	100	100
January 2021	99	97	95	92	91
January 2022	97	91	84	76	72
January 2023	95	84	70	57	50
January 2024	94	78	58	43	34
January 2025	92	71	49	32	23
January 2026	90	66	40	24	16
January 2027	88	60	33	17	11
January 2028	86	55	28	13	7
January 2029	84	50	23	10	5
January 2030	81	46	19	7	3
January 2031	79	42	15	5	2
January 2032	76	38	13	4	2
January 2033	74	34	10	3	1
January 2034	71	31	8	2	1
January 2035	68	28	7	1	0
January 2036	65	25	6	1	0
January 2037	61	22	4	1	0
January 2038	58	19	4	1	0
January 2039	54	17	3	0	0
January 2040	51	15	2	0	0
January 2041	47	13	2	0	0
January 2042	42	11	1	0	0
January 2043	38	9	1	0	0
January 2044	33	7	1	0	0
January 2045	28	6	1	0	0
January 2046	23	5	0	0	0
January 2047	18	3	0	0	0
January 2048	12	2	0	0	0
January 2049	6	1	0	0	0
January 2050	0	0	0	0	0
Weighted Average Life (years)	18.6	10.8	6.3	4.4	3.7

**Security Group 7  
PSA Prepayment Assumption Rates**

Distribution Date	Classes GA, GB, GC, GD, GE, GH, GI and GJ					Class GL					Class GZ				
	0%	200%	275%	350%	600%	0%	200%	275%	350%	600%	0%	200%	275%	350%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
January 2021	98	93	93	93	93	100	100	100	100	100	104	104	96	88	61
January 2022	95	81	81	81	77	100	100	100	100	100	107	107	82	57	0
January 2023	92	67	67	67	49	100	100	100	100	100	111	111	67	25	0
January 2024	90	54	54	54	30	100	100	100	100	100	115	115	58	7	0
January 2025	87	42	42	42	19	100	100	100	100	100	119	119	55	0	0
January 2026	84	33	33	33	11	100	100	100	100	100	123	122	55	0	0
January 2027	80	25	25	25	7	100	100	100	100	100	128	120	52	0	0
January 2028	77	19	19	19	4	100	100	100	100	100	132	115	48	0	0
January 2029	74	14	14	14	2	100	100	100	100	100	137	107	44	0	0
January 2030	70	11	11	11	1	100	100	100	100	100	142	98	39	0	0
January 2031	66	8	8	8	0	100	100	100	100	100	147	89	34	0	0
January 2032	62	6	6	6	0	100	100	100	100	100	152	79	29	0	0
January 2033	58	4	4	4	0	100	100	100	100	65	158	70	25	0	0
January 2034	53	3	3	3	0	100	100	100	100	40	163	61	21	0	0
January 2035	49	2	2	2	0	100	100	100	100	24	169	53	18	0	0
January 2036	44	2	2	2	0	100	100	100	100	15	175	46	15	0	0
January 2037	39	1	1	1	0	100	100	100	100	9	181	39	12	0	0
January 2038	33	1	1	1	0	100	100	100	100	5	188	33	10	0	0
January 2039	28	0	0	0	0	100	100	100	100	3	194	28	8	0	0
January 2040	22	0	0	0	0	100	100	100	100	2	201	23	6	0	0
January 2041	16	0	0	0	0	100	73	73	73	1	208	19	5	0	0
January 2042	9	0	0	0	0	100	52	52	52	1	216	15	4	0	0
January 2043	3	0	0	0	0	100	36	36	36	0	223	12	3	0	0
January 2044	0	0	0	0	0	25	25	25	25	0	211	9	2	0	0
January 2045	0	0	0	0	0	17	17	17	17	0	180	7	2	0	0
January 2046	0	0	0	0	0	11	11	11	11	0	148	5	1	0	0
January 2047	0	0	0	0	0	6	6	6	6	0	113	3	1	0	0
January 2048	0	0	0	0	0	3	3	3	3	0	78	2	0	0	0
January 2049	0	0	0	0	0	1	1	1	1	0	40	1	0	0	0
January 2050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	13.8	5.2	5.2	5.2	3.5	24.1	22.7	22.7	22.7	14.2	26.9	15.0	8.4	2.3	1.1





**Security Group 9  
PSA Prepayment Assumption Rates**

<u>Distribution Date</u>	<u>Classes FA and SA</u>				
	<u>0%</u>	<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>
Initial Percent .....	100	100	100	100	100
January 2021 .....	99	96	94	91	89
January 2022 .....	97	90	82	74	68
January 2023 .....	95	83	68	55	47
January 2024 .....	94	77	57	41	32
January 2025 .....	92	70	47	30	22
January 2026 .....	90	65	39	23	15
January 2027 .....	88	59	32	17	10
January 2028 .....	86	54	27	12	7
January 2029 .....	84	49	22	9	5
January 2030 .....	81	45	18	7	3
January 2031 .....	79	41	15	5	2
January 2032 .....	76	37	12	4	1
January 2033 .....	74	33	10	3	1
January 2034 .....	71	30	8	2	1
January 2035 .....	68	27	7	1	0
January 2036 .....	65	24	5	1	0
January 2037 .....	61	21	4	1	0
January 2038 .....	58	19	3	1	0
January 2039 .....	54	16	3	0	0
January 2040 .....	51	14	2	0	0
January 2041 .....	47	12	2	0	0
January 2042 .....	42	10	1	0	0
January 2043 .....	38	9	1	0	0
January 2044 .....	33	7	1	0	0
January 2045 .....	28	6	1	0	0
January 2046 .....	23	4	0	0	0
January 2047 .....	18	3	0	0	0
January 2048 .....	12	2	0	0	0
January 2049 .....	6	1	0	0	0
January 2050 .....	0	0	0	0	0
Weighted Average Life (years) .....	18.6	10.6	6.1	4.3	3.6

**Security Group 10  
PSA Prepayment Assumption Rates**

<u>Distribution Date</u>	<u>Classes AI and AT</u>				
	<u>0%</u>	<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>
Initial Percent .....	100	100	100	100	100
January 2021 .....	99	97	95	93	92
January 2022 .....	97	92	85	78	73
January 2023 .....	95	85	71	59	51
January 2024 .....	94	78	59	44	35
January 2025 .....	92	72	49	32	24
January 2026 .....	90	66	41	24	16
January 2027 .....	88	60	34	18	11
January 2028 .....	86	55	28	13	8
January 2029 .....	84	50	23	10	5
January 2030 .....	81	46	19	7	4
January 2031 .....	79	42	16	5	2
January 2032 .....	76	38	13	4	2
January 2033 .....	74	34	10	3	1
January 2034 .....	71	31	8	2	1
January 2035 .....	68	27	7	1	0
January 2036 .....	65	25	6	1	0
January 2037 .....	61	22	4	1	0
January 2038 .....	58	19	4	1	0
January 2039 .....	54	17	3	0	0
January 2040 .....	51	15	2	0	0
January 2041 .....	47	13	2	0	0
January 2042 .....	42	11	1	0	0
January 2043 .....	38	9	1	0	0
January 2044 .....	33	7	1	0	0
January 2045 .....	28	6	1	0	0
January 2046 .....	23	4	0	0	0
January 2047 .....	18	3	0	0	0
January 2048 .....	12	2	0	0	0
January 2049 .....	6	1	0	0	0
January 2050 .....	0	0	0	0	0
Weighted Average Life (years) .....	18.6	10.8	6.3	4.5	3.8

**Security Group 11  
PSA Prepayment Assumption Rates**

Distribution Date	Classes CF and CS				
	0%	100%	250%	400%	500%
Initial Percent	100	100	100	100	100
January 2021	99	96	94	91	89
January 2022	97	90	82	74	68
January 2023	95	83	68	55	47
January 2024	94	77	57	41	32
January 2025	92	70	47	30	22
January 2026	90	65	39	23	15
January 2027	88	59	32	17	10
January 2028	86	54	27	12	7
January 2029	84	49	22	9	5
January 2030	81	45	18	7	3
January 2031	79	41	15	5	2
January 2032	76	37	12	4	1
January 2033	74	33	10	3	1
January 2034	71	30	8	2	1
January 2035	68	27	7	1	0
January 2036	65	24	5	1	0
January 2037	61	21	4	1	0
January 2038	58	19	3	1	0
January 2039	54	16	3	0	0
January 2040	51	14	2	0	0
January 2041	47	12	2	0	0
January 2042	42	10	1	0	0
January 2043	38	9	1	0	0
January 2044	33	7	1	0	0
January 2045	28	6	0	0	0
January 2046	23	4	0	0	0
January 2047	18	3	0	0	0
January 2048	12	2	0	0	0
January 2049	6	1	0	0	0
January 2050	0	0	0	0	0
Weighted Average Life (years)	18.6	10.6	6.1	4.3	3.6

**Security Groups 9 and 11  
PSA Prepayment Assumption Rates**

Distribution Date	Class SC				
	0%	100%	250%	400%	500%
Initial Percent	100	100	100	100	100
January 2021	99	96	94	91	89
January 2022	97	90	82	74	68
January 2023	95	83	68	55	47
January 2024	94	77	57	41	32
January 2025	92	70	47	30	22
January 2026	90	65	39	23	15
January 2027	88	59	32	17	10
January 2028	86	54	27	12	7
January 2029	84	49	22	9	5
January 2030	81	45	18	7	3
January 2031	79	41	15	5	2
January 2032	76	37	12	4	1
January 2033	74	33	10	3	1
January 2034	71	30	8	2	1
January 2035	68	27	7	1	0
January 2036	65	24	5	1	0
January 2037	61	21	4	1	0
January 2038	58	19	3	1	0
January 2039	54	16	3	0	0
January 2040	51	14	2	0	0
January 2041	47	12	2	0	0
January 2042	42	10	1	0	0
January 2043	38	9	1	0	0
January 2044	33	7	1	0	0
January 2045	28	6	0	0	0
January 2046	23	4	0	0	0
January 2047	18	3	0	0	0
January 2048	12	2	0	0	0
January 2049	6	1	0	0	0
January 2050	0	0	0	0	0
Weighted Average Life (years)	18.6	10.6	6.1	4.3	3.6









**Security Group 14  
PSA Prepayment Assumption Rates**

<u>Distribution Date</u>	<u>Classes HD, HE, HG, HI, HJ, HK, HM, HN and HP</u>				
	<u>0%</u>	<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>
Initial Percent .....	100	100	100	100	100
January 2021 .....	98	96	91	87	84
January 2022 .....	97	89	78	67	61
January 2023 .....	95	82	65	50	42
January 2024 .....	93	76	54	37	29
January 2025 .....	91	70	45	28	20
January 2026 .....	89	64	38	21	13
January 2027 .....	87	59	31	15	9
January 2028 .....	85	54	26	11	6
January 2029 .....	83	49	21	8	4
January 2030 .....	80	45	18	6	3
January 2031 .....	78	41	15	5	2
January 2032 .....	75	37	12	3	1
January 2033 .....	72	34	10	2	1
January 2034 .....	69	30	8	2	1
January 2035 .....	66	27	6	1	0
January 2036 .....	63	24	5	1	0
January 2037 .....	60	22	4	1	0
January 2038 .....	56	19	3	0	0
January 2039 .....	52	17	3	0	0
January 2040 .....	48	15	2	0	0
January 2041 .....	44	13	2	0	0
January 2042 .....	40	11	1	0	0
January 2043 .....	35	9	1	0	0
January 2044 .....	30	7	1	0	0
January 2045 .....	25	6	0	0	0
January 2046 .....	20	4	0	0	0
January 2047 .....	14	3	0	0	0
January 2048 .....	8	1	0	0	0
January 2049 .....	2	0	0	0	0
January 2050 .....	0	0	0	0	0
Weighted Average Life (years) .....	18.1	10.5	5.9	4.0	3.3

**Security Group 15  
PSA Prepayment Assumption Rates**

<u>Distribution Date</u>	<u>Class II</u>				
	<u>0%</u>	<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>
Initial Percent .....	100	100	100	100	100
January 2021 .....	97	90	79	68	61
January 2022 .....	94	80	61	44	33
January 2023 .....	91	71	46	25	14
January 2024 .....	88	63	33	11	6
January 2025 .....	85	55	22	6	4
January 2026 .....	81	48	13	4	2
January 2027 .....	78	41	8	3	1
January 2028 .....	74	34	6	2	1
January 2029 .....	70	28	5	1	0
January 2030 .....	66	22	4	1	0
January 2031 .....	62	17	3	1	0
January 2032 .....	58	12	2	0	0
January 2033 .....	54	9	2	0	0
January 2034 .....	49	8	1	0	0
January 2035 .....	44	7	1	0	0
January 2036 .....	39	6	1	0	0
January 2037 .....	34	5	0	0	0
January 2038 .....	29	4	0	0	0
January 2039 .....	23	3	0	0	0
January 2040 .....	17	3	0	0	0
January 2041 .....	13	2	0	0	0
January 2042 .....	9	2	0	0	0
January 2043 .....	7	1	0	0	0
January 2044 .....	6	1	0	0	0
January 2045 .....	4	1	0	0	0
January 2046 .....	2	0	0	0	0
January 2047 .....	1	0	0	0	0
January 2048 .....	0	0	0	0	0
January 2049 .....	0	0	0	0	0
January 2050 .....	0	0	0	0	0
Weighted Average Life (years) .....	13.3	6.6	3.4	2.2	1.7



**Security Group 16  
PSA Prepayment Assumption Rates**

Distribution Date	Class FH				
	0%	100%	250%	400%	500%
Initial Percent	100	100	100	100	100
January 2021	99	95	90	85	82
January 2022	97	89	77	66	59
January 2023	96	82	65	49	41
January 2024	94	76	54	37	28
January 2025	92	70	45	28	19
January 2026	90	65	37	21	13
January 2027	89	59	31	15	9
January 2028	87	55	26	11	6
January 2029	84	50	21	8	4
January 2030	82	46	18	6	3
January 2031	80	42	15	5	2
January 2032	77	38	12	3	1
January 2033	74	34	10	2	1
January 2034	71	31	8	2	1
January 2035	68	28	7	1	0
January 2036	65	25	5	1	0
January 2037	62	22	4	1	0
January 2038	58	20	3	0	0
January 2039	54	17	3	0	0
January 2040	50	15	2	0	0
January 2041	46	13	2	0	0
January 2042	41	11	1	0	0
January 2043	36	9	1	0	0
January 2044	31	7	1	0	0
January 2045	26	6	0	0	0
January 2046	20	4	0	0	0
January 2047	14	3	0	0	0
January 2048	8	1	0	0	0
January 2049	2	0	0	0	0
January 2050	0	0	0	0	0
Weighted Average Life (years)	18.5	10.7	5.9	3.9	3.2

**Security Group 17  
CPR Prepayment Assumption Rates**

Distribution Date	Classes JF and JI 1.59000% CMT					Classes JF and JI 3.00000% CMT					Classes JF and JI 4.00000% CMT					Classes JF and JI 6.50000% CMT				
	0%	10%	15%	25%	30%	0%	10%	15%	25%	30%	0%	10%	15%	25%	30%	0%	10%	15%	25%	30%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
January 2021	97	88	83	73	68	98	88	83	73	68	98	88	83	73	68	98	88	83	73	68
January 2022	95	77	68	53	46	95	77	69	54	47	95	77	69	54	47	95	77	69	54	47
January 2023	92	67	56	39	31	93	68	57	39	32	93	68	57	39	32	93	68	57	39	32
January 2024	89	58	46	28	21	90	59	47	29	22	91	60	47	29	22	91	60	48	29	22
January 2025	86	50	38	20	14	87	52	39	21	15	88	52	39	21	15	89	53	40	21	15
January 2026	82	44	31	15	10	85	45	32	15	10	86	46	32	15	10	87	46	33	16	10
January 2027	79	38	25	11	6	82	39	26	11	7	83	40	27	11	7	85	41	27	11	7
January 2028	75	32	21	8	4	78	34	21	8	5	80	34	22	8	5	83	36	23	8	5
January 2029	72	28	17	5	3	75	29	17	6	3	77	30	18	6	3	80	31	19	6	3
January 2030	68	24	13	4	2	72	25	14	4	2	74	26	14	4	2	77	27	15	4	2
January 2031	64	20	11	3	1	68	21	11	3	1	70	22	12	3	1	74	23	12	3	1
January 2032	60	17	9	2	1	64	18	9	2	1	66	19	9	2	1	71	20	10	2	1
January 2033	56	14	7	1	1	60	15	7	1	1	63	16	8	1	1	67	17	8	2	1
January 2034	52	12	5	1	0	56	13	6	1	0	58	13	6	1	0	63	14	6	1	0
January 2035	47	10	4	1	0	51	11	4	1	0	54	11	5	1	0	59	12	5	1	0
January 2036	43	8	3	0	0	47	9	3	0	0	49	9	4	0	0	54	10	4	1	0
January 2037	38	6	2	0	0	42	7	3	0	0	44	7	3	0	0	49	8	3	0	0
January 2038	33	5	2	0	0	37	6	2	0	0	39	6	2	0	0	44	7	2	0	0
January 2039	28	4	1	0	0	31	4	1	0	0	33	5	2	0	0	38	5	2	0	0
January 2040	23	3	1	0	0	26	3	1	0	0	27	3	1	0	0	32	4	1	0	0
January 2041	17	2	1	0	0	20	2	1	0	0	21	2	1	0	0	25	3	1	0	0
January 2042	12	1	0	0	0	13	1	0	0	0	15	1	0	0	0	17	2	0	0	0
January 2043	6	1	0	0	0	7	1	0	0	0	7	1	0	0	0	9	1	0	0	0
January 2044	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0
January 2045	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	13.7	6.6	4.9	3.1	2.6	14.3	6.8	5.0	3.2	2.6	14.6	6.9	5.1	3.2	2.6	15.3	7.0	5.2	3.2	2.6

**Security Group 18  
PSA Prepayment Assumption Rates**

Distribution Date	Class AZ					Classes IP, PA, PB, PD, PE, PG, PH, PJ, PK and PL					Class YP				
	0%	350%	400%	600%	800%	0%	350%	400%	600%	800%	0%	350%	400%	600%	800%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
January 2021	104	104	100	83	66	97	91	91	91	91	100	100	100	100	100
January 2022	108	108	95	42	0	95	72	72	72	70	100	100	100	100	100
January 2023	113	113	90	7	0	92	49	49	49	35	100	100	100	100	100
January 2024	117	117	90	0	0	89	31	31	31	16	100	100	100	100	100
January 2025	122	113	85	0	0	86	18	18	18	7	100	100	100	100	100
January 2026	127	101	74	0	0	82	10	10	10	2	100	100	100	100	100
January 2027	132	86	62	0	0	79	5	5	5	0	100	100	100	100	83
January 2028	138	72	50	0	0	75	2	2	2	0	100	100	100	100	42
January 2029	143	59	40	0	0	71	0	0	0	0	100	100	100	100	21
January 2030	149	47	31	0	0	67	0	0	0	0	100	65	65	65	11
January 2031	155	37	24	0	0	63	0	0	0	0	100	40	40	40	5
January 2032	161	29	18	0	0	58	0	0	0	0	100	25	25	25	3
January 2033	168	23	14	0	0	54	0	0	0	0	100	15	15	15	1
January 2034	175	18	10	0	0	49	0	0	0	0	100	9	9	9	1
January 2035	182	13	8	0	0	43	0	0	0	0	100	6	6	6	0
January 2036	189	10	6	0	0	38	0	0	0	0	100	3	3	3	0
January 2037	197	8	4	0	0	32	0	0	0	0	100	2	2	2	0
January 2038	205	6	3	0	0	26	0	0	0	0	100	1	1	1	0
January 2039	214	4	2	0	0	19	0	0	0	0	100	1	1	1	0
January 2040	222	3	1	0	0	13	0	0	0	0	100	0	0	0	0
January 2041	231	2	1	0	0	6	0	0	0	0	100	0	0	0	0
January 2042	241	2	1	0	0	0	0	0	0	0	39	0	0	0	0
January 2043	221	1	0	0	0	0	0	0	0	0	0	0	0	0	0
January 2044	194	1	0	0	0	0	0	0	0	0	0	0	0	0	0
January 2045	166	1	0	0	0	0	0	0	0	0	0	0	0	0	0
January 2046	137	0	0	0	0	0	0	0	0	0	0	0	0	0	0
January 2047	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0
January 2048	72	0	0	0	0	0	0	0	0	0	0	0	0	0	0
January 2049	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0
January 2050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	26.4	9.9	8.5	1.8	1.2	12.8	3.3	3.3	3.3	2.7	22.0	11.2	11.2	11.2	8.2

**Security Group 19  
PSA Prepayment Assumption Rates**

Distribution Date	Class JP					Class JZ					Class PI					Class ZJ					
	0%	188%	225%	300%	500%	0%	188%	225%	300%	500%	0%	188%	225%	300%	500%	0%	188%	225%	300%	500%	
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
January 2021	98	93	93	93	93	104	104	98	87	57	98	93	93	93	93	103	103	103	103	103	103
January 2022	95	82	82	82	78	107	107	91	58	0	95	82	82	82	78	106	106	106	106	106	106
January 2023	93	69	69	69	53	111	111	83	28	0	93	69	69	69	54	109	109	109	109	109	109
January 2024	90	57	57	57	36	115	115	78	10	0	91	57	57	57	37	113	113	113	113	113	113
January 2025	88	46	46	46	25	119	119	77	1	0	88	47	47	47	25	116	116	116	116	116	116
January 2026	85	37	37	37	16	123	123	78	0	0	85	38	38	38	17	120	120	120	120	120	120
January 2027	82	29	29	29	11	128	123	77	0	0	82	30	30	30	12	123	123	123	123	123	123
January 2028	79	23	23	23	7	132	120	74	0	0	79	24	24	24	8	127	127	127	127	127	127
January 2029	75	18	18	18	4	137	114	69	0	0	76	19	19	19	5	131	131	131	131	131	131
January 2030	72	14	14	14	3	142	106	64	0	0	73	15	15	15	4	135	135	135	135	135	135
January 2031	68	11	11	11	1	147	98	58	0	0	69	12	12	12	2	139	139	139	139	139	139
January 2032	65	8	8	8	1	152	89	52	0	0	65	9	9	9	2	143	143	143	143	143	143
January 2033	61	6	6	6	0	158	80	46	0	0	61	7	7	7	1	148	148	148	148	148	141
January 2034	57	5	5	5	0	163	71	40	0	0	57	6	6	6	1	152	152	152	152	152	94
January 2035	52	3	3	3	0	169	63	35	0	0	53	5	5	5	1	157	157	157	157	157	63
January 2036	48	2	2	2	0	175	55	30	0	0	49	4	4	4	0	162	162	162	162	162	42
January 2037	43	1	1	1	0	181	47	25	0	0	44	3	3	3	0	166	166	166	166	166	28
January 2038	38	1	1	1	0	188	41	21	0	0	39	2	2	2	0	171	171	171	171	171	18
January 2039	33	0	0	0	0	194	35	18	0	0	34	2	2	2	0	177	177	177	177	177	12
January 2040	27	0	0	0	0	201	29	15	0	0	29	1	1	1	0	182	152	152	152	152	8
January 2041	22	0	0	0	0	208	24	12	0	0	23	1	1	1	0	188	114	114	114	114	5
January 2042	16	0	0	0	0	216	20	10	0	0	17	1	1	1	0	193	85	85	85	85	3
January 2043	9	0	0	0	0	223	16	8	0	0	11	0	0	0	0	199	61	61	61	61	2
January 2044	3	0	0	0	0	231	12	6	0	0	4	0	0	0	0	205	44	44	44	44	1
January 2045	0	0	0	0	0	222	9	4	0	0	0	0	0	0	0	30	30	30	30	30	1
January 2046	0	0	0	0	0	182	7	3	0	0	0	0	0	0	0	20	20	20	20	20	0
January 2047	0	0	0	0	0	140	5	2	0	0	0	0	0	0	0	12	12	12	12	12	0
January 2048	0	0	0	0	0	96	3	1	0	0	0	0	0	0	0	7	7	7	7	7	0
January 2049	0	0	0	0	0	49	1	0	0	0	0	0	0	0	0	2	2	2	2	2	0
January 2050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	14.5	5.6	5.6	5.6	3.8	27.5	15.9	12.2	2.3	1.1	14.7	5.8	5.8	5.8	3.9	24.9	22.5	22.5	22.5	22.5	15.3

**Security Groups 2 and 19  
PSA Prepayment Assumption Rates**

Distribution Date	Class ZM					
	0%	181%	188%	225%	300%	500%
Initial Percent	100	100	100	100	100	100
January 2021	104	104	103	99	90	67
January 2022	107	107	105	91	63	0
January 2023	111	111	107	81	32	0
January 2024	115	115	109	75	12	0
January 2025	119	119	112	73	2	0
January 2026	123	123	116	73	0	0
January 2027	128	125	116	73	0	0
January 2028	132	122	113	70	0	0
January 2029	137	117	108	66	0	0
January 2030	142	110	101	61	0	0
January 2031	147	101	93	55	0	0
January 2032	152	92	85	49	0	0
January 2033	158	83	76	44	0	0
January 2034	163	75	68	38	0	0
January 2035	169	66	60	33	0	0
January 2036	175	58	52	29	0	0
January 2037	181	50	45	24	0	0
January 2038	188	43	39	21	0	0
January 2039	194	37	33	17	0	0
January 2040	201	31	28	14	0	0
January 2041	208	26	23	11	0	0
January 2042	216	21	19	9	0	0
January 2043	223	17	15	7	0	0
January 2044	231	13	12	6	0	0
January 2045	210	10	9	4	0	0
January 2046	173	7	6	3	0	0
January 2047	133	5	4	2	0	0
January 2048	91	3	3	1	0	0
January 2049	47	1	1	0	0	0
January 2050	0	0	0	0	0	0
Weighted Average Life (years)	27.3	16.3	16.0	11.7	2.5	1.2

**Security Group 20  
PSA Prepayment Assumption Rates**

Distribution Date	Classes CA, CB, CD, CE, CG, CH, CJ and IC					Class CL					Class CZ				
	0%	200%	250%	335%	500%	0%	200%	250%	335%	500%	0%	200%	250%	335%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
January 2021	98	94	94	94	94	100	100	100	100	100	104	104	98	90	72
January 2022	95	83	83	83	83	100	100	100	100	100	107	107	90	61	6
January 2023	93	68	68	68	58	100	100	100	100	100	111	111	79	28	0
January 2024	90	55	55	55	39	100	100	100	100	100	115	115	73	9	0
January 2025	87	44	44	44	27	100	100	100	100	100	119	119	71	1	0
January 2026	84	34	34	34	18	100	100	100	100	100	123	123	72	0	0
January 2027	81	27	27	27	12	100	100	100	100	100	128	122	70	0	0
January 2028	78	20	20	20	8	100	100	100	100	100	132	117	66	0	0
January 2029	74	16	16	16	5	100	100	100	100	100	137	110	60	0	0
January 2030	71	12	12	12	3	100	100	100	100	100	142	101	55	0	0
January 2031	67	9	9	9	2	100	100	100	100	100	147	92	49	0	0
January 2032	63	7	7	7	1	100	100	100	100	100	152	83	43	0	0
January 2033	59	5	5	5	0	100	100	100	100	100	158	73	37	0	0
January 2034	55	4	4	4	0	100	100	100	100	94	163	65	32	0	0
January 2035	50	3	3	3	0	100	100	100	100	63	169	56	27	0	0
January 2036	46	2	2	2	0	100	100	100	100	42	175	49	23	0	0
January 2037	41	1	1	1	0	100	100	100	100	28	181	42	19	0	0
January 2038	36	1	1	1	0	100	100	100	100	18	188	35	16	0	0
January 2039	30	0	0	0	0	100	100	100	100	12	194	30	13	0	0
January 2040	25	0	0	0	0	100	92	92	92	8	201	25	11	0	0
January 2041	19	0	0	0	0	100	68	68	68	5	208	20	8	0	0
January 2042	13	0	0	0	0	100	49	49	49	3	216	16	7	0	0
January 2043	6	0	0	0	0	100	35	35	35	2	223	13	5	0	0
January 2044	0	0	0	0	0	24	24	24	24	1	231	10	4	0	0
January 2045	0	0	0	0	0	16	16	16	16	1	197	8	3	0	0
January 2046	0	0	0	0	0	11	11	11	11	0	162	5	2	0	0
January 2047	0	0	0	0	0	6	6	6	6	0	124	4	1	0	0
January 2048	0	0	0	0	0	3	3	3	3	0	85	2	1	0	0
January 2049	0	0	0	0	0	1	1	1	1	0	44	1	0	0	0
January 2050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	14.1	5.3	5.3	5.3	4.0	24.5	22.6	22.6	22.6	16.3	27.2	15.3	10.8	2.4	1.3

**Security Group 21  
PSA Prepayment Assumption Rates**

Distribution Date	Class ZG				
	0%	100%	250%	400%	500%
Initial Percent	100	100	100	100	100
January 2021	104	104	97	81	71
January 2022	107	107	88	39	8
January 2023	111	111	79	0	0
January 2024	115	115	74	0	0
January 2025	119	119	73	0	0
January 2026	123	123	74	0	0
January 2027	128	128	72	0	0
January 2028	132	132	67	0	0
January 2029	137	137	62	0	0
January 2030	142	142	56	0	0
January 2031	147	147	49	0	0
January 2032	152	152	43	0	0
January 2033	158	158	37	0	0
January 2034	163	163	32	0	0
January 2035	169	157	27	0	0
January 2036	175	142	23	0	0
January 2037	181	128	19	0	0
January 2038	188	114	16	0	0
January 2039	194	101	13	0	0
January 2040	201	88	10	0	0
January 2041	208	76	8	0	0
January 2042	216	65	6	0	0
January 2043	214	54	5	0	0
January 2044	186	44	4	0	0
January 2045	156	35	3	0	0
January 2046	125	26	2	0	0
January 2047	93	18	1	0	0
January 2048	59	11	1	0	0
January 2049	24	4	0	0	0
January 2050	0	0	0	0	0
Weighted Average Life (years)	26.4	21.0	10.8	1.7	1.3

**Security Groups 5, 7, 20 and 21  
PSA Prepayment Assumption Rates**

Distribution Date	Class QZ											
	0%	100%	175%	200%	250%	275%	325%	335%	350%	400%	500%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100
January 2021	104	104	104	102	97	95	90	89	88	83	73	63
January 2022	107	107	107	103	87	79	64	60	56	40	9	0
January 2023	111	111	111	104	75	61	34	28	20	0	0	0
January 2024	115	115	115	106	68	50	16	9	2	0	0	0
January 2025	119	119	119	109	66	45	8	3	0	0	0	0
January 2026	123	123	123	112	65	44	7	3	0	0	0	0
January 2027	128	128	126	111	64	43	6	2	0	0	0	0
January 2028	132	132	127	107	60	40	6	2	0	0	0	0
January 2029	137	137	126	100	55	36	5	2	0	0	0	0
January 2030	142	142	118	92	50	32	5	2	0	0	0	0
January 2031	147	147	108	84	44	29	4	2	0	0	0	0
January 2032	152	152	98	75	39	25	3	1	0	0	0	0
January 2033	158	158	88	67	34	21	3	1	0	0	0	0
January 2034	163	160	79	59	29	18	2	1	0	0	0	0
January 2035	169	154	69	51	25	15	2	1	0	0	0	0
January 2036	175	140	60	44	21	13	2	1	0	0	0	0
January 2037	181	126	52	38	17	10	1	0	0	0	0	0
January 2038	188	113	45	32	14	9	1	0	0	0	0	0
January 2039	194	100	38	27	12	7	1	0	0	0	0	0
January 2040	201	87	32	22	9	6	1	0	0	0	0	0
January 2041	208	75	26	18	8	4	0	0	0	0	0	0
January 2042	216	64	22	15	6	3	0	0	0	0	0	0
January 2043	222	54	17	11	5	3	0	0	0	0	0	0
January 2044	207	44	14	9	3	2	0	0	0	0	0	0
January 2045	176	35	10	7	2	1	0	0	0	0	0	0
January 2046	144	26	7	5	2	1	0	0	0	0	0	0
January 2047	110	18	5	3	1	1	0	0	0	0	0	0
January 2048	74	11	3	2	1	0	0	0	0	0	0	0
January 2049	37	4	1	1	0	0	0	0	0	0	0	0
January 2050	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	26.9	21.0	16.5	15.2	10.1	7.5	3.1	2.6	2.2	1.7	1.4	1.1

**Security Group 22  
PSA Prepayment Assumption Rates**

Distribution Date	Class L				
	0%	100%	250%	400%	500%
Initial Percent	100	100	100	100	100
January 2021	100	100	100	100	100
January 2022	100	100	100	100	100
January 2023	100	100	100	100	100
January 2024	100	100	100	100	100
January 2025	100	100	100	100	100
January 2026	100	100	100	100	100
January 2027	100	100	100	100	100
January 2028	100	100	100	100	100
January 2029	100	100	100	100	100
January 2030	100	100	100	100	100
January 2031	100	100	100	100	100
January 2032	100	100	100	100	100
January 2033	100	100	100	100	100
January 2034	100	100	100	100	100
January 2035	100	100	100	100	79
January 2036	100	100	100	100	53
January 2037	100	100	100	100	35
January 2038	100	100	100	91	23
January 2039	100	100	100	64	15
January 2040	100	94	94	45	10
January 2041	100	68	68	31	6
January 2042	100	48	48	21	4
January 2043	34	34	34	14	2
January 2044	23	23	23	10	1
January 2045	15	15	15	6	1
January 2046	10	10	10	4	0
January 2047	6	6	6	2	0
January 2048	3	3	3	1	0
January 2049	1	1	1	0	0
January 2050	0	0	0	0	0
Weighted Average Life (years)	23.6	22.5	22.5	20.4	16.8

**Security Groups 5, 7, 20 and 22  
PSA Prepayment Assumption Rates**

Distribution Date	Class QL											
	0%	100%	175%	200%	250%	275%	325%	335%	350%	400%	500%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100
January 2021	100	100	100	100	100	100	100	100	100	100	100	100
January 2022	100	100	100	100	100	100	100	100	100	100	100	100
January 2023	100	100	100	100	100	100	100	100	100	100	100	100
January 2024	100	100	100	100	100	100	100	100	100	100	100	100
January 2025	100	100	100	100	100	100	100	100	100	100	100	100
January 2026	100	100	100	100	100	100	100	100	100	100	100	100
January 2027	100	100	100	100	100	100	100	100	100	100	100	100
January 2028	100	100	100	100	100	100	100	100	100	100	100	100
January 2029	100	100	100	100	100	100	100	100	100	100	100	100
January 2030	100	100	100	100	100	100	100	100	100	100	100	100
January 2031	100	100	100	100	100	100	100	100	100	100	100	100
January 2032	100	100	100	100	100	100	100	100	100	100	100	82
January 2033	100	100	100	100	100	100	100	100	100	100	100	51
January 2034	100	100	100	100	100	100	100	100	100	100	92	31
January 2035	100	100	100	100	100	100	100	100	100	100	65	19
January 2036	100	100	100	100	100	100	100	100	100	100	43	11
January 2037	100	100	100	100	100	100	100	100	100	96	28	7
January 2038	100	100	100	100	100	100	100	100	100	74	19	4
January 2039	100	100	100	100	100	100	100	100	96	52	12	2
January 2040	100	94	94	94	94	94	94	89	76	37	8	1
January 2041	100	69	69	69	69	69	69	65	55	25	5	1
January 2042	100	50	50	50	50	50	50	46	39	17	3	0
January 2043	90	35	35	35	35	35	35	33	27	12	2	0
January 2044	24	24	24	24	24	24	24	23	19	8	1	0
January 2045	16	16	16	16	16	16	16	15	12	5	1	0
January 2046	10	10	10	10	10	10	10	10	8	3	0	0
January 2047	6	6	6	6	6	6	6	6	5	2	0	0
January 2048	3	3	3	3	3	3	3	3	2	1	0	0
January 2049	1	1	1	1	1	1	1	1	1	0	0	0
January 2050	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	24.0	22.6	22.6	22.6	22.6	22.6	22.6	22.4	21.9	19.8	16.3	13.6

**Security Group 23**  
PSA Prepayment Assumption Rates

Distribution Date	Classes AK, KC, KD, KE, KG and KI					Classes FM and SM					Classes IK, KH, KJ, KL, KM and KN					Class KA				
	0%	286%	470%	500%	1,000%	0%	286%	470%	500%	1,000%	0%	286%	470%	500%	1,000%	0%	286%	470%	500%	1,000%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
January 2021	98	92	92	92	92	99	94	91	90	81	98	92	92	92	92	100	100	84	84	55
January 2022	97	75	75	75	57	97	81	72	70	47	97	76	76	76	59	100	100	50	50	0
January 2023	95	55	55	55	19	96	66	51	49	19	95	57	57	57	23	100	100	18	18	0
January 2024	93	38	38	38	4	95	54	36	34	7	93	41	41	41	9	100	100	3	3	0
January 2025	91	25	25	25	0	93	44	25	23	3	91	29	29	29	3	100	99	0	0	0
January 2026	88	15	15	15	0	91	36	18	16	1	89	19	19	19	1	100	93	0	0	0
January 2027	86	8	8	8	0	90	29	13	11	0	87	13	13	13	0	100	82	0	0	0
January 2028	84	4	4	4	0	88	23	9	7	0	84	9	9	9	0	100	68	0	0	0
January 2029	81	1	1	1	0	86	19	6	5	0	82	6	6	6	0	100	55	0	0	0
January 2030	78	0	0	0	0	84	15	4	3	0	79	4	4	4	0	100	42	0	0	0
January 2031	75	0	0	0	0	81	12	3	2	0	76	2	2	2	0	100	30	0	0	0
January 2032	72	0	0	0	0	79	10	2	2	0	73	1	1	1	0	100	19	0	0	0
January 2033	68	0	0	0	0	77	8	1	1	0	70	1	1	1	0	100	10	0	0	0
January 2034	65	0	0	0	0	74	6	1	1	0	67	0	0	0	0	100	3	0	0	0
January 2035	61	0	0	0	0	71	5	1	0	0	63	0	0	0	0	100	0	0	0	0
January 2036	57	0	0	0	0	68	4	0	0	0	59	0	0	0	0	100	0	0	0	0
January 2037	53	0	0	0	0	65	3	0	0	0	55	0	0	0	0	100	0	0	0	0
January 2038	48	0	0	0	0	61	2	0	0	0	51	0	0	0	0	100	0	0	0	0
January 2039	43	0	0	0	0	58	2	0	0	0	46	0	0	0	0	100	0	0	0	0
January 2040	38	0	0	0	0	54	1	0	0	0	41	0	0	0	0	100	0	0	0	0
January 2041	33	0	0	0	0	50	1	0	0	0	36	0	0	0	0	100	0	0	0	0
January 2042	27	0	0	0	0	46	1	0	0	0	31	0	0	0	0	100	0	0	0	0
January 2043	21	0	0	0	0	41	1	0	0	0	25	0	0	0	0	100	0	0	0	0
January 2044	14	0	0	0	0	36	0	0	0	0	19	0	0	0	0	100	0	0	0	0
January 2045	7	0	0	0	0	31	0	0	0	0	12	0	0	0	0	100	0	0	0	0
January 2046	0	0	0	0	0	26	0	0	0	0	5	0	0	0	0	100	0	0	0	0
January 2047	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	92	0	0	0	0
January 2048	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	53	0	0	0	0
January 2049	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	12	0	0	0	0
January 2050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	16.2	3.6	3.6	3.6	2.2	19.3	5.7	3.8	3.7	2.1	16.8	4.0	4.0	4.0	2.4	28.1	9.5	2.1	2.1	1.0

PSA Prepayment Assumption Rates

Distribution Date	Class KB					Class KU					Class KY					Class KZ				
	0%	286%	470%	500%	1,000%	0%	286%	470%	500%	1,000%	0%	286%	470%	500%	1,000%	0%	286%	470%	500%	1,000%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
January 2021	100	100	100	100	100	100	100	90	80	0	100	100	100	100	100	103	103	103	103	103
January 2022	100	100	100	100	100	100	100	70	41	0	100	100	100	100	100	105	105	105	105	0
January 2023	100	100	100	100	100	100	100	54	9	0	100	100	100	100	100	108	108	108	108	0
January 2024	100	100	100	100	100	100	100	49	0	0	100	100	100	100	100	111	111	111	111	0
January 2025	100	100	100	100	58	100	100	46	0	0	100	100	100	100	100	113	113	0	0	0
January 2026	100	100	100	100	15	100	100	40	0	0	100	100	100	100	100	116	116	0	0	0
January 2027	100	100	100	100	0	100	100	34	0	0	100	100	100	100	86	119	119	0	0	0
January 2028	100	100	100	100	0	100	100	27	0	0	100	100	100	100	34	122	122	0	0	0
January 2029	100	100	100	100	0	100	100	22	0	0	100	100	100	100	13	125	125	0	0	0
January 2030	100	71	71	71	0	100	100	17	0	0	100	100	100	100	5	128	128	0	0	0
January 2031	100	44	44	44	0	100	100	13	0	0	100	100	100	100	2	132	132	0	0	0
January 2032	100	26	26	26	0	100	100	10	0	0	100	100	100	100	1	135	135	0	0	0
January 2033	100	13	13	13	0	100	100	7	0	0	100	100	100	100	0	138	138	0	0	0
January 2034	100	5	5	5	0	100	100	5	0	0	100	100	100	100	0	142	142	0	0	0
January 2035	100	0	0	0	0	100	87	4	0	0	100	92	92	92	0	145	0	0	0	0
January 2036	100	0	0	0	0	100	70	3	0	0	100	61	61	61	0	149	0	0	0	0
January 2037	100	0	0	0	0	100	56	2	0	0	100	41	41	41	0	153	0	0	0	0
January 2038	100	0	0	0	0	100	44	1	0	0	100	27	27	27	0	157	0	0	0	0
January 2039	100	0	0	0	0	100	35	1	0	0	100	18	18	18	0	161	0	0	0	0
January 2040	100	0	0	0	0	100	27	1	0	0	100	11	11	11	0	165	0	0	0	0
January 2041	100	0	0	0	0	100	21	0	0	0	100	7	7	7	0	169	0	0	0	0
January 2042	100	0	0	0	0	100	15	0	0	0	100	5	5	5	0	173	0	0	0	0
January 2043	100	0	0	0	0	100	12	0	0	0	100	3	3	3	0	178	0	0	0	0
January 2044	100	0	0	0	0	100	8	0	0	0	100	2	2	2	0	182	0	0	0	0
January 2045	100	0	0	0	0	100	6	0	0	0	100	1	1	1	0	187	0	0	0	0
January 2046	98	0	0	0	0	100	4	0	0	0	100	0	0	0	0	191	0	0	0	0
January 2047	0	0	0	0	0	100	2	0	0	0	0	0	0	0	0	196	0	0	0	0
January 2048	0	0	0	0	0	100	1	0	0	0	0	0	0	0	0	201	0	0	0	0
January 2049	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	206	0	0	0	0
January 2050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	26.4	11.1	11.1	11.1	5.3	29.6	18.4	5.5	1.8	0.4	26.8	17.2	17.2	17.2	7.9	29.3	14.4	4.6	4.6	1.4

**Security Group 23  
PSA Prepayment Assumption Rates**

Distribution Date	Class SB					Class SD					Class ZK				
	0%	286%	470%	500%	1,000%	0%	286%	470%	500%	1,000%	0%	286%	470%	500%	1,000%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
January 2021	99	94	91	90	81	99	94	91	90	81	103	103	103	103	0
January 2022	97	81	72	70	47	97	81	72	70	47	105	105	105	105	0
January 2023	96	66	51	49	19	96	66	51	49	19	108	108	108	108	0
January 2024	95	54	36	34	7	95	54	36	34	7	111	111	111	111	70
January 2025	93	44	25	23	3	93	44	25	23	3	113	113	113	113	37
January 2026	91	36	18	16	1	91	36	18	16	1	116	116	116	116	37
January 2027	90	29	13	11	0	90	29	13	11	0	119	119	119	119	37
January 2028	88	23	9	7	0	88	23	9	7	0	122	122	122	122	37
January 2029	86	19	6	5	0	86	19	6	5	0	125	125	125	125	37
January 2030	84	15	4	3	0	84	15	4	3	0	128	128	128	128	37
January 2031	81	12	3	2	0	81	12	3	2	0	132	132	132	132	37
January 2032	79	10	2	2	0	79	10	2	2	0	135	135	135	135	37
January 2033	77	8	1	1	0	77	8	1	1	0	138	138	138	138	37
January 2034	74	6	1	1	0	74	6	1	1	0	142	142	142	142	37
January 2035	71	5	1	0	0	71	5	1	0	0	145	145	145	145	37
January 2036	68	4	0	0	0	68	4	0	0	0	149	149	149	149	37
January 2037	65	3	0	0	0	65	3	0	0	0	153	153	153	153	37
January 2038	61	2	0	0	0	61	2	0	0	0	157	157	157	157	37
January 2039	58	2	0	0	0	58	2	0	0	0	161	161	161	161	37
January 2040	54	1	0	0	0	54	1	0	0	0	165	165	165	165	37
January 2041	50	1	0	0	0	50	1	0	0	0	169	169	169	169	37
January 2042	46	1	0	0	0	46	1	0	0	0	173	173	173	173	37
January 2043	41	1	0	0	0	41	1	0	0	0	178	178	178	178	37
January 2044	36	0	0	0	0	36	0	0	0	0	182	182	182	182	37
January 2045	31	0	0	0	0	31	0	0	0	0	187	187	187	187	37
January 2046	26	0	0	0	0	26	0	0	0	0	191	191	175	175	37
January 2047	20	0	0	0	0	20	0	0	0	0	196	196	114	114	37
January 2048	14	0	0	0	0	14	0	0	0	0	201	201	74	74	37
January 2049	7	0	0	0	0	7	0	0	0	0	206	206	26	26	13
January 2050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	19.3	5.7	3.8	3.7	2.1	19.3	5.7	3.8	3.7	2.1	30.0	29.8	27.5	12.4	0.7

**Yield Considerations**

An investor seeking to maximize yield should make a decision whether to invest in any Regular or MX Class based on the anticipated yield of that Class resulting from its purchase price, the investor's own projection of Mortgage Loan prepayment rates under a variety of scenarios, in the case of the Group 1, 3, 4, 12, 13, 14, 15, 16, 21 and 22 Securities, the investor's own projection of payment rates on the Underlying Certificates under a variety of scenarios, in the case of a Floating Rate or an Inverse Floating Rate Class or the Class K or WL Securities, the investor's own projection of levels of LIBOR under a variety of scenarios and, in the case of the Group 17 and Class WA and WI Securities, the investor's own projection of levels of LIBOR and CMT under a variety of scenarios. **No representation is made regarding Mortgage Loan prepayment rates, Underlying Certificate payment rates, CMT levels, LIBOR levels or the yield of any Class.**

*Prepayments: Effect on Yields*

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

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

- Investors in an MX Class that is subject to mandatory exchange should consider that differing rates of reduction in the related REMIC Securities may ultimately cause such a Class to become a Principal Only Class or to be exchanged for the related REMIC Securities (consisting primarily or exclusively of an Interest Only Class).
- The rates of principal amortization on the Mortgage Loans underlying the Group 17 and Subgroup 12L Trust Assets will depend upon the level of and annual adjustments in the applicable Mortgage Rates, with higher Mortgage Rates and earlier increases in Mortgage Rates affecting the rates of prepayments, which 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 fixed rate 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 fixed rate 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 and the Class JI, K and WL Securities*

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 and the Class JI, K and WL Securities. In addition, the Floating Rate Classes will not necessarily benefit from a higher yield at high levels of LIBOR and Class MS may not benefit from particularly low levels of LIBOR because the rate on such Classes is capped at a maximum rate described under “Terms Sheet — Interest Rates.”

*CMT: Effect on Yields of the Group 17 Securities*

Low levels of CMT can reduce the yield of the Group 17 Securities. *See “Risk Factors — After the initial fixed rate period of the mortgage loans underlying the group 17 trust assets, the mortgage rates on such mortgage loans adjust annually based on CMT, the level of which will affect the yield on the related securities” in this Supplement.*

*CMT and LIBOR: Effect on Yields of the Class WA and WI Securities*

Low levels of CMT can reduce the yield of the Class WA and WI Securities. High levels of LIBOR can reduce the yield of the Class WA and WI Securities. *See “Risk Factors” in the related Underlying Certificate Disclosure Documents.*



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

The effective yield on any Fixed Rate or Delay Class will be less than the yield otherwise produced by its Interest Rate and purchase price because, on each Distribution Date, 30 days' interest will be payable on (or added to the principal amount of) that Class even though interest began to accrue approximately 46 or 50 days earlier, as applicable.

### **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 or CPR, as applicable, in the case of the Inverse Floating Rate Classes and the Class K and WL Securities, at various constant levels of LIBOR and, in the case of the Class JI, WA and WI Securities, at various constant levels of LIBOR and CMT.

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

The yields were calculated by

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

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

The information set forth in the following tables was prepared on the basis of the Modeling Assumptions and the assumptions that (1) the Interest Rate applicable to the Inverse Floating Rate Class and the Class JI, K and WL Securities for each Accrual Period following the first Accrual Period will be based on the indicated level of LIBOR, (2) the Interest Rate applicable to the Class WA and WI Securities for each Accrual Period following the first Accrual Period will be based on the indicated levels of LIBOR and CMT, as applicable, (3) the Mortgage Rates applicable to the Mortgage Loans underlying the Group 17 and Subgroup 12L Trust Assets for each Accrual Period after the next Mortgage Rate adjustment date will be based on the indicated level of CMT and (4) the purchase price of each Class (expressed as a percentage of its original Class Principal Balance or Class Notional Balance) plus accrued interest (in the case of interest-bearing Classes) is as indicated in the related table. **The assumed purchase price is not necessarily that at which actual sales will occur.**

**SECURITY GROUP 1**

**Sensitivity of Class CI to Prepayments  
Assumed Price 6.5%\***

<b>PSA Prepayment Assumption Rates</b>				
<u>100%</u>	<u>250%</u>	<u>321%</u>	<u>400%</u>	<u>500%</u>
47.7%	17.0%	0.1%	(19.6)%	(44.8)%

**Sensitivity of Class DI to Prepayments  
Assumed Price 16.75%\***

<b>PSA Prepayment Assumption Rates</b>				
<u>100%</u>	<u>250%</u>	<u>317%</u>	<u>400%</u>	<u>500%</u>
18.1%	5.9%	0.1%	(7.4)%	(16.7)%

**Sensitivity of Class IB to Prepayments  
Assumed Price 16.8%\***

<b>PSA Prepayment Assumption Rates</b>				
<u>100%</u>	<u>250%</u>	<u>344%</u>	<u>400%</u>	<u>500%</u>
19.8%	7.6%	0.1%	(4.5)%	(12.8)%

**SECURITY GROUP 2**

**Sensitivity of Class IL to Prepayments  
Assumed Price 6.5%\***

<b>PSA Prepayment Assumption Rates</b>				
<u>181%</u>	<u>225%</u>	<u>300%</u>	<u>500%</u>	<u>1,249%</u>
43.6%	43.6%	43.6%	36.3%	0.0%

**Sensitivity of Class IO to Prepayments  
Assumed Price 7.5%\***

<b>PSA Prepayment Assumption Rates</b>				
<u>181%</u>	<u>225%</u>	<u>300%</u>	<u>500%</u>	<u>1,097%</u>
35.6%	35.6%	35.6%	28.3%	0.0%

**Sensitivity of Class LI to Prepayments  
Assumed Price 7.0%\***

<b>PSA Prepayment Assumption Rates</b>				
<u>181%</u>	<u>225%</u>	<u>300%</u>	<u>500%</u>	<u>1,202%</u>
39.7%	39.7%	39.7%	32.7%	0.0%

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

**Sensitivity of Class MI to Prepayments  
Assumed Price 5.5%\***

<b>PSA Prepayment Assumption Rates</b>				
<u>181%</u>	<u>225%</u>	<u>300%</u>	<u>500%</u>	<u>1,458%</u>
54.0%	54.0%	54.0%	46.8%	0.0%

**SECURITY GROUP 3**

**Sensitivity of Class EI to Prepayments  
Assumed Price 16.5%\***

<b>PSA Prepayment Assumption Rates</b>				
<u>100%</u>	<u>250%</u>	<u>253%</u>	<u>400%</u>	<u>500%</u>
14.6%	0.3%	0.0%	(16.5)%	(28.7)%

**SECURITY GROUP 5**

**Sensitivity of Class NI to Prepayments  
Assumed Price 17.8%\***

<b>PSA Prepayment Assumption Rates</b>				
<u>175%</u>	<u>250%</u>	<u>325%</u>	<u>361%</u>	<u>500%</u>
1.8%	1.8%	1.8%	0.0%	(7.8)%

**SECURITY GROUP 6**

**Sensitivity of Class AS to Prepayments  
Assumed Price 4.8%\***

<u>LIBOR</u>	<b>PSA Prepayment Assumption Rates</b>			
	<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>
1.00000% .....	33.5%	26.2%	18.8%	13.7%
1.69213% .....	17.0%	9.1%	1.1%	(4.5)%
2.25607% .....	3.2%	(5.1)%	(13.8)%	(19.8)%
2.82000% and above .....	**	**	**	**

**SECURITY GROUP 7**

**Sensitivity of Class GI to Prepayments  
Assumed Price 9.5%\***

<b>PSA Prepayment Assumption Rates</b>				
<u>200%</u>	<u>275%</u>	<u>350%</u>	<u>600%</u>	<u>795%</u>
21.4%	21.4%	21.4%	10.3%	0.0%

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

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

**SECURITY GROUP 8**

**Sensitivity of Class DS to Prepayments  
Assumed Price 20.0%\***

<u>LIBOR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>149%</u>	<u>200%</u>	<u>250%</u>	<u>400%</u>
1.00000% .....	12.9%	12.9%	12.9%	5.6%
1.78088% .....	8.2%	8.2%	8.2%	0.6%
3.94044% .....	(5.3)%	(5.3)%	(5.3)%	(13.8)%
6.10000% and above .....	**	**	**	**

**Sensitivity of Class IY to Prepayments  
Assumed Price 18.0%\***

<u>PSA Prepayment Assumption Rates</u>				
<u>149%</u>	<u>200%</u>	<u>250%</u>	<u>400%</u>	<u>419%</u>
8.6%	8.6%	8.6%	1.1%	0.0%

**Sensitivity of Class YI to Prepayments  
Assumed Price 17.7%\***

<u>PSA Prepayment Assumption Rates</u>				
<u>149%</u>	<u>200%</u>	<u>250%</u>	<u>400%</u>	<u>411%</u>
8.7%	8.7%	8.7%	0.7%	0.0%

**SECURITY GROUP 9**

**Sensitivity of Class SA to Prepayments  
Assumed Price 5.6%\***

<u>LIBOR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>
1.00000% .....	26.5%	18.5%	10.4%	4.8%
1.67713% .....	12.7%	4.4%	(4.2)%	(10.1)%
2.23857% .....	0.8%	(7.8)%	(16.7)%	(22.9)%
2.80000% and above .....	**	**	**	**

**SECURITY GROUP 10**

**Sensitivity of Class AI to Prepayments  
Assumed Price 16.4%\***

<u>PSA Prepayment Assumption Rates</u>				
<u>100%</u>	<u>250%</u>	<u>371%</u>	<u>400%</u>	<u>500%</u>
14.3%	6.5%	0.0%	(1.5)%	(7.0)%

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

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

**SECURITY GROUP 11**

**Sensitivity of Class CS to Prepayments  
Assumed Price 5.8%\***

<u>LIBOR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>
1.00000% .....	25.2%	17.2%	9.0%	3.4%
1.67663% .....	11.9%	3.6%	(5.0)%	(10.9)%
2.23832% .....	0.3%	(8.2)%	(17.2)%	(23.4)%
2.80000% and above .....	**	**	**	**

**SECURITY GROUPS 9 AND 11**

**Sensitivity of Class SC to Prepayments  
Assumed Price 5.7%\***

<u>LIBOR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>
1.00000% .....	25.8%	17.9%	9.7%	4.1%
1.67688% .....	12.3%	4.0%	(4.6)%	(10.5)%
2.23844% .....	0.6%	(8.0)%	(17.0)%	(23.2)%
2.80000% and above .....	**	**	**	**

**SECURITY GROUP 12**

**Sensitivity of Class ID to Prepayments  
Assumed Price 14.5%\***

<u>CPR Prepayment Assumption Rates</u>				
<u>9%</u>	<u>10%</u>	<u>15%</u>	<u>25%</u>	<u>30%</u>
1.0%	(0.5)%	(0.8)%	(17.3)%	(28.4)%

**Sensitivity of Class IQ to Prepayments  
Assumed Price 7.5%\***

<u>CPR Prepayment Assumption Rates</u>				
<u>10%</u>	<u>15%</u>	<u>20%</u>	<u>25%</u>	<u>30%</u>
22.5%	12.7%	1.6%	(10.6)%	(23.8)%

**Sensitivity of Class JO to Prepayments  
Assumed Price 72.0%**

<u>CPR Prepayment Assumption Rates</u>			
<u>10%</u>	<u>15%</u>	<u>25%</u>	<u>30%</u>
2.2%	3.1%	5.0%	6.1%

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

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

**Sensitivity of Class K to Prepayments  
Assumed Price 98.0%\***

<u>LIBOR</u>	<u>CPR Prepayment Assumption Rates</u>			
	<u>10%</u>	<u>15%</u>	<u>25%</u>	<u>30%</u>
1.000000% .....	2.6%	2.3%	3.6%	4.4%
1.657750% .....	2.1%	1.9%	3.2%	4.1%
2.828875% .....	1.1%	1.0%	2.4%	3.5%
4.000000% and above .....	0.1%	0.2%	1.7%	3.0%

**Sensitivity of Class KO to Prepayments  
Assumed Price 73.0%**

<u>CPR Prepayment Assumption Rates</u>			
<u>10%</u>	<u>15%</u>	<u>25%</u>	<u>30%</u>
2.4%	2.5%	3.2%	3.9%

**Sensitivity of Class LO to Prepayments  
Assumed Price 74.0%**

<u>CPR Prepayment Assumption Rates</u>			
<u>10%</u>	<u>15%</u>	<u>25%</u>	<u>30%</u>
1.2%	1.3%	1.9%	2.3%

**Sensitivity of Class MO to Prepayments  
Assumed Price 82.0%**

<u>CPR Prepayment Assumption Rates</u>			
<u>10%</u>	<u>15%</u>	<u>25%</u>	<u>30%</u>
1.0%	1.7%	2.6%	3.1%

**Sensitivity of Class MS to Prepayments  
Assumed Price 7.5%\***

<u>LIBOR</u>	<u>CPR Prepayment Assumption Rates</u>			
	<u>10%</u>	<u>15%</u>	<u>25%</u>	<u>30%</u>
1.000000% .....	21.1%	15.0%	2.2%	(4.6)%
1.657750% .....	11.7%	5.8%	(6.5)%	(13.0)%
2.578875% .....	(1.9)%	(7.5)%	(19.0)%	(25.1)%
3.500000% and above .....	**	**	**	**

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

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

**Sensitivity of Class OL to Prepayments  
Assumed Price 80.0%**

<b>CPR Prepayment Assumption Rates</b>			
<b>10%</b>	<b>15%</b>	<b>25%</b>	<b>30%</b>
1.7%	2.2%	3.4%	4.0%

**Sensitivity of Class PO to Prepayments  
Assumed Price 75.0%**

<b>CPR Prepayment Assumption Rates</b>			
<b>10%</b>	<b>15%</b>	<b>25%</b>	<b>30%</b>
1.4%	1.8%	2.7%	3.2%

**Sensitivity of Class QO to Prepayments  
Assumed Price 74.5%**

<b>CPR Prepayment Assumption Rates</b>			
<b>10%</b>	<b>15%</b>	<b>25%</b>	<b>30%</b>
1.3%	1.3%	2.0%	2.4%

**Sensitivity of Class QS to Prepayments  
Assumed Price 6.0%\***

<b>LIBOR</b>	<b>CPR Prepayment Assumption Rates</b>			
	<b>10%</b>	<b>15%</b>	<b>25%</b>	<b>30%</b>
1.000000% .....	91.2%	69.4%	(82.4)%	**
1.657750% .....	78.2%	58.9%	(93.3)%	**
3.903875% .....	36.7%	25.7%	**	**
6.150000% and above .....	**	**	**	**

**Sensitivity of Class SL to Prepayments  
Assumed Price 2.5%\***

<b>LIBOR</b>	<b>CPR Prepayment Assumption Rates</b>			
	<b>10%</b>	<b>15%</b>	<b>25%</b>	<b>30%</b>
1.000000% .....	98.1%	90.1%	73.3%	64.5%
1.657750% .....	64.9%	57.7%	42.7%	34.8%
2.533875% .....	24.3%	18.1%	5.1%	(1.7)%
3.410000% and above .....	**	**	**	**

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

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

**Sensitivity of Class WA to Prepayments**  
**Assumed Price 96.5%\***  
**CMT 1.59000%**

<u>LIBOR</u>	<u>CPR Prepayment Assumption Rates</u>			
	<u>10%</u>	<u>15%</u>	<u>25%</u>	<u>30%</u>
1.00000% .....	3.6%	2.9%	2.2%	2.2%
1.65775% .....	2.9%	2.3%	1.8%	1.8%
4.00000% .....	0.9%	0.9%	0.8%	0.9%
6.15000% .....	0.6%	0.7%	0.8%	0.9%
9.42500% .....	0.6%	0.7%	0.8%	0.9%
12.70000% and above .....	0.6%	0.7%	0.8%	0.9%

**Sensitivity of Class WA to Prepayments**  
**Assumed Price 96.5%\***  
**CMT 6.00000%**

<u>LIBOR</u>	<u>CPR Prepayment Assumption Rates</u>			
	<u>10%</u>	<u>15%</u>	<u>25%</u>	<u>30%</u>
1.00000% .....	4.1%	3.4%	2.6%	2.5%
1.65775% .....	3.4%	2.8%	2.2%	2.2%
4.00000% .....	1.2%	1.2%	1.1%	1.1%
6.15000% .....	0.7%	0.8%	0.9%	0.9%
9.42500% .....	0.6%	0.7%	0.8%	0.9%
12.70000% and above .....	0.6%	0.7%	0.8%	0.9%

**Sensitivity of Class WA to Prepayments**  
**Assumed Price 96.5%\***  
**CMT 8.00000%**

<u>LIBOR</u>	<u>CPR Prepayment Assumption Rates</u>			
	<u>10%</u>	<u>15%</u>	<u>25%</u>	<u>30%</u>
1.00000% .....	4.1%	3.4%	2.6%	2.6%
1.65775% .....	3.4%	2.8%	2.2%	2.2%
4.00000% .....	1.3%	1.2%	1.1%	1.1%
6.15000% .....	0.7%	0.8%	0.9%	1.0%
9.42500% .....	0.6%	0.7%	0.8%	0.9%
12.70000% and above .....	0.6%	0.7%	0.8%	0.9%

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



**Sensitivity of Class WA to Prepayments**  
**Assumed Price 96.5%\***  
**CMT 11.50000%**

<u>LIBOR</u>	<u>CPR Prepayment Assumption Rates</u>			
	<u>10%</u>	<u>15%</u>	<u>25%</u>	<u>30%</u>
1.00000% .....	4.1%	3.4%	2.6%	2.6%
1.65775% .....	3.4%	2.9%	2.2%	2.2%
4.00000% .....	1.3%	1.2%	1.1%	1.1%
6.15000% .....	0.8%	0.8%	0.9%	1.0%
9.42500% .....	0.6%	0.7%	0.8%	0.9%
12.70000% and above .....	0.6%	0.7%	0.8%	0.9%

**Sensitivity of Class WI to Prepayments**  
**Assumed Price 4.0%\***  
**CMT 1.59000%**

<u>LIBOR</u>	<u>CPR Prepayment Assumption Rates</u>			
	<u>10%</u>	<u>15%</u>	<u>25%</u>	<u>30%</u>
1.00000% .....	37.5%	11.1%	(14.0)%	(21.6)%
1.78088% .....	21.9%	(5.8)%	(25.1)%	(31.7)%
7.24044% .....	**	**	**	**
12.70000% and above .....	**	**	**	**

**Sensitivity of Class WI to Prepayments**  
**Assumed Price 4.0%\***  
**CMT 6.00000%**

<u>LIBOR</u>	<u>CPR Prepayment Assumption Rates</u>			
	<u>10%</u>	<u>15%</u>	<u>25%</u>	<u>30%</u>
1.00000% .....	56.2%	37.6%	12.8%	3.9%
1.78088% .....	41.4%	24.8%	4.4%	(3.5)%
7.24044% .....	**	**	**	**
12.70000% and above .....	**	**	**	**

**Sensitivity of Class WI to Prepayments**  
**Assumed Price 4.0%\***  
**CMT 8.00000%**

<u>LIBOR</u>	<u>CPR Prepayment Assumption Rates</u>			
	<u>10%</u>	<u>15%</u>	<u>25%</u>	<u>30%</u>
1.00000% .....	56.8%	38.4%	13.8%	5.0%
1.78088% .....	42.1%	26.0%	5.7%	(2.2)%
7.24044% .....	(17.2)%	(22.4)%	(33.1)%	(38.7)%
12.70000% and above .....	**	**	**	**

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

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

**Sensitivity of Class WI to Prepayments**  
**Assumed Price 4.0%\***  
**CMT 11.50000%**

<u>LIBOR</u>	<u>CPR Prepayment Assumption Rates</u>			
	<u>10%</u>	<u>15%</u>	<u>25%</u>	<u>30%</u>
1.00000% .....	56.8%	38.4%	13.9%	5.0%
1.78088% .....	42.2%	26.1%	5.8%	(2.1)%
7.24044% .....	(16.5)%	(21.7)%	(32.4)%	(38.1)%
12.70000% and above .....	**	**	**	**

**SECURITY GROUP 13**

**Sensitivity of Class AO to Prepayments**  
**Assumed Price 70.0%**

<u>PSA Prepayment Assumption Rates</u>			
<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>
1.5%	1.5%	2.1%	2.6%

**Sensitivity of Class HO to Prepayments**  
**Assumed Price 70.0%**

<u>PSA Prepayment Assumption Rates</u>			
<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>
1.5%	1.6%	2.2%	2.7%

**Sensitivity of Class IA to Prepayments**  
**Assumed Price 42.0%\***

<u>PSA Prepayment Assumption Rates</u>				
<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>	<u>579%</u>
6.7%	6.6%	4.5%	2.2%	0.0%

**Sensitivity of Class IG to Prepayments**  
**Assumed Price 36.0%\***

<u>PSA Prepayment Assumption Rates</u>				
<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>	<u>649%</u>
7.8%	7.8%	6.2%	4.1%	0.0%

**Sensitivity of Class IH to Prepayments**  
**Assumed Price 27.5%\***

<u>PSA Prepayment Assumption Rates</u>				
<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>	<u>598%</u>
7.7%	7.4%	5.0%	2.7%	0.0%

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

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

**Sensitivity of Class IJ to Prepayments  
Assumed Price 42.0%\***

PSA Prepayment Assumption Rates				
<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>	<u>647%</u>
7.1%	6.9%	5.3%	3.5%	0.0%

**Sensitivity of Class IM to Prepayments  
Assumed Price 20.0%\***

PSA Prepayment Assumption Rates				
<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>	<u>727%</u>
7.6%	7.6%	7.6%	5.9%	0.0%

**Sensitivity of Class IN to Prepayments  
Assumed Price 36.0%\***

PSA Prepayment Assumption Rates				
<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>	<u>665%</u>
7.8%	7.8%	6.4%	4.4%	0.0%

**Sensitivity of Class OG to Prepayments  
Assumed Price 70.0%**

PSA Prepayment Assumption Rates				
<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>	<u>500%</u>
1.7%	1.7%	2.2%	2.7%	2.7%

**Sensitivity of Class OJ to Prepayments  
Assumed Price 70.0%**

PSA Prepayment Assumption Rates				
<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>	<u>500%</u>
1.4%	1.4%	1.9%	2.3%	2.3%

**Sensitivity of Class OM to Prepayments  
Assumed Price 70.0%**

PSA Prepayment Assumption Rates				
<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>	<u>500%</u>
1.9%	1.9%	1.9%	2.3%	2.3%

**Sensitivity of Class OT to Prepayments  
Assumed Price 70.0%**

PSA Prepayment Assumption Rates				
<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>	<u>500%</u>
1.6%	1.6%	1.9%	2.4%	2.4%

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

**Sensitivity of Class ST to Prepayments  
Assumed Price 3.0%\***

<u>LIBOR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>
1.000000% .....	83.5%	75.8%	67.9%	62.5%
1.657750% .....	56.0%	48.0%	39.9%	34.3%
2.503875% .....	22.6%	14.2%	5.5%	(0.5)%
3.350000% and above .....	**	**	**	**

**Sensitivity of Class TI to Prepayments  
Assumed Price 36.0%\***

<u>PSA Prepayment Assumption Rates</u>				
<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>	<u>726%</u>
8.2%	8.2%	7.1%	5.5%	0.0%

**Sensitivity of Class WL to Prepayments  
Assumed Price 98.0%\***

<u>LIBOR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>
1.000000% .....	8.0%	4.7%	3.9%	3.9%
1.657750% .....	5.4%	3.2%	2.7%	2.7%
2.503875% .....	2.5%	1.5%	1.3%	1.4%
3.350000% and above .....	0.1%	0.1%	0.1%	0.2%

**SECURITY GROUP 14**

**Sensitivity of Class HI to Prepayments  
Assumed Price 15.0%\***

<u>PSA Prepayment Assumption Rates</u>				
<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>481%</u>	<u>500%</u>
23.4%	14.5%	5.2%	0.0%	(1.2)%

**SECURITY GROUP 15**

**Sensitivity of Class IT to Prepayments  
Assumed Price 5.2%\***

<u>PSA Prepayment Assumption Rates</u>				
<u>100%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>	<u>552%</u>
59.8%	41.7%	21.4%	7.4%	0.1%

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

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

**SECURITY GROUP 17**

**Sensitivity of Class JI to Prepayments**

**Assumed Price 4.0%\***

**CMT 1.59000%**

<u>LIBOR</u>	<u>CPR Prepayment Assumption Rates</u>			
	<u>10%</u>	<u>15%</u>	<u>25%</u>	<u>30%</u>
1.000% .....	32.5%	26.1%	12.7%	5.7%
1.670% .....	13.3%	7.4%	(5.0)%	(11.5)%
4.635% .....	**	**	**	**
7.600% and above .....	**	**	**	**

**Sensitivity of Class JI to Prepayments**

**Assumed Price 4.0%\***

**CMT 3.00000%**

<u>LIBOR</u>	<u>CPR Prepayment Assumption Rates</u>			
	<u>10%</u>	<u>15%</u>	<u>25%</u>	<u>30%</u>
1.000% .....	61.2%	54.1%	39.2%	31.4%
1.670% .....	43.5%	36.9%	22.9%	15.5%
4.635% .....	**	**	**	**
7.600% and above .....	**	**	**	**

**Sensitivity of Class JI to Prepayments**

**Assumed Price 4.0%\***

**CMT 4.00000%**

<u>LIBOR</u>	<u>CPR Prepayment Assumption Rates</u>			
	<u>10%</u>	<u>15%</u>	<u>25%</u>	<u>30%</u>
1.000% .....	72.0%	64.5%	49.0%	40.9%
1.670% .....	55.4%	48.4%	33.7%	26.0%
4.635% .....	(6.2)%	(11.6)%	(23.0)%	(28.9)%
7.600% and above .....	**	**	**	**

**Sensitivity of Class JI to Prepayments**

**Assumed Price 4.0%\***

**CMT 6.50000%**

<u>LIBOR</u>	<u>CPR Prepayment Assumption Rates</u>			
	<u>10%</u>	<u>15%</u>	<u>25%</u>	<u>30%</u>
1.000% .....	78.7%	71.1%	55.1%	46.8%
1.670% .....	63.7%	56.5%	41.3%	33.4%
4.635% .....	17.3%	11.2%	(1.5)%	(8.2)%
7.600% and above .....	**	**	**	**

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

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

**SECURITY GROUP 18**

**Sensitivity of Class IP to Prepayments  
Assumed Price 8.0%\***

<b>PSA Prepayment Assumption Rates</b>				
<u>350%</u>	<u>400%</u>	<u>600%</u>	<u>800%</u>	<u>1,188%</u>
26.0%	26.0%	26.0%	18.1%	0.0%

**SECURITY GROUP 19**

**Sensitivity of Class PI to Prepayments  
Assumed Price 9.75%\***

<b>PSA Prepayment Assumption Rates</b>				
<u>188%</u>	<u>225%</u>	<u>300%</u>	<u>500%</u>	<u>746%</u>
22.1%	22.1%	22.1%	13.1%	0.0%

**SECURITY GROUP 20**

**Sensitivity of Class IC to Prepayments  
Assumed Price 17.25%\***

<b>PSA Prepayment Assumption Rates</b>				
<u>200%</u>	<u>250%</u>	<u>335%</u>	<u>372%</u>	<u>500%</u>
1.8%	1.8%	1.8%	0.0%	(7.2)%

**SECURITY GROUP 23**

**Sensitivity of Class IK to Prepayments  
Assumed Price 18.5%\***

<b>PSA Prepayment Assumption Rates</b>				
<u>262%</u>	<u>286%</u>	<u>470%</u>	<u>500%</u>	<u>1,000%</u>
0.1%	(1.2)%	(1.2)%	(1.2)%	(29.7)%

**Sensitivity of Class KI to Prepayments  
Assumed Price 16.75%\***

<b>PSA Prepayment Assumption Rates</b>				
<u>263%</u>	<u>286%</u>	<u>470%</u>	<u>500%</u>	<u>1,000%</u>
0.1%	(1.6)%	(1.6)%	(1.6)%	(32.3)%

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

**Sensitivity of Class SB to Prepayments**  
**Assumed Price 17.0%\***

<b>LIBOR</b>	<b>PSA Prepayment Assumption Rates</b>			
	<b>286%</b>	<b>470%</b>	<b>500%</b>	<b>1,000%</b>
1.000000% .....	14.6%	4.6%	3.0%	(25.9)%
1.676250% .....	9.8%	(0.3)%	(2.0)%	(31.7)%
3.863125% .....	(5.7)%	(16.6)%	(18.4)%	(51.6)%
6.050000% and above .....	**	**	**	**

**Sensitivity of Class SD to Prepayments**  
**Assumed Price 18.0%\***

<b>LIBOR</b>	<b>PSA Prepayment Assumption Rates</b>			
	<b>286%</b>	<b>470%</b>	<b>500%</b>	<b>1,000%</b>
1.000000% .....	12.6%	2.5%	0.9%	(28.3)%
1.676250% .....	8.1%	(2.1)%	(3.8)%	(33.8)%
3.863125% .....	(6.6)%	(17.5)%	(19.4)%	(52.7)%
6.050000% and above .....	**	**	**	**

**Sensitivity of Class SM to Prepayments**  
**Assumed Price 18.0%\***

<b>LIBOR</b>	<b>PSA Prepayment Assumption Rates</b>			
	<b>286%</b>	<b>470%</b>	<b>500%</b>	<b>1,000%</b>
1.000000% .....	12.6%	2.5%	0.9%	(28.3)%
1.676250% .....	8.1%	(2.1)%	(3.8)%	(33.8)%
3.863125% .....	(6.6)%	(17.5)%	(19.4)%	(52.7)%
6.050000% and above .....	**	**	**	**

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

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

**CERTAIN UNITED STATES FEDERAL INCOME TAX CONSEQUENCES**

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

**REMIC Elections**

In the opinion of Cleary Gottlieb Steen & Hamilton LLP, the Trust will constitute a Single REMIC Series as to the Group 6 Trust Assets, a Single REMIC Series as to the Group 9 Trust Assets, a Single REMIC Series as to the Group 11 Trust Assets, a Single REMIC Series as to the Group 16 Trust Assets, a Double REMIC Series as to the Group 17 Trust Assets and a Double REMIC Series as to the Group 1, 2, 3, 4, 5, 7, 8, 10, 12, 13, 14, 15, 18, 19, 20, 21, 22 and 23 Trust Assets, each for United States federal income tax purposes. Separate REMIC elections will be made for the Group 6 REMIC, the Group 9

REMIC, the Group 11 REMIC, the Group 16 REMIC, the Group 17 Pooling REMIC, the Group 17 Issuing REMIC, the Group 1, 2, 3, 4, 5, 7, 8, 10, 12, 13, 14, 15, 18, 19, 20, 21, 22 and 23 Pooling REMIC and the Group 1, 2, 3, 4, 5, 7, 8, 10, 12, 13, 14, 15, 18, 19, 20, 21, 22 and 23 Issuing REMIC.

### **Regular Securities**

The Regular Securities will be treated as debt instruments issued by the Group 1, 2, 3, 4, 5, 7, 8, 10, 12, 13, 14, 15, 18, 19, 20, 21, 22 and 23 Issuing REMIC, the Group 6 REMIC, the Group 9 REMIC, the Group 11 REMIC, the Group 16 REMIC or the Group 17 Issuing REMIC, as applicable, for United States federal income tax purposes. Income on the Regular Securities must be reported under an accrual method of accounting.

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

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

<u>Group(s)</u>	<u>PSA or CPR</u>
1, 3, 4, 5, 6, 9, 10, 11, 13, 14, 15, 16, 20, 21 and 22	250% PSA
2 and 19	225% PSA
7	275% PSA
8	200% PSA
12 and 17	15% CPR
18	400% PSA
23	470% PSA

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

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

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



In the case of any Trust REMIC that is considered to be a “single-class REMIC” under temporary Treasury regulations, certain fees and expenses of the single-class REMIC would be allocated proportionately among the Regular Securities and Residual Securities of such Trust REMIC. An individual, trust or estate that holds Regular Securities in a single-class REMIC (directly or indirectly through a grantor trust, a partnership, an S corporation, a common trust fund, or a nonpublicly offered RIC) generally will not be eligible to deduct its allocable share of fees or expenses of a single-class REMIC under Section 212 of the Code for any taxable year beginning before January 1, 2026. For a discussion of single-class REMICs, see “Certain United States Federal Income Tax Consequences — Tax Treatment of Regular Securities — Single Class REMICs” in the Base Offering Circular, as modified by the previous sentence. Prospective investors in the Regular Securities are urged to consult with their tax advisors regarding the potential applicability of these rules to their particular situation.

### **Residual Securities**

The Class R6 Securities will represent the beneficial ownership of the Residual Interest in the Group 6 REMIC. The Class R9 Securities will represent the beneficial ownership of the Residual Interest in the Group 9 REMIC. The Class R11 Securities will represent the beneficial ownership of the Residual Interest in the Group 11 REMIC. The Class R16 Securities will represent the beneficial ownership of the Residual Interest in the Group 16 REMIC. The Class RR17 Securities will represent the beneficial ownership of the Residual Interest in the Group 17 Pooling REMIC and the beneficial ownership of the Residual Interest in the Group 17 Issuing REMIC. The Class RR Securities will represent the beneficial ownership of the Residual Interest in the Group 1, 2, 3, 4, 5, 7, 8, 10, 12, 13, 14, 15, 18, 19, 20, 21, 22 and 23 Pooling REMIC and the beneficial ownership of the Residual Interest in the Group 1, 2, 3, 4, 5, 7, 8, 10, 12, 13, 14, 15, 18, 19, 20, 21, 22 and 23 Issuing REMIC. The Residual Securities, i.e., the Class RR, R6, R9, R11, R16 and RR17 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 related 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 related 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 nonpublicly offered RIC) generally will

not be eligible to deduct its allocable share of the related Trust REMIC's or Trust REMICs', as applicable, 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 Depart-

ment 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, if any, from (1) January 1, 2020 on the Fixed Rate and Delay Classes and (2) January 20, 2020 on the Floating Rate, Inverse Floating Rate and Weighted Average Coupon Classes other than the Delay Classes. The Sponsor may effect these transactions by sales to or through certain securities dealers. These dealers may receive compensation in the form of discounts, concessions or commissions from the Sponsor and/or commissions from any purchasers for which they act as agents. Some of the Securities may be sold through dealers in relatively small sales. In the usual case, the commission charged on a relatively small sale of securities will be a higher percentage of the sales price than that charged on a large sale of securities.

### **INCREASE IN SIZE**

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

## **LEGAL MATTERS**

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

Schedule I

Available Combinations(1)

Class	REMIC Securities		MX Securities							
	Original Class Principal Balance or Class Notional Balance	Related MX Class	Maximum Original Class Principal Balance or Class Notional Balance(2)	Principal Type(3)	Interest Rate	Interest Type(3)	CUSIP Number	Final Distribution Date(4)		
<b>Security Group 2</b> Combination 1(5) MC	\$107,436,000	MA	\$ 80,577,000	PAC/AD	4.00%	FIX	38382CKJ9	March 2048		
		MB	92,088,000	PAC/AD	3.75	FIX	38382CKK6	March 2048		
		MD	107,436,000	PAC/AD	3.25	FIX	38382CKL4	March 2048		
		MG	107,436,000	PAC/AD	3.00	FIX	38382CKM2	March 2048		
		MH	107,436,000	PAC/AD	2.75	FIX	38382CKN0	March 2048		
		MI	46,044,000	NTL(PAC/AD)	3.50	FIX/IO	38382CKP5	March 2048		
		MJ	107,436,000	PAC/AD	2.50	FIX	38382CKQ3	March 2048		
		MK	107,436,000	PAC/AD	2.25	FIX	38382CKR1	March 2048		
		MN	107,436,000	PAC/AD	2.00	FIX	38382CKS9	March 2048		
		Combination 2(5) MC MW	\$107,436,000 9,270,000	IL	\$ 50,016,857	NTL(PAC/AD)	3.50%	FIX/IO	38382CKT7	April 2049
				LM	87,529,500	PAC/AD	4.00	FIX	38382CKU4	April 2049
				LN	100,033,714	PAC/AD	3.75	FIX	38382CKV2	April 2049
				LP	116,706,000	PAC/AD	3.50	FIX	38382CKW0	April 2049
				LQ	116,706,000	PAC/AD	3.25	FIX	38382CKX8	April 2049
LT	116,706,000			PAC/AD	3.00	FIX	38382CKY6	April 2049		
Combination 2(5) MC MW	\$107,436,000 9,270,000	IU	116,706,000	PAC/AD	2.75	FIX	38382CKZ3	April 2049		
		LV	116,706,000	PAC/AD	2.50	FIX	38382CLA7	April 2049		
		LW	116,706,000	PAC/AD	2.25	FIX	38382CLB5	April 2049		
		LY	116,706,000	PAC/AD	2.00	FIX	38382CIC3	April 2049		

REMIC Securities

MX Securities

Class	Original Class Principal Balance or Class Notional Balance		Related MX Class	Maximum Original Class Principal Balance or Class Notional Balance(2)		Principal Type(3)	Interest Rate	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
	Principal Balance	Notional Balance		Principal Balance	Notional Balance					
Combination 3(5)										
MC	\$107,436,000		LA	\$ 91,047,750		PAC/AD	4.00%	FIX	38382CLD1	October 2049
MW	9,270,000		LB	104,054,571		PAC/AD	3.75	FIX	38382CLE9	October 2049
MY	4,691,000		LC	121,397,000		PAC/AD	3.50	FIX	38382CLF6	October 2049
			LD	121,397,000		PAC/AD	3.25	FIX	38382CLG4	October 2049
			LE	121,397,000		PAC/AD	3.00	FIX	38382CLH2	October 2049
			LG	121,397,000		PAC/AD	2.75	FIX	38382CLJ8	October 2049
			LH	121,397,000		PAC/AD	2.50	FIX	38382CLK5	October 2049
			LI	52,027,285		NTL(PAC/AD)	3.50	FIX/IO	38382CLL3	October 2049
			LJ	121,397,000		PAC/AD	2.25	FIX	38382CLM1	October 2049
			LK	121,397,000		PAC/AD	2.00	FIX	38382CLN9	October 2049
<b>Security Group 4</b>										
Combination 4										
JA	\$ 2,319,500		JG	\$ 15,000,000		SC/PT/SEQ	2.50%	FIX	38382CLP4	August 2049
JC	12,680,500									
Combination 5										
JB	\$ 2,319,500		JE	\$ 15,000,000		SC/PT/SEQ	4.50%	FIX	38382CLQ2	August 2049
JD	12,680,500									
<b>Security Group 5</b>										
Combination 6(5)										
NA	\$ 55,128,779		NB	\$ 55,128,779		PAC/AD	3.25%	FIX	38382CLR0	December 2049
			NC	55,128,779		PAC/AD	3.00	FIX	38382CLS8	December 2049
			ND	55,128,779		PAC/AD	2.75	FIX	38382CLT6	December 2049
			NE	55,128,779		PAC/AD	2.50	FIX	38382CLU3	December 2049
			NG	55,128,779		PAC/AD	2.25	FIX	38382CLV1	December 2049
			NH	55,128,779		PAC/AD	2.00	FIX	38382CLW9	December 2049
			NI	23,626,619		NTL(PAC/AD)	3.50	FIX/IO	38382CLX7	December 2049

REMIC Securities

MX Securities

Class	REMIC Securities		MX Securities					
	Original Class Principal Balance or Class Notional Balance	Related MX Class	Maximum Original Balance or Class Notional Balance(2)	Principal Type(3)	Interest Rate	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
<b>Security Group 7</b>								
Combination 7(5)								
GA	\$ 15,495,291	GB	\$ 15,495,291	PAC/AD	3.25%	FIX	38382CLY5	December 2049
		GC	15,495,291	PAC/AD	3.00	FIX	38382CLZ2	December 2049
		GD	15,495,291	PAC/AD	2.75	FIX	38382CMA6	December 2049
		GE	15,495,291	PAC/AD	2.50	FIX	38382CMB4	December 2049
		GH	15,495,291	PAC/AD	2.25	FIX	38382CMC2	December 2049
		GI	6,640,839	NTL(PAC/AD)	3.50	FIX/IO	38382CMD0	December 2049
		GJ	15,495,291	PAC/AD	2.00	FIX	38382CME8	December 2049
<b>Security Group 8</b>								
Combination 8(5)								
DA	\$ 75,277,592	DB	\$ 75,277,592	PAC/AD	2.25%	FIX	38382CMF5	December 2049
		DC	75,277,592	PAC/AD	2.00	FIX	38382CMG3	December 2049
		DE	75,277,592	PAC/AD	1.75	FIX	38382CMH1	December 2049
		DG	75,277,592	PAC/AD	1.50	FIX	38382CMJ7	December 2049
		DH	37,638,796	PAC/AD	3.50	FIX	38382CMK4	December 2049
		YI	18,819,398	NTL(PAC/AD)	4.00	FIX/IO	38382CML2	December 2049
Combination 9(5)								
DA	\$ 75,277,592	DJ	\$ 76,071,188	PAC/AD	2.25%	FIX	38382CMM0	January 2050
DY	793,596	DK	76,071,188	PAC/AD	2.00	FIX	38382CMN8	January 2050
		DL	38,035,594	PAC/AD	3.00	FIX	38382CMP3	January 2050
		DT	76,071,188	PAC/AD	2.50	FIX	38382CMQ1	January 2050
		IY	9,508,898	NTL(PAC/AD)	4.00	FIX/IO	38382CMR9	January 2050
<b>Security Groups 9 and 11</b>								
Combination 10(6)								
CS	\$ 50,000,000	SC	\$100,000,000	NTL(PT)	(7)	INV/IO	38382CMS7	January 2050
SA	50,000,000							

REMIC Securities		MX Securities						
Class	Original Class Principal Balance or Class Notional Balance	Related MX Class	Maximum Original Class Principal Balance or Class Notional Balance(2)	Principal Type(3)	Interest Rate	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
<b>Security Group 12</b>								
Combination 11								
ID	\$ 552,654	WA(8)	\$ 12,496,070	SC/PT	(7)	WAC/DLY	38382CMT5	November 2049
IQ	5,978,283							
JO	1,000,000							
K	763,167							
KO	949,134							
LO	344,664							
MO	5,808,769							
MS	6,645,575							
OL	1,000,000							
PO	2,020,787							
QO	609,549							
QS	1,903,915							
SL	4,806,295							
WI	12,383,239							
<b>Security Group 13</b>								
Combination 12								
AO	\$ 1,516,975	WL(8)	\$ 9,041,422	SC/PT	(7)	WAC	38382CMU2	December 2049
HO	1,644,750							
OG	3,481,361							
OJ	1,035,321							
OM	507,000							
OT	856,015							
ST	49,565,568							
Combination 13								
IG	\$ 3,481,361	IN	\$ 4,337,376	NTL(SC/PT)	3.50%	FIX/IO	38382CMV0	November 2049
TI	856,015							



REMIC Securities

MX Securities

Class	Original Class Principal Balance or Class Notional Balance	Related MX Class	Maximum Original Balance or Class Notional Balance(2)	Principal Type(3)	Interest Rate	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
<b>Security Group 14</b>								
Combination 14(5)								
HP	\$ 29,674,077	HD	\$ 29,674,077	SC/PT	1.75%	FIX	38382CMW8	June 2049
		HE	29,674,077	SC/PT	2.00	FIX	38382CMX6	June 2049
		HG	29,674,077	SC/PT	2.25	FIX	38382CMY4	June 2049
		HI	8,242,799	NTL(SC/PT)	4.50	FIX/IO	38382CMZ1	June 2049
		HJ	29,674,077	SC/PT	2.50	FIX	38382CNA5	June 2049
		HK	29,674,077	SC/PT	2.75	FIX	38382CNB3	June 2049
		HM	21,195,769	SC/PT	3.50	FIX	38382CNC1	June 2049
		HN	16,485,598	SC/PT	4.00	FIX	38382CND9	June 2049
<b>Security Group 18</b>								
Combination 15(5)								
PA	\$ 39,938,887	IP	\$ 22,465,623	NTL(PAC/AD)	4.00%	FIX/IO	38382CNE7	September 2049
		PB	39,938,887	PAC/AD	3.50	FIX	38382CNF4	September 2049
		PD	39,938,887	PAC/AD	3.25	FIX	38382CNG2	September 2049
		PE	39,938,887	PAC/AD	3.00	FIX	38382CNH0	September 2049
		PG	39,938,887	PAC/AD	2.75	FIX	38382CNJ6	September 2049
		PH	39,938,887	PAC/AD	2.50	FIX	38382CNK3	September 2049
		PJ	39,938,887	PAC/AD	2.25	FIX	38382CNL1	September 2049
		PK	39,938,887	PAC/AD	2.00	FIX	38382CNM9	September 2049
		PL	39,938,887	PAC/AD	1.75	FIX	38382CNN7	September 2049
<b>Security Groups 2 and 19</b>								
Combination 16(6)								
JZ	\$ 1,470,000	ZM	\$ 15,000,000	SUP	3.50%	FIX/Z	38382CNP2	January 2050
LZ	13,530,000							

REMIC Securities

MX Securities

Class	Original Class Principal Balance or Class Notional Balance		Related MX Class	Maximum Original Class Principal Balance or Class Notional Balance(2)		Principal Type(3)	Interest Rate	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
	Principal Balance	Notional Balance		Principal Balance	Notional Balance					
<b>Security Group 20</b>										
Combination 17(5)										
CA	\$ 41,899,163		CB	\$ 41,899,163		PAC/AD	3.25%	FIX	38382CNQ0	December 2049
			CD	41,899,163		PAC/AD	3.00	FIX	38382CNR8	December 2049
			CE	41,899,163		PAC/AD	2.75	FIX	38382CNS6	December 2049
			CG	41,899,163		PAC/AD	2.50	FIX	38382CNT4	December 2049
			CH	41,899,163		PAC/AD	2.25	FIX	38382CNU1	December 2049
			CJ	41,899,163		PAC/AD	2.00	FIX	38382CNV9	December 2049
			IC	17,956,784		NTL(PAC/AD)	3.50	FIX/IO	38382CNW7	December 2049
<b>Security Groups 5, 7, 20 and 21</b>										
Combination 18(6)										
CZ	\$ 7,095,776		QZ	\$ 25,811,285		SC/PT/SUP	3.50%	FIX/Z	38382CNX5	January 2050
GZ	2,917,062									
NZ	11,106,951									
ZG	4,691,496									
<b>Security Groups 5, 7, 20 and 22</b>										
Combination 19(6)										
CL	\$ 367,599		QL	\$ 1,177,543		SC/PT/PAC/AD	3.50%	FIX	38382CNY3	January 2050
GL	100,000									
L	172,929									
NL	537,015									
<b>Security Group 23</b>										
Combination 20										
SB	\$ 16,000,000		SM	\$ 50,000,000		NTL(PT)	(7)	INV/IO	38382CNZ0	January 2050
SD	34,000,000									
<b>Combination 21(5)</b>										
AK	\$ 37,192,000		KC	\$ 37,192,000		PAC I	2.00%	FIX	38382CPA3	June 2049
			KD	37,192,000		PAC I	2.25	FIX	38382CPB1	June 2049
			KE	24,794,666		PAC I	2.75	FIX	38382CPC9	June 2049
			KG	18,596,000		PAC I	3.00	FIX	38382CPD7	June 2049
			KI	4,132,444		NTL(PAC I)	4.50	FIX/IO	38382CPE5	June 2049

REMIC Securities

MX Securities

Class	REMIC Securities		MX Securities					
	Original Class Principal Balance or Class Notional Balance	Related MX Class	Maximum Original Class Principal Balance or Class Notional Balance(2)	Principal Type(3)	Interest Rate	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
Combination 22(5)								
AK	\$ 37,192,000	IK	\$ 4,360,444	NTI(PAC I)	4.50%	FIX/IO	38382CPF2	January 2050
KB	2,052,000	KH	39,244,000	PAC I	2.00	FIX	38382CPG0	January 2050
		KJ	39,244,000	PAC I	2.25	FIX	38382CPH8	January 2050
		KL	39,244,000	PAC I	2.50	FIX	38382CPJ4	January 2050
		KM	26,162,666	PAC I	2.75	FIX	38382CPK1	January 2050
		KN	19,622,000	PAC I	3.00	FIX	38382CPL9	January 2050

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

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

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

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

(5) In the case of Combinations 1, 2, 3, 6, 7, 8, 9, 14, 15, 17, 21 and 22, various subcombinations are permitted. See “Description of the Securities — Modification and Exchange” in the Base Offering Circular for a discussion of subcombinations.

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

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

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

**Schedule II**

**SCHEDULED PRINCIPAL BALANCES**

<u>Distribution Date</u>	<u>Classes AK, KB and KY (in the aggregate)</u>	<u>Classes CA and CI (in the aggregate)</u>	<u>Classes DA, DF, DY, PC and PY (in the aggregate)</u>
Initial Balance . . . . .	\$39,503,000.00	\$42,266,762.00	\$170,839,751.00
February 2020 . . . . .	39,370,182.07	42,141,887.68	170,296,210.94
March 2020 . . . . .	39,213,205.67	42,000,284.63	169,703,115.29
April 2020 . . . . .	39,032,157.74	41,842,007.46	169,060,698.48
May 2020 . . . . .	38,827,160.45	41,667,127.77	168,369,232.74
June 2020 . . . . .	38,598,371.25	41,475,734.17	167,629,027.92
July 2020 . . . . .	38,345,982.79	41,267,932.25	166,840,431.32
August 2020 . . . . .	38,070,222.87	41,043,844.47	166,003,827.38
September 2020 . . . . .	37,771,354.17	40,803,610.16	165,119,637.46
October 2020 . . . . .	37,449,673.99	40,547,385.28	164,188,319.44
November 2020 . . . . .	37,105,513.85	40,275,342.39	163,210,367.36
December 2020 . . . . .	36,739,239.01	39,987,670.36	162,186,310.94
January 2021 . . . . .	36,351,247.97	39,684,574.26	161,116,715.15
February 2021 . . . . .	35,941,971.79	39,366,275.04	160,002,179.64
March 2021 . . . . .	35,511,873.35	39,033,009.32	158,843,338.15
April 2021 . . . . .	35,061,446.59	38,685,029.07	157,640,857.91
May 2021 . . . . .	34,591,215.63	38,322,601.32	156,395,438.98
June 2021 . . . . .	34,101,733.72	37,946,007.77	155,107,813.51
July 2021 . . . . .	33,593,582.33	37,555,544.45	153,778,745.00
August 2021 . . . . .	33,067,369.90	37,151,521.30	152,409,027.49
September 2021 . . . . .	32,523,730.74	36,734,261.76	150,999,484.75
October 2021 . . . . .	31,963,323.76	36,304,102.32	149,550,969.39
November 2021 . . . . .	31,386,831.10	35,861,392.04	148,064,361.93
December 2021 . . . . .	30,794,956.80	35,406,492.07	146,540,569.88
January 2022 . . . . .	30,188,425.33	34,939,775.10	144,980,526.73
February 2022 . . . . .	29,567,980.09	34,461,624.86	143,385,190.95
March 2022 . . . . .	28,934,381.88	33,972,435.55	141,755,544.92
April 2022 . . . . .	28,288,407.28	33,472,611.27	140,092,593.85
May 2022 . . . . .	27,630,847.05	32,962,565.41	138,442,630.89
June 2022 . . . . .	26,984,139.88	32,442,720.05	136,805,547.38
July 2022 . . . . .	26,348,109.75	31,928,564.11	135,181,235.49
August 2022 . . . . .	25,722,583.46	31,420,032.88	133,569,588.25
September 2022 . . . . .	25,107,390.58	30,917,062.39	131,970,499.51
October 2022 . . . . .	24,502,363.42	30,419,589.33	130,383,863.96
November 2022 . . . . .	23,907,336.98	29,927,551.11	128,809,577.13
December 2022 . . . . .	23,322,148.89	29,440,885.82	127,247,535.35
January 2023 . . . . .	22,746,639.42	28,959,532.23	125,697,635.77
February 2023 . . . . .	22,180,651.36	28,483,429.79	124,159,776.34
March 2023 . . . . .	21,624,030.04	28,012,518.59	122,633,855.81
April 2023 . . . . .	21,076,623.29	27,546,739.39	121,119,773.73
May 2023 . . . . .	20,538,281.34	27,086,033.60	119,617,430.42
June 2023 . . . . .	20,008,856.87	26,630,343.28	118,126,727.00
July 2023 . . . . .	19,488,204.90	26,179,611.11	116,647,565.36
August 2023 . . . . .	18,976,182.77	25,733,780.40	115,179,848.15

<u>Distribution Date</u>	<u>Classes AK, KB and KY (in the aggregate)</u>	<u>Classes CA and CL (in the aggregate)</u>	<u>Classes DA, DF, DY, PC and PY (in the aggregate)</u>
September 2023	\$18,472,650.12	\$25,292,795.10	\$113,723,478.79
October 2023	17,977,468.86	24,856,599.74	112,278,361.44
November 2023	17,490,503.09	24,425,139.50	110,844,401.03
December 2023	17,011,619.11	23,998,360.12	109,421,503.22
January 2024	16,540,685.36	23,576,207.98	108,009,574.42
February 2024	16,077,572.40	23,158,630.01	106,608,521.77
March 2024	15,622,152.88	22,745,573.73	105,218,253.12
April 2024	15,174,301.47	22,336,987.25	103,838,677.06
May 2024	14,733,894.87	21,932,819.24	102,469,702.89
June 2024	14,300,811.77	21,533,018.93	101,111,240.61
July 2024	13,874,932.79	21,137,536.11	99,763,200.94
August 2024	13,456,140.50	20,746,321.13	98,425,495.29
September 2024	13,044,319.32	20,359,324.88	97,098,035.75
October 2024	12,641,249.82	19,976,498.77	95,780,735.11
November 2024	12,250,515.88	19,597,794.77	94,473,506.85
December 2024	11,871,742.84	19,223,165.36	93,176,265.12
January 2025	11,504,567.33	18,852,563.56	91,888,924.72
February 2025	11,148,636.97	18,485,942.88	90,611,401.15
March 2025	10,803,610.01	18,123,257.37	89,343,610.54
April 2025	10,469,155.02	17,764,461.55	88,085,469.70
May 2025	10,144,950.58	17,409,510.47	86,836,896.08
June 2025	9,830,685.00	17,058,359.67	85,597,807.76
July 2025	9,526,055.99	16,710,965.15	84,368,123.48
August 2025	9,230,770.41	16,368,370.85	83,147,762.61
September 2025	8,944,543.95	16,032,626.36	81,936,645.14
October 2025	8,667,100.94	15,703,597.12	80,734,691.69
November 2025	8,398,174.02	15,381,151.17	79,541,823.51
December 2025	8,137,503.91	15,065,159.12	78,357,962.45
January 2026	7,884,839.18	14,755,494.10	77,183,030.97
February 2026	7,639,936.02	14,452,031.68	76,016,952.15
March 2026	7,402,557.98	14,154,649.85	74,859,649.65
April 2026	7,172,475.77	13,863,228.97	73,711,047.74
May 2026	6,949,467.03	13,577,651.74	72,572,053.86
June 2026	6,733,316.15	13,297,803.12	71,449,825.82
July 2026	6,523,814.05	13,023,570.30	70,344,123.96
August 2026	6,320,757.95	12,754,842.67	69,254,711.95
September 2026	6,123,951.24	12,491,511.78	68,181,356.80
October 2026	5,933,203.27	12,233,471.27	67,123,828.77
November 2026	5,748,329.13	11,980,616.85	66,081,901.36
December 2026	5,569,149.57	11,732,846.27	65,055,351.24
January 2027	5,395,490.71	11,490,059.26	64,043,958.22
February 2027	5,227,183.99	11,252,157.49	63,047,505.22
March 2027	5,064,065.94	11,019,044.57	62,065,778.17
April 2027	4,905,978.04	10,790,625.96	61,098,566.05
May 2027	4,752,766.60	10,566,808.97	60,145,660.77
June 2027	4,604,282.57	10,347,502.72	59,206,857.19
July 2027	4,460,381.43	10,132,618.08	58,281,953.05
August 2027	4,320,923.07	9,922,067.68	57,370,748.91

<u>Distribution Date</u>	<u>Classes AK, KB and KY (in the aggregate)</u>	<u>Classes CA and CL (in the aggregate)</u>	<u>Classes DA, DF, DY, PC and PY (in the aggregate)</u>
September 2027	\$ 4,185,771.58	\$ 9,715,765.85	\$ 56,473,048.18
October 2027	4,054,795.23	9,513,628.55	55,588,656.99
November 2027	3,927,866.25	9,315,573.44	54,717,384.22
December 2027	3,804,860.77	9,121,519.74	53,859,041.43
January 2028	3,685,658.69	8,931,388.25	53,013,442.85
February 2028	3,570,143.53	8,745,101.33	52,180,405.31
March 2028	3,458,202.38	8,562,582.85	51,359,748.22
April 2028	3,349,725.75	8,383,758.16	50,551,293.53
May 2028	3,244,607.46	8,208,554.06	49,754,865.70
June 2028	3,142,744.60	8,036,898.80	48,970,291.68
July 2028	3,044,037.34	7,868,722.01	48,197,400.84
August 2028	2,948,388.93	7,703,954.69	47,436,024.94
September 2028	2,855,705.53	7,542,529.22	46,685,998.15
October 2028	2,765,896.18	7,384,379.27	45,947,156.96
November 2028	2,678,872.67	7,229,439.82	45,219,340.14
December 2028	2,594,549.50	7,077,647.11	44,502,388.79
January 2029	2,512,843.73	6,928,938.64	43,796,146.19
February 2029	2,433,674.99	6,783,253.12	43,100,457.88
March 2029	2,356,965.34	6,640,530.47	42,415,171.55
April 2029	2,282,639.21	6,500,711.77	41,740,137.06
May 2029	2,210,623.34	6,363,739.27	41,075,206.37
June 2029	2,140,846.69	6,229,556.34	40,420,233.55
July 2029	2,073,240.41	6,098,107.46	39,775,074.72
August 2029	2,007,737.73	5,969,338.19	39,139,588.04
September 2029	1,944,273.91	5,843,195.18	38,513,633.65
October 2029	1,882,786.22	5,719,626.09	37,897,073.71
November 2029	1,823,213.80	5,598,579.64	37,289,772.29
December 2029	1,765,497.67	5,480,005.54	36,691,595.40
January 2030	1,709,580.66	5,363,854.47	36,102,410.94
February 2030	1,655,407.32	5,250,078.11	35,522,088.68
March 2030	1,602,923.91	5,138,629.05	34,950,500.24
April 2030	1,552,078.33	5,029,460.85	34,387,519.04
May 2030	1,502,820.07	4,922,527.96	33,833,020.31
June 2030	1,455,100.16	4,817,785.71	33,286,881.03
July 2030	1,408,871.13	4,715,190.33	32,748,979.94
August 2030	1,364,086.96	4,614,698.91	32,219,197.47
September 2030	1,320,703.04	4,516,269.37	31,697,415.78
October 2030	1,278,676.13	4,419,860.45	31,183,518.67
November 2030	1,237,964.30	4,325,431.73	30,677,391.60
December 2030	1,198,526.90	4,232,943.56	30,178,921.66
January 2031	1,160,324.55	4,142,357.08	29,687,997.53
February 2031	1,123,319.04	4,053,634.18	29,204,509.46
March 2031	1,087,473.36	3,966,737.52	28,728,349.29
April 2031	1,052,751.62	3,881,630.49	28,259,410.35
May 2031	1,019,119.04	3,798,277.18	27,797,587.53
June 2031	986,541.88	3,716,642.42	27,342,777.18
July 2031	954,987.47	3,636,691.71	26,894,877.13

<u>Distribution Date</u>	<u>Classes AK, KB and KY (in the aggregate)</u>	<u>Classes CA and CL (in the aggregate)</u>	<u>Classes DA, DF, DY, PC and PY (in the aggregate)</u>
August 2031	\$ 924,424.11	\$ 3,558,391.23	\$ 26,453,786.67
September 2031	894,821.09	3,481,707.84	26,019,406.50
October 2031	866,148.64	3,406,609.03	25,591,638.77
November 2031	838,377.90	3,333,062.97	25,170,386.97
December 2031	811,480.90	3,261,038.42	24,755,556.00
January 2032	785,430.52	3,190,504.77	24,347,052.10
February 2032	760,200.48	3,121,432.01	23,944,782.84
March 2032	735,765.31	3,053,790.74	23,548,657.11
April 2032	712,100.31	2,987,552.11	23,158,585.09
May 2032	689,181.55	2,922,687.87	22,774,478.26
June 2032	666,985.84	2,859,170.30	22,396,249.33
July 2032	645,490.68	2,796,972.26	22,023,812.28
August 2032	624,674.30	2,736,067.12	21,657,082.28
September 2032	604,515.56	2,676,428.78	21,295,975.75
October 2032	584,993.99	2,618,031.67	20,940,410.28
November 2032	566,089.76	2,560,850.71	20,590,304.64
December 2032	547,783.62	2,504,861.33	20,245,578.74
January 2033	530,056.95	2,450,039.44	19,906,153.66
February 2033	512,891.68	2,396,361.42	19,571,951.60
March 2033	496,270.29	2,343,804.12	19,242,895.85
April 2033	480,175.83	2,292,344.88	18,918,910.82
May 2033	464,591.84	2,241,961.43	18,599,921.97
June 2033	449,502.38	2,192,631.99	18,285,855.87
July 2033	434,892.03	2,144,335.20	17,976,640.09
August 2033	420,745.79	2,097,050.11	17,672,203.27
September 2033	407,049.17	2,050,756.20	17,372,475.04
October 2033	393,788.10	2,005,433.35	17,077,386.07
November 2033	380,948.97	1,961,061.85	16,786,868.00
December 2033	368,518.56	1,917,622.36	16,500,853.45
January 2034	356,484.08	1,875,095.95	16,219,276.00
February 2034	344,833.13	1,833,464.04	15,942,070.19
March 2034	333,553.70	1,792,708.45	15,669,171.50
April 2034	322,634.13	1,752,811.33	15,400,516.32
May 2034	312,063.15	1,713,755.21	15,136,041.97
June 2034	301,829.81	1,675,522.96	14,875,686.64
July 2034	291,923.52	1,638,097.77	14,619,389.44
August 2034	282,334.02	1,601,463.21	14,367,090.33
September 2034	273,051.34	1,565,603.13	14,118,730.12
October 2034	264,065.86	1,530,501.73	13,874,250.51
November 2034	255,368.22	1,496,143.51	13,633,594.01
December 2034	246,949.38	1,462,513.30	13,396,703.94
January 2035	238,800.55	1,429,596.21	13,163,524.46
February 2035	230,913.24	1,397,377.66	12,934,000.53
March 2035	223,279.22	1,365,843.36	12,708,077.88
April 2035	215,890.50	1,334,979.29	12,485,703.05
May 2035	208,739.35	1,304,771.73	12,266,823.32
June 2035	201,818.28	1,275,207.23	12,051,386.75

<u>Distribution Date</u>	<u>Classes AK, KB and KY (in the aggregate)</u>	<u>Classes CA and CL (in the aggregate)</u>	<u>Classes DA, DF, DY, PC and PY (in the aggregate)</u>
July 2035 . . . . .	\$ 195,120.02	\$ 1,246,272.60	\$ 11,839,342.12
August 2035 . . . . .	188,637.56	1,217,954.92	11,630,638.98
September 2035 . . . . .	182,364.06	1,190,241.53	11,425,227.59
October 2035 . . . . .	176,292.93	1,163,120.03	11,223,058.91
November 2035 . . . . .	170,417.76	1,136,578.24	11,024,084.64
December 2035 . . . . .	164,732.37	1,110,604.25	10,828,257.15
January 2036 . . . . .	159,230.75	1,085,186.39	10,635,529.50
February 2036 . . . . .	153,907.08	1,060,313.20	10,445,855.44
March 2036 . . . . .	148,755.72	1,035,973.48	10,259,189.37
April 2036 . . . . .	143,771.21	1,012,156.23	10,075,486.36
May 2036 . . . . .	138,948.27	988,850.69	9,894,702.12
June 2036 . . . . .	134,281.76	966,046.30	9,716,793.00
July 2036 . . . . .	129,766.72	943,732.72	9,541,715.99
August 2036 . . . . .	125,398.35	921,899.82	9,369,428.69
September 2036 . . . . .	121,171.98	900,537.66	9,199,889.31
October 2036 . . . . .	117,083.10	879,636.51	9,033,056.68
November 2036 . . . . .	113,127.34	859,186.84	8,868,890.21
December 2036 . . . . .	109,300.45	839,179.31	8,707,349.91
January 2037 . . . . .	105,598.34	819,604.76	8,548,396.35
February 2037 . . . . .	102,017.04	800,454.23	8,391,990.68
March 2037 . . . . .	98,552.68	781,718.90	8,238,094.62
April 2037 . . . . .	95,201.55	763,390.19	8,086,670.44
May 2037 . . . . .	91,960.03	745,459.64	7,937,680.95
June 2037 . . . . .	88,824.61	727,918.99	7,791,089.50
July 2037 . . . . .	85,791.92	710,760.14	7,646,859.97
August 2037 . . . . .	82,858.66	693,975.14	7,504,956.78
September 2037 . . . . .	80,021.66	677,556.22	7,365,344.84
October 2037 . . . . .	77,277.83	661,495.75	7,227,989.60
November 2037 . . . . .	74,624.19	645,786.27	7,092,856.98
December 2037 . . . . .	72,057.86	630,420.46	6,959,913.41
January 2038 . . . . .	69,576.03	615,391.15	6,829,125.81
February 2038 . . . . .	67,176.00	600,691.32	6,700,461.58
March 2038 . . . . .	64,855.13	586,314.08	6,573,888.59
April 2038 . . . . .	62,610.88	572,252.70	6,449,375.17
May 2038 . . . . .	60,440.80	558,500.57	6,326,890.12
June 2038 . . . . .	58,342.50	545,051.21	6,206,402.71
July 2038 . . . . .	56,313.66	531,898.29	6,087,882.62
August 2038 . . . . .	54,352.05	519,035.59	5,971,300.00
September 2038 . . . . .	52,455.51	506,457.03	5,856,625.42
October 2038 . . . . .	50,621.93	494,156.65	5,743,829.89
November 2038 . . . . .	48,849.29	482,128.60	5,632,884.84
December 2038 . . . . .	47,135.62	470,367.16	5,523,762.11
January 2039 . . . . .	45,479.01	458,866.72	5,416,433.96
February 2039 . . . . .	43,877.62	447,621.80	5,310,873.04
March 2039 . . . . .	42,329.66	436,627.01	5,207,052.41
April 2039 . . . . .	40,833.40	425,877.08	5,104,945.54
May 2039 . . . . .	39,387.17	415,366.85	5,004,526.25



<u>Distribution Date</u>	<u>Classes AK, KB and KY (in the aggregate)</u>	<u>Classes CA and CL (in the aggregate)</u>	<u>Classes DA, DF, DY, PC and PY (in the aggregate)</u>
June 2039	\$ 37,989.35	\$ 405,091.25	\$ 4,905,768.76
July 2039	36,638.36	395,045.34	4,808,647.69
August 2039	35,332.68	385,224.26	4,713,138.00
September 2039	34,070.85	375,623.26	4,619,215.02
October 2039	32,851.43	366,237.67	4,526,854.46
November 2039	31,673.05	357,062.94	4,436,032.37
December 2039	30,534.37	348,094.58	4,346,725.16
January 2040	29,434.10	339,328.24	4,258,909.56
February 2040	28,370.98	330,759.61	4,172,562.69
March 2040	27,343.80	322,384.50	4,087,661.95
April 2040	26,351.39	314,198.79	4,004,185.12
May 2040	25,392.61	306,198.45	3,922,110.28
June 2040	24,466.36	298,379.53	3,841,415.83
July 2040	23,571.57	290,738.16	3,762,080.50
August 2040	22,707.23	283,270.57	3,684,083.33
September 2040	21,872.31	275,973.03	3,607,403.66
October 2040	21,065.87	268,841.92	3,532,021.14
November 2040	20,286.97	261,873.67	3,457,915.71
December 2040	19,534.69	255,064.80	3,385,067.63
January 2041	18,808.17	248,411.90	3,313,457.43
February 2041	18,106.55	241,911.61	3,243,065.93
March 2041	17,429.01	235,560.68	3,173,874.23
April 2041	16,774.77	229,355.88	3,105,863.72
May 2041	16,143.05	223,294.08	3,039,016.06
June 2041	15,533.10	217,372.20	2,973,313.16
July 2041	14,944.21	211,587.23	2,908,737.24
August 2041	14,375.67	205,936.22	2,845,270.74
September 2041	13,826.83	200,416.28	2,782,896.39
October 2041	13,297.01	195,024.57	2,721,597.16
November 2041	12,785.59	189,758.33	2,661,356.27
December 2041	12,291.95	184,614.84	2,602,157.20
January 2042	11,815.52	179,591.44	2,543,983.67
February 2042	11,355.70	174,685.54	2,486,819.63
March 2042	10,911.95	169,894.57	2,430,649.28
April 2042	10,483.74	165,216.06	2,375,457.05
May 2042	10,070.54	160,647.54	2,321,227.62
June 2042	9,671.85	156,186.64	2,267,945.86
July 2042	9,287.18	151,831.00	2,215,596.89
August 2042	8,916.07	147,578.33	2,164,166.05
September 2042	8,558.06	143,426.38	2,113,638.90
October 2042	8,212.71	139,372.96	2,064,001.19
November 2042	7,879.59	135,415.91	2,015,238.92
December 2042	7,558.30	131,553.11	1,967,338.26
January 2043	7,248.43	127,782.51	1,920,285.62
February 2043	6,949.60	124,102.08	1,874,067.60
March 2043	6,661.44	120,509.84	1,828,670.98
April 2043	6,383.58	117,003.86	1,784,082.77

<u>Distribution Date</u>	<u>Classes AK, KB and KY (in the aggregate)</u>	<u>Classes CA and CL (in the aggregate)</u>	<u>Classes DA, DF, DY, PC and PY (in the aggregate)</u>
May 2043	\$ 6,115.68	\$ 113,582.22	\$ 1,740,290.15
June 2043	5,857.40	110,243.09	1,697,280.51
July 2043	5,608.41	106,984.63	1,655,041.41
August 2043	5,368.39	103,805.07	1,613,560.60
September 2043	5,137.05	100,702.66	1,572,826.03
October 2043	4,914.08	97,675.69	1,532,825.81
November 2043	4,699.21	94,722.49	1,493,548.23
December 2043	4,492.15	91,841.43	1,454,981.78
January 2044	4,292.63	89,030.91	1,417,115.08
February 2044	4,100.40	86,289.35	1,379,936.97
March 2044	3,915.21	83,615.23	1,343,436.41
April 2044	3,736.82	81,007.03	1,307,602.56
May 2044	3,564.99	78,463.29	1,272,424.72
June 2044	3,399.49	75,982.56	1,237,892.37
July 2044	3,240.12	73,563.44	1,203,995.14
August 2044	3,086.65	71,204.56	1,170,722.81
September 2044	2,938.88	68,904.54	1,138,065.33
October 2044	2,796.62	66,662.09	1,106,012.77
November 2044	2,659.68	64,475.89	1,074,555.39
December 2044	2,527.86	62,344.69	1,043,683.57
January 2045	2,400.99	60,267.25	1,013,387.84
February 2045	2,278.91	58,242.34	983,658.88
March 2045	2,161.43	56,268.79	954,487.51
April 2045	2,048.41	54,345.44	925,864.67
May 2045	1,939.68	52,471.13	897,781.46
June 2045	1,835.09	50,644.77	870,229.11
July 2045	1,734.50	48,865.26	843,198.98
August 2045	1,637.77	47,131.54	816,682.55
September 2045	1,544.77	45,442.55	790,671.45
October 2045	1,455.35	43,797.29	765,157.43
November 2045	1,369.40	42,194.75	740,132.35
December 2045	1,286.78	40,633.95	715,588.21
January 2046	1,207.39	39,113.94	691,517.12
February 2046	1,131.11	37,633.77	667,911.33
March 2046	1,057.82	36,192.54	644,763.19
April 2046	987.42	34,789.35	622,065.17
May 2046	919.81	33,423.32	599,809.86
June 2046	854.88	32,093.58	577,989.95
July 2046	792.55	30,799.31	556,598.26
August 2046	732.71	29,539.68	535,627.70
September 2046	675.27	28,313.88	515,071.31
October 2046	620.16	27,121.13	494,922.22
November 2046	567.28	25,960.65	475,173.67
December 2046	516.56	24,831.71	455,819.00
January 2047	467.91	23,733.55	436,851.66
February 2047	421.26	22,665.45	418,265.20
March 2047	376.54	21,626.72	400,053.25

<u>Distribution Date</u>	<u>Classes AK, KB and KY (in the aggregate)</u>	<u>Classes CA and CL (in the aggregate)</u>	<u>Classes DA, DF, DY, PC and PY (in the aggregate)</u>
April 2047 .....	\$ 333.68	\$ 20,616.67	\$ 382,209.57
May 2047 .....	292.60	19,634.61	364,727.99
June 2047 .....	253.25	18,679.88	347,602.44
July 2047 .....	215.56	17,751.85	330,826.96
August 2047 .....	179.46	16,849.88	314,395.65
September 2047 .....	144.90	15,973.35	298,302.74
October 2047 .....	111.83	15,121.66	282,542.51
November 2047 .....	80.17	14,294.21	267,109.35
December 2047 .....	49.90	13,490.44	251,997.75
January 2048 .....	20.94	12,709.76	237,202.24
February 2048 .....	0.00	11,951.64	222,717.49
March 2048 .....	0.00	11,215.52	208,538.21
April 2048 .....	0.00	10,500.88	194,659.21
May 2048 .....	0.00	9,807.21	181,075.38
June 2048 .....	0.00	9,133.99	167,781.68
July 2048 .....	0.00	8,480.73	154,773.17
August 2048 .....	0.00	7,846.95	142,044.95
September 2048 .....	0.00	7,232.18	129,592.24
October 2048 .....	0.00	6,635.94	117,410.30
November 2048 .....	0.00	6,057.80	105,494.48
December 2048 .....	0.00	5,497.30	93,840.20
January 2049 .....	0.00	4,954.01	82,442.94
February 2049 .....	0.00	4,427.52	71,298.27
March 2049 .....	0.00	3,917.40	60,401.83
April 2049 .....	0.00	3,423.26	49,749.29
May 2049 .....	0.00	2,944.69	39,336.44
June 2049 .....	0.00	2,481.32	29,159.10
July 2049 .....	0.00	2,032.75	19,213.18
August 2049 .....	0.00	1,598.64	9,494.62
September 2049 .....	0.00	1,178.60	0.00
October 2049 .....	0.00	772.30	0.00
November 2049 .....	0.00	379.38	0.00
December 2049 and thereafter .....	0.00	0.00	0.00

<u>Distribution Date</u>	<u>Classes GA and GL (in the aggregate)</u>	<u>Classes JP and ZJ (in the aggregate)</u>	<u>Classes KA and KZ (in the aggregate)</u>
Initial Balance	\$15,595,291.00	\$10,081,000.00	\$7,955,000.00
February 2020	15,541,261.45	10,045,135.33	7,915,762.50
March 2020	15,480,963.77	10,005,602.62	7,863,392.21
April 2020	15,414,424.97	9,962,421.41	7,797,933.17
May 2020	15,341,678.44	9,915,614.79	7,719,477.67
June 2020	15,262,763.97	9,865,209.35	7,628,166.62
July 2020	15,177,727.69	9,811,235.16	7,524,189.81
August 2020	15,086,622.06	9,753,725.76	7,407,785.77
September 2020	14,989,505.78	9,692,718.15	7,279,241.61
October 2020	14,886,443.80	9,628,252.71	7,138,892.47
November 2020	14,777,507.21	9,560,373.17	6,987,120.82
December 2020	14,662,773.15	9,489,126.57	6,824,355.54
January 2021	14,542,324.76	9,414,563.23	6,651,070.67
February 2021	14,416,251.06	9,336,736.64	6,467,784.01
March 2021	14,284,646.82	9,255,703.42	6,275,055.55
April 2021	14,147,612.49	9,171,523.26	6,073,485.49
May 2021	14,005,254.02	9,084,258.85	5,863,712.21
June 2021	13,857,682.73	8,993,975.76	5,646,410.01
July 2021	13,705,015.19	8,900,742.41	5,422,286.52
August 2021	13,547,373.03	8,804,629.94	5,192,080.10
September 2021	13,384,882.77	8,705,712.11	4,956,556.92
October 2021	13,217,675.67	8,604,065.27	4,716,507.91
November 2021	13,045,887.51	8,499,768.15	4,472,745.59
December 2021	12,869,658.43	8,392,901.86	4,226,100.76
January 2022	12,689,132.68	8,283,549.70	3,977,419.00
February 2022	12,504,458.48	8,171,797.08	3,727,557.11
March 2022	12,315,787.73	8,057,731.41	3,477,379.52
April 2022	12,123,275.85	7,941,441.97	3,227,754.50
May 2022	11,927,081.50	7,826,353.55	2,979,550.45
June 2022	11,733,024.84	7,712,453.36	2,744,327.75
July 2022	11,541,081.50	7,599,728.73	2,521,640.32
August 2022	11,351,227.42	7,488,167.12	2,311,055.43
September 2022	11,163,438.77	7,377,756.11	2,112,153.27
October 2022	10,977,691.98	7,268,483.43	1,924,526.61
November 2022	10,793,963.77	7,160,336.92	1,747,780.45
December 2022	10,612,231.08	7,053,304.54	1,581,531.67
January 2023	10,432,471.11	6,947,374.38	1,425,408.70
February 2023	10,254,661.33	6,842,534.66	1,279,051.21
March 2023	10,078,779.44	6,738,773.70	1,142,109.78
April 2023	9,904,803.39	6,636,079.97	1,014,245.58
May 2023	9,732,711.36	6,534,442.03	895,130.11
June 2023	9,562,481.78	6,433,848.58	784,444.87
July 2023	9,394,093.33	6,334,288.42	681,881.09
August 2023	9,227,524.89	6,235,750.46	587,139.48
September 2023	9,062,755.61	6,138,223.74	499,929.95
October 2023	8,899,764.83	6,041,697.41	419,971.28
November 2023	8,738,532.14	5,946,160.73	346,991.01
December 2023	8,579,037.36	5,851,603.06	280,725.05

<u>Distribution Date</u>	<u>Classes GA and GL (in the aggregate)</u>	<u>Classes JP and ZJ (in the aggregate)</u>	<u>Classes KA and KZ (in the aggregate)</u>
January 2024	\$ 8,421,260.51	\$ 5,758,013.88	\$ 220,917.53
February 2024	8,265,181.85	5,665,382.78	167,320.55
March 2024	8,110,781.84	5,573,699.45	121,804.24
April 2024	7,958,041.15	5,482,953.68	84,025.64
May 2024	7,806,940.70	5,393,135.38	53,643.77
June 2024	7,657,461.57	5,304,234.55	30,329.64
July 2024	7,509,585.07	5,216,241.31	13,765.94
August 2024	7,363,292.73	5,129,145.87	3,646.55
September 2024	7,218,566.26	5,042,938.53	0.00
October 2024	7,075,387.57	4,957,609.71	0.00
November 2024	6,933,738.79	4,873,149.91	0.00
December 2024	6,793,602.23	4,789,549.75	0.00
January 2025	6,654,960.39	4,706,799.93	0.00
February 2025	6,517,795.97	4,624,891.24	0.00
March 2025	6,382,091.87	4,543,814.58	0.00
April 2025	6,247,831.16	4,463,560.94	0.00
May 2025	6,114,997.10	4,384,121.39	0.00
June 2025	5,984,007.97	4,305,487.12	0.00
July 2025	5,855,761.70	4,227,649.37	0.00
August 2025	5,730,201.77	4,150,599.50	0.00
September 2025	5,607,272.83	4,074,328.96	0.00
October 2025	5,486,920.66	3,999,185.47	0.00
November 2025	5,369,092.12	3,925,383.92	0.00
December 2025	5,253,735.17	3,852,900.86	0.00
January 2026	5,140,798.83	3,781,713.25	0.00
February 2026	5,030,233.15	3,711,798.43	0.00
March 2026	4,921,989.21	3,643,134.15	0.00
April 2026	4,816,019.07	3,575,698.52	0.00
May 2026	4,712,275.78	3,509,470.04	0.00
June 2026	4,610,713.36	3,444,427.60	0.00
July 2026	4,511,286.73	3,380,550.41	0.00
August 2026	4,413,951.76	3,317,818.08	0.00
September 2026	4,318,665.21	3,256,210.54	0.00
October 2026	4,225,384.74	3,195,708.09	0.00
November 2026	4,134,068.84	3,136,291.35	0.00
December 2026	4,044,676.87	3,077,941.30	0.00
January 2027	3,957,169.02	3,020,639.21	0.00
February 2027	3,871,506.29	2,964,366.71	0.00
March 2027	3,787,650.48	2,909,105.73	0.00
April 2027	3,705,564.15	2,854,838.51	0.00
May 2027	3,625,210.66	2,801,547.60	0.00
June 2027	3,546,554.09	2,749,215.86	0.00
July 2027	3,469,559.27	2,697,826.43	0.00
August 2027	3,394,191.73	2,647,362.76	0.00
September 2027	3,320,417.74	2,597,808.56	0.00
October 2027	3,248,204.23	2,549,147.84	0.00
November 2027	3,177,518.81	2,501,364.89	0.00
December 2027	3,108,329.76	2,454,444.27	0.00

<u>Distribution Date</u>	<u>Classes GA and GL (in the aggregate)</u>	<u>Classes JP and ZJ (in the aggregate)</u>	<u>Classes KA and KZ (in the aggregate)</u>
January 2028	\$ 3,040,606.01	\$ 2,408,370.78	\$ 0.00
February 2028	2,974,317.13	2,363,129.53	0.00
March 2028	2,909,433.30	2,318,705.85	0.00
April 2028	2,845,925.33	2,275,085.33	0.00
May 2028	2,783,764.60	2,232,253.83	0.00
June 2028	2,722,923.09	2,190,197.44	0.00
July 2028	2,663,373.38	2,148,902.47	0.00
August 2028	2,605,088.57	2,108,355.52	0.00
September 2028	2,548,042.33	2,068,543.37	0.00
October 2028	2,492,208.89	2,029,453.05	0.00
November 2028	2,437,562.97	1,991,071.82	0.00
December 2028	2,384,079.84	1,953,387.16	0.00
January 2029	2,331,735.25	1,916,386.75	0.00
February 2029	2,280,505.49	1,880,058.52	0.00
March 2029	2,230,367.29	1,844,390.56	0.00
April 2029	2,181,297.88	1,809,371.20	0.00
May 2029	2,133,274.97	1,774,988.97	0.00
June 2029	2,086,276.70	1,741,232.59	0.00
July 2029	2,040,281.69	1,708,090.99	0.00
August 2029	1,995,268.96	1,675,553.26	0.00
September 2029	1,951,218.01	1,643,608.73	0.00
October 2029	1,908,108.72	1,612,246.87	0.00
November 2029	1,865,921.41	1,581,457.35	0.00
December 2029	1,824,636.79	1,551,230.02	0.00
January 2030	1,784,235.98	1,521,554.92	0.00
February 2030	1,744,700.47	1,492,422.23	0.00
March 2030	1,706,012.15	1,463,822.34	0.00
April 2030	1,668,153.28	1,435,745.77	0.00
May 2030	1,631,106.47	1,408,183.24	0.00
June 2030	1,594,854.71	1,381,125.60	0.00
July 2030	1,559,381.32	1,354,563.88	0.00
August 2030	1,524,669.99	1,328,489.25	0.00
September 2030	1,490,704.71	1,302,893.07	0.00
October 2030	1,457,469.84	1,277,766.80	0.00
November 2030	1,424,950.04	1,253,102.08	0.00
December 2030	1,393,130.28	1,228,890.69	0.00
January 2031	1,361,995.86	1,205,124.55	0.00
February 2031	1,331,532.37	1,181,795.73	0.00
March 2031	1,301,725.71	1,158,896.43	0.00
April 2031	1,272,562.06	1,136,418.98	0.00
May 2031	1,244,027.88	1,114,355.86	0.00
June 2031	1,216,109.93	1,092,699.68	0.00
July 2031	1,188,795.23	1,071,443.16	0.00
August 2031	1,162,071.07	1,050,579.16	0.00
September 2031	1,135,925.00	1,030,100.67	0.00
October 2031	1,110,344.85	1,010,000.80	0.00
November 2031	1,085,318.66	990,272.77	0.00
December 2031	1,060,834.76	970,909.93	0.00

<u>Distribution Date</u>	<u>Classes GA and GL (in the aggregate)</u>	<u>Classes JP and ZJ (in the aggregate)</u>	<u>Classes KA and KZ (in the aggregate)</u>
January 2032	\$ 1,036,881.70	\$ 951,905.74	\$ 0.00
February 2032	1,013,448.26	933,253.78	0.00
March 2032	990,523.48	914,947.74	0.00
April 2032	968,096.59	896,981.42	0.00
May 2032	946,157.09	879,348.73	0.00
June 2032	924,694.65	862,043.67	0.00
July 2032	903,699.19	845,060.39	0.00
August 2032	883,160.81	828,393.08	0.00
September 2032	863,069.85	812,036.09	0.00
October 2032	843,416.81	795,983.83	0.00
November 2032	824,192.43	780,230.83	0.00
December 2032	805,387.61	764,771.71	0.00
January 2033	786,993.46	749,601.17	0.00
February 2033	769,001.25	734,714.03	0.00
March 2033	751,402.46	720,105.18	0.00
April 2033	734,188.73	705,769.60	0.00
May 2033	717,351.87	691,702.38	0.00
June 2033	700,883.89	677,898.67	0.00
July 2033	684,776.92	664,353.72	0.00
August 2033	669,023.30	651,062.86	0.00
September 2033	653,615.49	638,021.50	0.00
October 2033	638,546.15	625,225.14	0.00
November 2033	623,808.04	612,669.35	0.00
December 2033	609,394.13	600,349.77	0.00
January 2034	595,297.48	588,262.14	0.00
February 2034	581,511.34	576,402.25	0.00
March 2034	568,029.08	564,765.99	0.00
April 2034	554,844.20	553,349.31	0.00
May 2034	541,950.36	542,148.22	0.00
June 2034	529,341.33	531,158.81	0.00
July 2034	517,011.02	520,377.25	0.00
August 2034	504,953.47	509,799.76	0.00
September 2034	493,162.85	499,422.63	0.00
October 2034	481,633.42	489,242.24	0.00
November 2034	470,359.61	479,254.99	0.00
December 2034	459,335.93	469,457.39	0.00
January 2035	448,557.01	459,845.97	0.00
February 2035	438,017.61	450,417.35	0.00
March 2035	427,712.58	441,168.20	0.00
April 2035	417,636.88	432,095.25	0.00
May 2035	407,785.59	423,195.29	0.00
June 2035	398,153.89	414,465.16	0.00
July 2035	388,737.05	405,901.76	0.00
August 2035	379,530.44	397,502.05	0.00
September 2035	370,529.53	389,263.04	0.00
October 2035	361,729.91	381,181.78	0.00
November 2035	353,127.22	373,255.40	0.00
December 2035	344,717.22	365,481.07	0.00

<u>Distribution Date</u>	<u>Classes GA and GL (in the aggregate)</u>	<u>Classes JP and ZJ (in the aggregate)</u>	<u>Classes KA and KZ (in the aggregate)</u>
January 2036	\$ 336,495.74	\$ 357,855.98	\$ 0.00
February 2036	328,458.73	350,377.42	0.00
March 2036	320,602.19	343,042.70	0.00
April 2036	312,922.23	335,849.18	0.00
May 2036	305,415.02	328,794.26	0.00
June 2036	298,076.82	321,875.41	0.00
July 2036	290,903.98	315,090.12	0.00
August 2036	283,892.91	308,435.94	0.00
September 2036	277,040.11	301,910.46	0.00
October 2036	270,342.14	295,511.30	0.00
November 2036	263,795.65	289,236.15	0.00
December 2036	257,397.34	283,082.72	0.00
January 2037	251,143.99	277,048.77	0.00
February 2037	245,032.45	271,132.08	0.00
March 2037	239,059.65	265,330.51	0.00
April 2037	233,222.55	259,641.91	0.00
May 2037	227,518.20	254,064.21	0.00
June 2037	221,943.71	248,595.35	0.00
July 2037	216,496.25	243,233.32	0.00
August 2037	211,173.04	237,976.14	0.00
September 2037	205,971.38	232,821.87	0.00
October 2037	200,888.60	227,768.61	0.00
November 2037	195,922.11	222,814.47	0.00
December 2037	191,069.36	217,957.62	0.00
January 2038	186,327.87	213,196.26	0.00
February 2038	181,695.20	208,528.60	0.00
March 2038	177,168.95	203,952.91	0.00
April 2038	172,746.80	199,467.48	0.00
May 2038	168,426.47	195,070.61	0.00
June 2038	164,205.71	190,760.68	0.00
July 2038	160,082.34	186,536.04	0.00
August 2038	156,054.22	182,395.12	0.00
September 2038	152,119.24	178,336.35	0.00
October 2038	148,275.37	174,358.19	0.00
November 2038	144,520.59	170,459.14	0.00
December 2038	140,852.93	166,637.71	0.00
January 2039	137,270.48	162,892.47	0.00
February 2039	133,771.35	159,221.96	0.00
March 2039	130,353.70	155,624.81	0.00
April 2039	127,015.72	152,099.62	0.00
May 2039	123,755.67	148,645.06	0.00
June 2039	120,571.80	145,259.78	0.00
July 2039	117,462.43	141,942.50	0.00
August 2039	114,425.91	138,691.92	0.00
September 2039	111,460.62	135,506.80	0.00
October 2039	108,564.98	132,385.90	0.00
November 2039	105,737.44	129,328.02	0.00
December 2039	102,976.48	126,331.95	0.00



<u>Distribution Date</u>	<u>Classes GA and GL (in the aggregate)</u>	<u>Classes JP and ZJ (in the aggregate)</u>	<u>Classes KA and KZ (in the aggregate)</u>
January 2040	\$ 100,280.63	\$ 123,396.53	\$ 0.00
February 2040	97,648.43	120,520.62	0.00
March 2040	95,078.45	117,703.10	0.00
April 2040	92,569.32	114,942.85	0.00
May 2040	90,119.68	112,238.79	0.00
June 2040	87,728.18	109,589.86	0.00
July 2040	85,393.54	106,995.01	0.00
August 2040	83,114.48	104,453.21	0.00
September 2040	80,889.76	101,963.45	0.00
October 2040	78,718.14	99,524.75	0.00
November 2040	76,598.45	97,136.14	0.00
December 2040	74,529.52	94,796.65	0.00
January 2041	72,510.20	92,505.36	0.00
February 2041	70,539.37	90,261.33	0.00
March 2041	68,615.96	88,063.68	0.00
April 2041	66,738.87	85,911.51	0.00
May 2041	64,907.08	83,803.95	0.00
June 2041	63,119.56	81,740.16	0.00
July 2041	61,375.30	79,719.28	0.00
August 2041	59,673.33	77,740.50	0.00
September 2041	58,012.69	75,803.01	0.00
October 2041	56,392.44	73,906.01	0.00
November 2041	54,811.67	72,048.73	0.00
December 2041	53,269.48	70,230.40	0.00
January 2042	51,764.99	68,450.27	0.00
February 2042	50,297.34	66,707.60	0.00
March 2042	48,865.70	65,001.68	0.00
April 2042	47,469.24	63,331.79	0.00
May 2042	46,107.16	61,697.23	0.00
June 2042	44,778.68	60,097.32	0.00
July 2042	43,483.02	58,531.38	0.00
August 2042	42,219.44	56,998.77	0.00
September 2042	40,987.20	55,498.83	0.00
October 2042	39,785.58	54,030.93	0.00
November 2042	38,613.88	52,594.44	0.00
December 2042	37,471.40	51,188.75	0.00
January 2043	36,357.48	49,813.27	0.00
February 2043	35,271.47	48,467.40	0.00
March 2043	34,212.70	47,150.56	0.00
April 2043	33,180.57	45,862.18	0.00
May 2043	32,174.44	44,601.72	0.00
June 2043	31,193.72	43,368.62	0.00
July 2043	30,237.83	42,162.34	0.00
August 2043	29,306.17	40,982.36	0.00
September 2043	28,398.20	39,828.16	0.00
October 2043	27,513.36	38,699.23	0.00
November 2043	26,651.11	37,595.08	0.00
December 2043	25,810.92	36,515.22	0.00

<u>Distribution Date</u>	<u>Classes GA and GL (in the aggregate)</u>	<u>Classes JP and ZJ (in the aggregate)</u>	<u>Classes KA and KZ (in the aggregate)</u>
January 2044	\$ 24,992.29	\$ 35,459.16	\$ 0.00
February 2044	24,194.70	34,426.44	0.00
March 2044	23,417.67	33,416.60	0.00
April 2044	22,660.71	32,429.17	0.00
May 2044	21,923.35	31,463.73	0.00
June 2044	21,205.14	30,519.82	0.00
July 2044	20,505.62	29,597.02	0.00
August 2044	19,824.35	28,694.92	0.00
September 2044	19,160.90	27,813.09	0.00
October 2044	18,514.85	26,951.14	0.00
November 2044	17,885.80	26,108.66	0.00
December 2044	17,273.33	25,285.28	0.00
January 2045	16,677.06	24,480.59	0.00
February 2045	16,096.60	23,694.24	0.00
March 2045	15,531.57	22,925.84	0.00
April 2045	14,981.61	22,175.05	0.00
May 2045	14,446.36	21,441.50	0.00
June 2045	13,925.47	20,724.85	0.00
July 2045	13,418.59	20,024.76	0.00
August 2045	12,925.39	19,340.89	0.00
September 2045	12,445.54	18,672.91	0.00
October 2045	11,978.73	18,020.50	0.00
November 2045	11,524.63	17,383.35	0.00
December 2045	11,082.94	16,761.14	0.00
January 2046	10,653.36	16,153.58	0.00
February 2046	10,235.60	15,560.35	0.00
March 2046	9,829.38	14,981.18	0.00
April 2046	9,434.40	14,415.77	0.00
May 2046	9,050.41	13,863.84	0.00
June 2046	8,677.14	13,325.11	0.00
July 2046	8,314.31	12,799.31	0.00
August 2046	7,961.69	12,286.18	0.00
September 2046	7,619.01	11,785.46	0.00
October 2046	7,286.04	11,296.88	0.00
November 2046	6,962.53	10,820.21	0.00
December 2046	6,648.26	10,355.18	0.00
January 2047	6,342.99	9,901.57	0.00
February 2047	6,046.52	9,459.13	0.00
March 2047	5,758.61	9,027.63	0.00
April 2047	5,479.05	8,606.85	0.00
May 2047	5,207.65	8,196.55	0.00
June 2047	4,944.19	7,796.53	0.00
July 2047	4,688.48	7,406.56	0.00
August 2047	4,440.32	7,026.44	0.00
September 2047	4,199.54	6,655.95	0.00
October 2047	3,965.93	6,294.90	0.00
November 2047	3,739.33	5,943.08	0.00
December 2047	3,519.56	5,600.31	0.00

<u>Distribution Date</u>	<u>Classes GA and GL (in the aggregate)</u>	<u>Classes JP and ZJ (in the aggregate)</u>	<u>Classes KA and KZ (in the aggregate)</u>
January 2048 .....	\$ 3,306.44	\$ 5,266.38	\$ 0.00
February 2048 .....	3,099.80	4,941.12	0.00
March 2048 .....	2,899.49	4,624.33	0.00
April 2048 .....	2,705.34	4,315.84	0.00
May 2048 .....	2,517.20	4,015.47	0.00
June 2048 .....	2,334.91	3,723.05	0.00
July 2048 .....	2,158.32	3,438.41	0.00
August 2048 .....	1,987.29	3,161.38	0.00
September 2048 .....	1,821.68	2,891.79	0.00
October 2048 .....	1,661.34	2,629.49	0.00
November 2048 .....	1,506.14	2,374.32	0.00
December 2048 .....	1,355.95	2,126.12	0.00
January 2049 .....	1,210.64	1,884.75	0.00
February 2049 .....	1,070.07	1,650.05	0.00
March 2049 .....	934.14	1,421.88	0.00
April 2049 .....	802.71	1,200.11	0.00
May 2049 .....	675.68	984.58	0.00
June 2049 .....	552.91	775.16	0.00
July 2049 .....	434.31	571.72	0.00
August 2049 .....	319.76	374.12	0.00
September 2049 .....	209.16	182.24	0.00
October 2049 .....	102.39	0.00	0.00
November 2049 and thereafter .....	0.00	0.00	0.00

<u>Distribution Date</u>	<u>Classes MC, ME, MU, MW, MY and MZ (in the aggregate)</u>	<u>Classes NA and NL (in the aggregate)</u>	<u>Classes PA and YP (in the aggregate)</u>
Initial Balance .....	\$150,651,000.00	\$55,665,794.00	\$41,172,862.00
February 2020 .....	150,217,979.02	55,495,052.35	41,018,279.87
March 2020 .....	149,731,499.62	55,304,458.53	40,833,961.99
April 2020 .....	149,191,748.38	55,094,082.18	40,619,970.72
May 2020 .....	148,598,961.14	54,864,010.61	40,376,420.82
June 2020 .....	147,953,422.98	54,614,348.82	40,103,479.78
July 2020 .....	147,255,468.07	54,345,219.44	39,801,367.96
August 2020 .....	146,505,479.45	54,056,762.64	39,470,358.54
September 2020 .....	145,703,888.80	53,749,136.03	39,110,777.33
October 2020 .....	144,851,175.98	53,422,514.53	38,723,002.47
November 2020 .....	143,947,868.69	53,077,090.24	38,307,463.91
December 2020 .....	142,994,541.88	52,713,072.21	37,864,642.78
January 2021 .....	141,991,817.22	52,330,686.27	37,395,070.54
February 2021 .....	140,940,362.39	51,930,174.77	36,899,328.06
March 2021 .....	139,840,890.38	51,511,796.35	36,378,044.46
April 2021 .....	138,694,158.65	51,075,825.63	35,831,895.85
May 2021 .....	137,500,968.27	50,622,552.91	35,261,603.90
June 2021 .....	136,262,162.94	50,152,283.81	34,667,934.25
July 2021 .....	134,978,628.01	49,665,338.97	34,051,694.80
August 2021 .....	133,651,289.36	49,162,053.60	33,413,733.82
September 2021 .....	132,281,112.24	48,642,777.11	32,754,938.00
October 2021 .....	130,869,100.08	48,107,872.71	32,076,230.29
November 2021 .....	129,416,293.19	47,557,716.88	31,378,567.67
December 2021 .....	127,923,767.43	46,992,698.99	30,662,938.76
January 2022 .....	126,392,632.81	46,413,220.76	29,930,361.40
February 2022 .....	124,824,032.01	45,819,695.76	29,181,880.07
March 2022 .....	123,219,138.94	45,212,548.88	28,418,563.19
April 2022 .....	121,579,157.13	44,592,215.79	27,641,500.46
May 2022 .....	119,905,318.15	43,959,142.40	26,851,800.00
June 2022 .....	118,198,879.98	43,313,784.24	26,050,585.49
July 2022 .....	116,509,334.08	42,674,495.03	25,265,069.62
August 2022 .....	114,836,506.90	42,041,214.39	24,494,930.96
September 2022 .....	113,180,226.62	41,413,882.57	23,739,854.57
October 2022 .....	111,540,323.09	40,792,440.33	22,999,531.82
November 2022 .....	109,916,627.82	40,176,829.02	22,273,660.27
December 2022 .....	108,308,974.01	39,566,990.55	21,561,943.59
January 2023 .....	106,717,196.49	38,962,867.35	20,864,091.39
February 2023 .....	105,141,131.71	38,364,402.43	20,179,819.10
March 2023 .....	103,580,617.75	37,771,539.32	19,508,847.89
April 2023 .....	102,035,494.26	37,184,222.07	18,850,904.54
May 2023 .....	100,505,602.49	36,602,395.30	18,205,721.32
June 2023 .....	98,990,785.24	36,026,004.11	17,573,035.87
July 2023 .....	97,490,886.87	35,454,994.15	16,952,591.13
August 2023 .....	96,005,753.26	34,889,311.58	16,344,135.18
September 2023 .....	94,535,231.82	34,328,903.05	15,747,421.21
October 2023 .....	93,079,171.46	33,773,715.73	15,162,207.34
November 2023 .....	91,637,422.58	33,223,697.30	14,588,256.57

<u>Distribution Date</u>	<u>Classes MC, ME, MU, MW, MY and MZ (in the aggregate)</u>	<u>Classes NA and NL (in the aggregate)</u>	<u>Classes PA and YP (in the aggregate)</u>
December 2023	\$ 90,209,837.05	\$32,678,795.91	\$14,032,146.03
January 2024	88,796,268.21	32,138,960.23	13,497,110.98
February 2024	87,396,570.83	31,604,139.38	12,982,356.58
March 2024	86,010,601.13	31,074,283.00	12,487,117.87
April 2024	84,638,216.73	30,549,341.18	12,010,658.61
May 2024	83,279,276.66	30,029,264.50	11,552,270.22
June 2024	81,933,641.34	29,514,003.99	11,111,270.74
July 2024	80,601,172.57	29,003,511.15	10,687,003.84
August 2024	79,281,733.51	28,497,737.94	10,278,837.86
September 2024	77,975,188.67	27,996,636.79	9,886,164.89
October 2024	76,681,403.90	27,500,160.56	9,508,399.86
November 2024	75,400,246.35	27,008,262.56	9,144,979.71
December 2024	74,131,584.52	26,520,896.54	8,795,362.55
January 2025	72,875,288.17	26,038,016.71	8,459,026.87
February 2025	71,631,228.36	25,559,577.68	8,135,470.78
March 2025	70,399,277.43	25,085,534.52	7,824,211.26
April 2025	69,179,308.97	24,615,842.70	7,524,783.49
May 2025	67,971,197.81	24,150,458.13	7,236,740.12
June 2025	66,774,820.03	23,689,337.13	6,959,650.65
July 2025	65,590,052.92	23,232,436.43	6,693,100.77
August 2025	64,416,774.99	22,779,713.18	6,436,691.79
September 2025	63,254,865.94	22,331,124.93	6,190,040.02
October 2025	62,104,206.68	21,886,629.63	5,952,776.23
November 2025	60,964,679.25	21,448,991.74	5,724,545.07
December 2025	59,838,008.30	21,019,859.29	5,505,004.62
January 2026	58,731,490.17	20,599,070.20	5,293,825.81
February 2026	57,644,772.23	20,186,465.41	5,090,691.98
March 2026	56,577,507.91	19,781,888.87	4,895,298.41
April 2026	55,529,356.63	19,385,187.47	4,707,351.86
May 2026	54,499,983.66	18,996,210.95	4,526,570.15
June 2026	53,489,060.05	18,614,811.91	4,352,681.74
July 2026	52,496,262.53	18,240,845.69	4,185,425.33
August 2026	51,521,273.40	17,874,170.37	4,024,549.48
September 2026	50,563,780.42	17,514,646.71	3,869,812.22
October 2026	49,623,476.78	17,162,138.06	3,720,980.74
November 2026	48,700,060.91	16,816,510.37	3,577,830.99
December 2026	47,793,236.50	16,477,632.10	3,440,147.38
January 2027	46,902,712.31	16,145,374.19	3,307,722.47
February 2027	46,028,202.17	15,819,610.02	3,180,356.65
March 2027	45,169,424.81	15,500,215.34	3,057,857.83
April 2027	44,326,103.86	15,187,068.26	2,940,041.21
May 2027	43,497,967.68	14,880,049.17	2,826,728.94
June 2027	42,684,749.38	14,579,040.72	2,717,749.90
July 2027	41,886,186.63	14,283,927.77	2,612,939.44
August 2027	41,102,021.67	13,994,597.37	2,512,139.13
September 2027	40,332,001.18	13,710,938.68	2,415,196.52
October 2027	39,575,876.23	13,432,842.95	2,321,964.96

<u>Distribution Date</u>	<u>Classes MC, ME, MU, MW, MY and MZ (in the aggregate)</u>	<u>Classes NA and NL (in the aggregate)</u>	<u>Classes PA and YP (in the aggregate)</u>
November 2027	\$ 38,833,402.19	\$13,160,203.51	\$ 2,232,303.29
December 2027	38,104,338.68	12,892,915.66	2,146,075.73
January 2028	37,388,449.45	12,630,876.73	2,063,151.64
February 2028	36,685,502.37	12,373,985.93	1,983,405.28
March 2028	35,995,269.31	12,122,144.43	1,906,715.72
April 2028	35,317,526.10	11,875,255.23	1,832,966.57
May 2028	34,652,052.45	11,633,223.17	1,762,045.87
June 2028	33,998,631.89	11,395,954.91	1,693,845.88
July 2028	33,357,051.70	11,163,358.84	1,628,262.95
August 2028	32,727,102.85	10,935,345.11	1,565,197.37
September 2028	32,108,579.92	10,711,825.56	1,504,553.17
October 2028	31,501,281.07	10,492,713.69	1,446,238.06
November 2028	30,905,007.96	10,277,924.66	1,390,163.22
December 2028	30,319,565.67	10,067,375.21	1,336,243.20
January 2029	29,744,762.70	9,860,983.67	1,284,395.80
February 2029	29,180,410.85	9,658,669.92	1,234,541.93
March 2029	28,626,325.17	9,460,355.34	1,186,605.51
April 2029	28,082,323.97	9,265,962.83	1,140,513.32
May 2029	27,548,228.67	9,075,416.71	1,096,194.95
June 2029	27,023,863.81	8,888,642.77	1,053,582.64
July 2029	26,509,057.00	8,705,568.20	1,012,611.22
August 2029	26,003,638.81	8,526,121.56	973,217.97
September 2029	25,507,442.78	8,350,232.76	935,342.58
October 2029	25,020,305.34	8,177,833.07	898,927.02
November 2029	24,542,065.76	8,008,855.03	863,915.44
December 2029	24,072,566.11	7,843,232.48	830,254.16
January 2030	23,611,651.21	7,680,900.51	797,891.50
February 2030	23,159,168.59	7,521,795.44	766,777.76
March 2030	22,714,968.41	7,365,854.82	736,865.13
April 2030	22,278,903.46	7,213,017.37	708,107.62
May 2030	21,850,829.10	7,063,222.96	680,460.98
June 2030	21,430,603.19	6,916,412.63	653,882.66
July 2030	21,018,086.08	6,772,528.53	628,331.70
August 2030	20,613,140.55	6,631,513.91	603,768.74
September 2030	20,215,631.78	6,493,313.10	580,155.89
October 2030	19,825,427.29	6,357,871.50	557,456.70
November 2030	19,442,396.94	6,225,135.53	535,636.13
December 2030	19,066,412.81	6,095,052.64	514,660.46
January 2031	18,697,349.27	5,967,571.29	494,497.26
February 2031	18,335,082.84	5,842,640.90	475,115.32
March 2031	17,979,492.21	5,720,211.89	456,484.66
April 2031	17,630,458.21	5,600,235.58	438,576.39
May 2031	17,287,863.73	5,482,664.25	421,362.76
June 2031	16,951,593.71	5,367,451.09	404,817.08
July 2031	16,621,535.10	5,254,550.16	388,913.64
August 2031	16,297,576.84	5,143,916.41	373,627.76
September 2031	15,979,609.80	5,035,505.67	358,935.68

<u>Distribution Date</u>	<u>Classes MC, ME, MU, MW, MY and MZ (in the aggregate)</u>	<u>Classes NA and NL (in the aggregate)</u>	<u>Classes PA and YP (in the aggregate)</u>
October 2031	\$ 15,667,526.77	\$ 4,929,274.58	\$ 344,814.53
November 2031	15,361,222.40	4,825,180.62	331,242.34
December 2031	15,060,593.20	4,723,182.10	318,197.98
January 2032	14,765,537.49	4,623,238.10	305,661.10
February 2032	14,475,955.38	4,525,308.49	293,612.15
March 2032	14,191,748.70	4,429,353.93	282,032.34
April 2032	13,912,821.03	4,335,335.80	270,903.56
May 2032	13,639,077.63	4,243,216.24	260,208.42
June 2032	13,370,425.42	4,152,958.10	249,930.20
July 2032	13,106,772.96	4,064,524.96	240,052.79
August 2032	12,848,030.41	3,977,881.07	230,560.74
September 2032	12,594,109.50	3,892,991.40	221,439.15
October 2032	12,344,923.53	3,809,821.57	212,673.72
November 2032	12,100,387.29	3,728,337.85	204,250.68
December 2032	11,860,417.11	3,648,507.18	196,156.80
January 2033	11,624,930.75	3,570,297.11	188,379.34
February 2033	11,393,847.44	3,493,675.84	180,906.07
March 2033	11,167,087.82	3,418,612.16	173,725.22
April 2033	10,944,573.93	3,345,075.46	166,825.47
May 2033	10,726,229.18	3,273,035.73	160,195.93
June 2033	10,511,978.33	3,202,463.53	153,826.14
July 2033	10,301,747.47	3,133,329.97	147,706.03
August 2033	10,095,463.97	3,065,606.74	141,825.93
September 2033	9,893,056.51	2,999,266.07	136,176.52
October 2033	9,694,455.00	2,934,280.71	130,748.86
November 2033	9,499,590.60	2,870,623.95	125,534.34
December 2033	9,308,395.69	2,808,269.58	120,524.69
January 2034	9,120,803.82	2,747,191.91	115,711.95
February 2034	8,936,749.73	2,687,365.73	111,088.47
March 2034	8,756,169.31	2,628,766.32	106,646.91
April 2034	8,578,999.58	2,571,369.44	102,380.18
May 2034	8,405,178.66	2,515,151.32	98,281.48
June 2034	8,234,645.80	2,460,088.64	94,344.29
July 2034	8,067,341.27	2,406,158.54	90,562.30
August 2034	7,903,206.45	2,353,338.59	86,929.49
September 2034	7,742,183.71	2,301,606.81	83,440.04
October 2034	7,584,216.48	2,250,941.61	80,088.35
November 2034	7,429,249.15	2,201,321.86	76,869.07
December 2034	7,277,227.14	2,152,726.80	73,777.03
January 2035	7,128,096.79	2,105,136.11	70,807.26
February 2035	6,981,805.43	2,058,529.83	67,954.99
March 2035	6,838,301.30	2,012,888.41	65,215.63
April 2035	6,697,533.56	1,968,192.65	62,584.77
May 2035	6,559,452.28	1,924,423.75	60,058.18
June 2035	6,424,008.42	1,881,563.26	57,631.77
July 2035	6,291,153.78	1,839,593.09	55,301.63
August 2035	6,160,841.05	1,798,495.51	53,063.99

<u>Distribution Date</u>	<u>Classes MC, ME, MU, MW, MY and MZ (in the aggregate)</u>	<u>Classes NA and NL (in the aggregate)</u>	<u>Classes PA and YP (in the aggregate)</u>
September 2035	\$ 6,033,023.75	\$ 1,758,253.11	\$ 50,915.23
October 2035	5,907,656.22	1,718,848.84	48,851.86
November 2035	5,784,693.61	1,680,265.97	46,870.55
December 2035	5,664,091.87	1,642,488.10	44,968.07
January 2036	5,545,807.73	1,605,499.15	43,141.33
February 2036	5,429,798.71	1,569,283.35	41,387.37
March 2036	5,316,023.06	1,533,825.22	39,703.32
April 2036	5,204,439.78	1,499,109.61	38,086.44
May 2036	5,095,008.61	1,465,121.65	36,534.09
June 2036	4,987,690.00	1,431,846.75	35,043.73
July 2036	4,882,445.10	1,399,270.62	33,612.93
August 2036	4,779,235.76	1,367,379.25	32,239.34
September 2036	4,678,024.51	1,336,158.89	30,920.71
October 2036	4,578,774.55	1,305,596.05	29,654.88
November 2036	4,481,449.72	1,275,677.53	28,439.76
December 2036	4,386,014.54	1,246,390.38	27,273.35
January 2037	4,292,434.12	1,217,721.87	26,153.74
February 2037	4,200,674.24	1,189,659.57	25,079.08
March 2037	4,110,701.25	1,162,191.26	24,047.58
April 2037	4,022,482.13	1,135,304.95	23,057.56
May 2037	3,935,984.43	1,108,988.92	22,107.36
June 2037	3,851,176.30	1,083,231.66	21,195.41
July 2037	3,768,026.45	1,058,021.86	20,320.21
August 2037	3,686,504.16	1,033,348.49	19,480.28
September 2037	3,606,579.24	1,009,200.67	18,674.25
October 2037	3,528,222.05	985,567.78	17,900.76
November 2037	3,451,403.50	962,439.39	17,158.52
December 2037	3,376,095.00	939,805.28	16,446.29
January 2038	3,302,268.48	917,655.43	15,762.89
February 2038	3,229,896.37	895,980.00	15,107.16
March 2038	3,158,951.61	874,769.37	14,478.01
April 2038	3,089,407.61	854,014.09	13,874.38
May 2038	3,021,238.26	833,704.91	13,295.25
June 2038	2,954,417.93	813,832.74	12,739.66
July 2038	2,888,921.44	794,388.69	12,206.65
August 2038	2,824,724.06	775,364.03	11,695.33
September 2038	2,761,801.53	756,750.22	11,204.84
October 2038	2,700,130.01	738,538.87	10,734.35
November 2038	2,639,686.07	720,721.77	10,283.04
December 2038	2,580,446.74	703,290.85	9,850.17
January 2039	2,522,389.44	686,238.22	9,434.99
February 2039	2,465,492.01	669,556.14	9,036.79
March 2039	2,409,732.67	653,237.02	8,654.90
April 2039	2,355,090.07	637,273.42	8,288.65
May 2039	2,301,543.21	621,658.05	7,937.43
June 2039	2,249,071.48	606,383.76	7,600.63
July 2039	2,197,654.65	591,443.55	7,277.67



<u>Distribution Date</u>	<u>Classes MC, ME, MU, MW, MY and MZ (in the aggregate)</u>	<u>Classes NA and NL (in the aggregate)</u>	<u>Classes PA and YP (in the aggregate)</u>
August 2039	\$ 2,147,272.86	\$ 576,830.54	\$ 6,968.00
September 2039	2,097,906.60	562,538.02	6,671.07
October 2039	2,049,536.71	548,559.36	6,386.39
November 2039	2,002,144.38	534,888.12	6,113.45
December 2039	1,955,711.15	521,517.95	5,851.78
January 2040	1,910,218.89	508,442.63	5,600.93
February 2040	1,865,649.80	495,656.08	5,360.46
March 2040	1,821,986.39	483,152.33	5,129.95
April 2040	1,779,211.51	470,925.52	4,909.00
May 2040	1,737,308.30	458,969.92	4,697.22
June 2040	1,696,260.22	447,279.91	4,494.25
July 2040	1,656,051.04	435,849.98	4,299.72
August 2040	1,616,664.80	424,674.73	4,113.29
September 2040	1,578,085.85	413,748.87	3,934.64
October 2040	1,540,298.81	403,067.21	3,763.44
November 2040	1,503,288.60	392,624.67	3,599.40
December 2040	1,467,040.41	382,416.27	3,442.22
January 2041	1,431,539.68	372,437.13	3,291.63
February 2041	1,396,772.14	362,682.46	3,147.36
March 2041	1,362,723.77	353,147.57	3,009.14
April 2041	1,329,380.81	343,827.87	2,876.74
May 2041	1,296,729.74	334,718.86	2,749.91
June 2041	1,264,757.31	325,816.12	2,628.43
July 2041	1,233,450.50	317,115.32	2,512.08
August 2041	1,202,796.51	308,612.23	2,400.64
September 2041	1,172,782.81	300,302.70	2,293.92
October 2041	1,143,397.07	292,182.66	2,191.73
November 2041	1,114,627.22	284,248.11	2,093.87
December 2041	1,086,461.36	276,495.16	2,000.17
January 2042	1,058,887.86	268,919.96	1,910.46
February 2042	1,031,895.28	261,518.77	1,824.57
March 2042	1,005,472.39	254,287.92	1,742.34
April 2042	979,608.17	247,223.79	1,663.64
May 2042	954,291.80	240,322.87	1,588.30
June 2042	929,512.66	233,581.68	1,516.19
July 2042	905,260.34	226,996.84	1,447.18
August 2042	881,524.60	220,565.03	1,381.14
September 2042	858,295.39	214,283.00	1,317.94
October 2042	835,562.87	208,147.56	1,257.47
November 2042	813,317.36	202,155.58	1,199.61
December 2042	791,549.36	196,304.01	1,144.26
January 2043	770,249.56	190,589.84	1,091.30
February 2043	749,408.80	185,010.14	1,040.65
March 2043	729,018.11	179,562.03	992.21
April 2043	709,068.69	174,242.69	945.87
May 2043	689,551.87	169,049.37	901.56
June 2043	670,459.18	163,979.34	859.19

<u>Distribution Date</u>	<u>Classes MC, ME, MU, MW, MY and MZ (in the aggregate)</u>	<u>Classes NA and NL (in the aggregate)</u>	<u>Classes PA and YP (in the aggregate)</u>
July 2043	\$ 651,782.28	\$ 159,029.97	\$ 818.67
August 2043	633,512.99	154,198.65	779.94
September 2043	615,643.31	149,482.84	742.91
October 2043	598,165.34	144,880.05	707.51
November 2043	581,071.37	140,387.84	673.68
December 2043	564,353.81	136,003.81	641.34
January 2044	548,005.22	131,725.62	610.44
February 2044	532,018.29	127,550.99	580.92
March 2044	516,385.87	123,477.65	552.71
April 2044	501,100.91	119,503.40	525.76
May 2044	486,156.51	115,626.10	500.01
June 2044	471,545.91	111,843.62	475.42
July 2044	457,262.45	108,153.91	451.94
August 2044	443,299.61	104,554.92	429.51
September 2044	429,651.01	101,044.68	408.10
October 2044	416,310.35	97,621.24	387.66
November 2044	403,271.47	94,282.70	368.15
December 2044	390,528.34	91,027.19	349.52
January 2045	378,075.01	87,852.88	331.75
February 2045	365,905.67	84,757.99	314.79
March 2045	354,014.61	81,740.77	298.61
April 2045	342,396.22	78,799.49	283.17
May 2045	331,045.01	75,932.48	268.44
June 2045	319,955.58	73,138.09	254.40
July 2045	309,122.65	70,414.72	241.01
August 2045	298,541.01	67,760.77	228.24
September 2045	288,205.58	65,174.71	216.07
October 2045	278,111.35	62,655.03	204.47
November 2045	268,253.43	60,200.24	193.42
December 2045	258,627.00	57,808.88	182.88
January 2046	249,227.35	55,479.55	172.85
February 2046	240,049.85	53,210.84	163.29
March 2046	231,089.95	51,001.41	154.19
April 2046	222,343.20	48,849.90	145.52
May 2046	213,805.23	46,755.02	137.27
June 2046	205,471.76	44,715.49	129.41
July 2046	197,338.58	42,730.05	121.94
August 2046	189,401.55	40,797.49	114.83
September 2046	181,656.65	38,916.59	108.07
October 2046	174,099.89	37,086.19	101.64
November 2046	166,727.40	35,305.14	95.52
December 2046	159,535.33	33,572.30	89.71
January 2047	152,519.96	31,886.59	84.18
February 2047	145,677.61	30,246.91	78.93
March 2047	139,004.67	28,652.22	73.95
April 2047	132,497.61	27,101.47	69.21
May 2047	126,152.97	25,593.66	64.72

<u>Distribution Date</u>	<u>Classes MC, ME, MU, MW, MY and MZ (in the aggregate)</u>	<u>Classes NA and NL (in the aggregate)</u>	<u>Classes PA and YP (in the aggregate)</u>
June 2047 .....	\$ 119,967.35	\$ 24,127.80	\$ 60.45
July 2047 .....	113,937.40	22,702.91	56.40
August 2047 .....	108,059.87	21,318.05	52.56
September 2047 .....	102,331.55	19,972.29	48.92
October 2047 .....	96,749.28	18,664.72	45.47
November 2047 .....	91,310.00	17,394.45	42.20
December 2047 .....	86,010.67	16,160.61	39.10
January 2048 .....	80,848.33	14,962.34	36.16
February 2048 .....	75,820.06	13,798.82	33.38
March 2048 .....	70,923.03	12,669.22	30.75
April 2048 .....	66,154.43	11,572.75	28.27
May 2048 .....	61,511.52	10,508.62	25.92
June 2048 .....	56,991.62	9,476.07	23.69
July 2048 .....	52,592.07	8,474.36	21.60
August 2048 .....	48,310.32	7,502.74	19.61
September 2048 .....	44,143.80	6,560.51	17.74
October 2048 .....	40,090.05	5,646.96	15.98
November 2048 .....	36,146.63	4,761.40	14.32
December 2048 .....	32,311.15	3,903.17	12.75
January 2049 .....	28,581.26	3,071.60	11.27
February 2049 .....	24,954.67	2,266.05	9.88
March 2049 .....	21,429.14	1,485.90	8.58
April 2049 .....	18,002.44	730.53	7.35
May 2049 .....	14,672.43	0.00	6.20
June 2049 .....	11,436.98	0.00	5.12
July 2049 .....	8,294.01	0.00	4.10
August 2049 .....	5,241.49	0.00	3.15
September 2049 .....	2,277.41	0.00	2.26
October 2049 .....	0.00	0.00	1.43
November 2049 .....	0.00	0.00	0.66
December 2049 and thereafter .....	0.00	0.00	0.00

Underlying Certificates

Trust Asset Group or Subgroup	Issuer	Series	Class	Issue Date	CLSP Number	Interest Rate	Interest Type(I)	Final Distribution Date	Principal Type(I)	Original Principal or Notional Balance of Class	Underlying Certificate Factor(2)	Principal or Notional Balance in Trust	Percentage of Trust in Class	Approximate Weighted Average Coupon of Mortgage Loans(3)	Approximate Weighted Average Remaining Maturity of Mortgage Loans (in months)(3)	Approximate Weighted Average Loan Age of Mortgage Loans (in months)(3)	Ginnie Mae 1 or II
IA	Ginnie Mae	2017-165	BK(GX5)	November 30, 2017	38380K1T5	2.750%	FIX	June 2016	SC/PT/SEQ	\$44,000,000	0.59876180	\$2,345,651	100.0000000000%	(5)	(5)	(5)	(5)
IB	Ginnie Mae	2018-080	DM(6)	June 29, 2018	38380W7R8	3.000	FIX	February 2018	SC/SEQ/AD	27,000,000	0.72501283	19,591,546	100.0000000000	5.000%	113	113	I
IC	Ginnie Mae	2018-085	AB(4)	June 29, 2018	38380XBK4	3.000	FIX	July 2012	SEQ	50,000,000	0.74343026	37,171,513	100.0000000000	4.432	26	26	II
ID	Ginnie Mae	2018-078	LN	June 29, 2018	38380XP77	3.000	FIX	March 2012	SEQ	70,000,000	0.77892925	54,529,506	100.0000000000	4.461	21	21	II
IE	Ginnie Mae	2019-042	GA(7)	April 30, 2019	38381TF91	3.000	FIX	September 2019	SC/PT	26,269,202	0.85768687	22,530,749	100.0000000000	5.398	226	124	II
IF	Ginnie Mae	2017-052	A(8)	April 28, 2017	38376LPP89	2.625	FIX	April 2017	PT	50,000,000	0.59826658	25,413,329	100.0000000000	(8)	(8)	(8)	II
IG	Ginnie Mae	2017-104	G(4)9	July 28, 2017	38380RE36	2.650	FIX	July 2017	SC/PT	34,444,368	0.61212787	21,084,357	100.0000000000	(9)	(9)	(9)	II
IH	Ginnie Mae	2017-165	CA(4)(10)	November 30, 2017	38380KT72	2.500	FIX	October 2017	SC/PT	50,262,777	0.62262490	31,294,856	100.0000000000	(10)	(10)	(10)	II
II	Ginnie Mae	2019-022	CB	June 29, 2019	38380XD53	3.500	FIX	August 2019	SC/PT	14,542,982	0.870188807	10,207,545	100.0000000000	(11)	(11)	(11)	II
IJ	Ginnie Mae	2015-110	MG(4)	February 28, 2015	38380REK1	3.250	FIX	May 2017	SEQ/AD	14,660,564	0.83075898	12,179,395	100.0000000000	5.311	237	113	I
3B	Ginnie Mae	2019-125	JD(4)(13)	August 30, 2019	38381AN7	3.000	FIX	January 2019	PAC I	84,938,000	0.34424177	17,297,804	59.1596223127	5.000	105	105	I
4A	Ginnie Mae	2019-105	KG(4)(13)(14)	August 30, 2019	38381X3M6	2.500	FIX	June 2017	SEQ/AD	60,000,000	0.69853847	27,941,538	66.6666666667	(12)	(12)	(12)	I
4B	Ginnie Mae	2018-001	QA(18)	January 30, 2018	38381X3W4	3.500	FIX	August 2019	SEQ	40,361,000	1.00000000	25,361,000	62.851104210	(14)	(14)	(14)	II
12A	Ginnie Mae	2019-140	QO(18)	November 29, 2019	38380U1B85	3.500	WAG/DLY	May 2016	SC/PT	2,394,798	0.61010476	763,167	32.5023177377	(15)	(15)	(15)	II
12B	Ginnie Mae	2019-140	QS(18)	November 29, 2019	38382A273	3.500	PO	June 2015	NTL(SC/PT)	1,419,566	0.73422987	552,654	38.96	(18)	(18)	II	
12C	Ginnie Mae	2019-140	MO(13)(21)	November 29, 2019	38382A281	(16)	PO	September 2019	SC/PT	3,381,942	1.00000000	1,000,000	29.568808731	(15)	(15)	II	
12E	Ginnie Mae	2018-078	HF(13)(20)	June 29, 2018	38380XG65	3.000	FIX/IO	July 2019	NTL(SC/PT)	7,832,114	0.82211933	1,903,915	24.296811792	5.904	9	9	II
12F	Ginnie Mae	2018-078	MS(22)	June 29, 2018	38380XG78	0.000	PO	March 2015	SC/SEQ	8,318,526	0.71867102	5,978,283	71.5252525253	3.18	38	38	II
12G	Ginnie Mae	2019-152	OL(13)(23)	December 30, 2019	38382BYV4	0.000	PO	January 2018	SC/SEQ	6,803,589	0.85378013	5,808,769	85.3850000000	(21)	(21)	(21)	II
12H	Ginnie Mae	2019-140	KO(4)(25)	June 29, 2019	38382BYV9	0.000	PO	October 2017	SC/PT	7,800,191	0.85197598	6,645,575	85.3250000000	4.423	29	29	II
12J	Ginnie Mae	2019-140	LO(13)(26)	December 30, 2019	38382AX10	0.000	PO	February 2019	SC/PT	8,362,901	1.00000000	1,000,000	11.9575731425	(23)	(23)	(23)	II
12K	Ginnie Mae	2019-140	PO(13)(28)	November 29, 2019	38382AX370	0.000	PO	September 2019	SC/PT	40,642,369	0.9888199	4,806,295	11.9575731425	(25)	(25)	(25)	II
12L	Ginnie Mae	2019-140	NI(13)(27)	February 28, 2019	38381RKL2	0.000	PO	October 2017	PAC/AD	949,134	1.00000000	949,134	100.0000000000	(27)	(27)	(27)	II
12M	Ginnie Mae	2019-140	OO(13)(29)	February 28, 2019	38381RKL2	0.000	PO	October 2017	PAC/AD	572,226	1.00000000	572,226	100.0000000000	(27)	(27)	(27)	II
12N	Ginnie Mae	2019-140	PB(4)(13)(30)	February 28, 2019	38381RKL2	0.000	PO	June 2016	NTL(SC/PT)	26,924,191	0.76359580	12,383,259	45.9936666667	(25)	(25)	(25)	II
13A	Ginnie Mae	2019-001	PY	January 30, 2019	38381RKL2	0.000	PO	June 2016	SC/PT	3,355,000	1.00000000	2,320,787	69.2051851852	(27)	(27)	(27)	II
13B	Ginnie Mae	2019-145	PC	November 29, 2019	38381RKL2	0.000	PO	June 2016	SC/PT	1,012,000	1.00000000	1,000,000	100.0000000000	(29)	(29)	(29)	II
13C	Ginnie Mae	2019-138	LP	November 29, 2019	38381RKL2	0.000	PO	July 2018	SC/PT	1,516,975	1.00000000	609,549	40.2051851852	(29)	(29)	(29)	II
13D	Ginnie Mae	2019-160	ML	December 30, 2019	38382AD25	2.500	FIX	January 2018	PAC I	3,481,361	1.00000000	1,516,975	43.5610999999	4.987	13	13	II
13E	Ginnie Mae	2019-151	IP	November 29, 2019	38382AD35	2.500	FIX	November 2019	PAC/AD	1,644,750	1.00000000	1,644,750	100.0000000000	3.988	4	4	II
13F	Ginnie Mae	2019-152	TX(13)(31)	December 30, 2019	38382BXY8	3.500	FIX	December 2019	PAC/AD	1,035,321	1.00000000	1,035,321	100.0000000000	4.948	11	11	II
13G	Ginnie Mae	2019-152	SA(13)	December 30, 2019	38382BXY8	3.500	FIX	December 2019	PAC/AD	507,000	1.00000000	507,000	100.0000000000	4.454	20	20	II
14	Ginnie Mae	2019-071	MD(4)	October 30, 2019	38382AHY4	(16)	IN/IO	October 2019	CPT/PAC/AD	856,015	1.00000000	856,015	100.0000000000	(31)	(31)	(31)	II
15	Ginnie Mae	2017-175	DI(4)(13)	November 30, 2017	38381WJK5	3.000	FIX	June 2019	PT	50,000,000	0.99151136	49,565,568	99.131168	4.507	5	5	II
15	Ginnie Mae	2017-175	NI(4)(13)	November 30, 2017	38380HY89	3.500	FIX/IO	June 2017	NTL(PAC/AD)	9,352,571	0.98913591	29,674,077	315.7051851852	4.999	8	8	II
15	Ginnie Mae	2018-012	DI(13)	January 30, 2018	38380KQJ5	3.500	FIX/IO	August 2014	NTL(PAC/AD)	80,953,142	0.7205054	5,527,313	6.8287359050	3.904	26	26	II
15	Ginnie Mae	2018-015	BI(13)	January 30, 2018	38380L772	3.500	FIX/IO	March 2015	NTL(SEQ/AD)	12,497,714	0.58835511	14,631,284	117.13284	3.903	31	31	II
15	Ginnie Mae	2019-044	QU(13)	January 30, 2019	38380URX3	3.500	FIX/IO	January 2018	NTL(PAC/AD)	7,142,857	0.68852747	7,353,094	102.9999999999	3.903	27	27	II
16	Ginnie Mae	2019-044	TH	April 30, 2019	38381URX2	3.500	FIX/IO	April 2019	NTL(PAC/AD)	2,857,142	0.61504915	1,842,997	64.5199899710	3.903	24	24	II
16	Ginnie Mae	2019-142	FF	February 28, 2019	38381B3H15	(16)	FIT	February 2019	PT	56,361,960	0.94474472	10,392,192	18.2769696970	4.007	14	14	II
21	Ginnie Mae	2019-152	GZ(13)	December 30, 2019	38382BZT3	3.500	FIX/Z	November 2019	SUP	17,800,453	0.99038843	17,629,362	98.4709999999	4.052	9	9	II
22	Ginnie Mae	2019-152	GL(13)	December 30, 2019	38382BZ55	3.500	FIX	December 2019	PAC/AD	17,229	1.00000000	4,691,496	27.2499999999	4.052	2	2	II

- (1) As defined under “Class Types” in Appendix I to the Base Offering Circular.
- (2) Underlying Certificate Factors are as of January 2020.
- (3) Based on information as of January 2020.
- (4) MX Class.

- (5) Ginnie Mae 2017-163 Class BK is an MX Class that is derived from REMIC Classes of separate Security Groups, one of which is related to separate Trust Asset Subgroups, and the other of which is backed by a previously issued REMIC certificate, Class PV from Ginnie Mae 2010-139, and by previously issued MX certificates, Class YB from Ginnie Mae 2009-118, Class CM from Ginnie Mae 2010-087, Class AU from Ginnie Mae 2010-092 and Class EG from Ginnie Mae 2011-102. These Trust Asset Subgroups and previously issued certificates are backed by certain mortgage loans whose approximate weighted average characteristics are as follows:

Series	Class or Trust Asset Subgroup	Approximate Weighted Average Coupon of Mortgage Loans(%)	Approximate Weighted Remaining Term to Maturity of Mortgage Loans (in months)(3)	Approximate Weighted Average Loan Age of Mortgage Loans (in months)(3)	Ginnie Mae I or II
2009-118	YB	4.922%	228	122	II
2010-087	CM	4.900	229	121	II
2010-092	AU	4.909	236	114	II
2010-139	PV	4.822	239	112	II
2011-102	EG	4.824	245	105	II
2017-163	15A	5.000	235	117	I
2017-163	15B	6.000	205	146	I
2017-163	15C	5.500	230	120	I
2017-163	15D	6.500	43	134	I
2017-163	15F	5.624	171	177	II
2017-163	15G	5.990	207	152	II
2017-163	15H	5.912	93	176	II
2017-163	15I	6.927	74	267	II
2017-163	15J	7.044	156	192	II
2017-163	15K	7.718	95	256	II
2017-163	15L	8.228	74	278	II
2017-163	15M	8.795	59	295	II
2017-163	15N	6.150	219	138	I
2017-163	15O	5.900	180	172	I
2017-163	15Q	6.000	168	179	I
2017-163	15R	6.100	188	170	I
2017-163	15S	6.150	206	143	I
2017-163	15U	6.250	200	153	I
2017-163	15V	6.300	206	149	I
2017-163	15W	6.350	206	151	I
2017-163	15X	6.500	150	208	I
2017-163	15Y	7.000	80	275	I
2017-163	15Z	7.500	48	308	I

- (6) Ginnie Mae 2018-080 Class DA is backed by a previously issued REMIC certificate, Class TH from Ginnie Mae 2018-021.  
(7) Ginnie Mae 2019-042 Class GA is backed by a previously issued MX certificate, Class CX from Ginnie Mae 2009-074.

- (8) Ginnie Mae 2017-052 Class A is a REMIC Class that is related to separate Trust Asset Subgroups, which are backed by certain mortgage loans whose approximate weighted average characteristics are as follows:

Series	Approximate Weighted		Approximate Weighted	
	Average Coupon of Mortgage Loans(3)	Term to Maturity of Mortgage Loans (in months)(3)	Average Remaining Term to Maturity of Mortgage Loans (in months)(3)	Average Loan Age of Mortgage Loans (in months)(3)
2017-052	6.466%	199	152	
2017-052	6.559	97	190	
2017-052	5.958	203	147	

- (9) Ginnie Mae 2017-104 Class G is an MX Class that is derived from REMIC Classes of separate Security Groups, one of which is backed by a previously issued REMIC certificate, Class PA from Ginnie Mae 2014-007. This Security Group and previously issued certificate are backed by certain mortgage loans whose approximate weighted average characteristics are as follows:

Series	Approximate Weighted		Approximate Weighted		Ginnie Mae I or II
	Average Coupon of Mortgage Loans(3)	Term to Maturity of Mortgage Loans (in months)(3)	Average Remaining Term to Maturity of Mortgage Loans (in months)(3)	Average Loan Age of Mortgage Loans (in months)(3)	
2014-007	5.354%	253	99	II	
2017-104	6.000	218	130	I	

(10) Ginnie Mae 2017-063 Class CA is backed by previously issued REMIC certificates, Class TP from Ginnie Mae 2013-169, Class YP from Ginnie Mae 2013-182 and Class BA from Ginnie Mae 2017-155, and by previously issued MX certificates, Class PL from Ginnie Mae 2011-102 and Class LE from Ginnie Mae 2013-188. Ginnie Mae 2011-102 Class PL is an MX Class derived from REMIC Classes of separate Security Groups, one of which is backed by previously issued REMIC certificates, Classes FP and SP from Ginnie Mae 2011-082, and by previously issued MX certificates, Classes PA, PD and PG from Ginnie Mae 2011-037, and the other of which is backed by a previously issued REMIC certificate, Class PA from Ginnie Mae 2011-037, and by previously issued MX certificates, Classes PI, PM and PN from Ginnie Mae 2011-037. Ginnie Mae 2011-037 Classes PA, PI, PM and PN are in turn backed by previously issued MX certificates, Classes PD, PG, PH and PL from Ginnie Mae 2010-147. Ginnie Mae 2013-169 Class TP is backed by a previously issued REMIC certificate, Class PA from Ginnie Mae 2012-146. These previously issued certificates are backed by certain mortgage loans whose approximate weighted average characteristics are as follows:

Series	Class(es)	Approximate Weighted		Ginnie Mae I or II
		Average Remaining Term to Maturity of Mortgage Loans (in months)(3)	Average Loan Age of Mortgage Loans (in months)(3)	
2010-147	PD, PG, PH and PL	4.819%	239	II
2011-082	FP, PA, PD, PG and SP	4.803	243	II
2012-146	PA	5.305	236	II
2013-182	YP	5.500	222	I
2013-188	LE	6.000	222	I
2017-155	BA	6.500	213	I

(11) Ginnie Mae 2018-079 Class BA is backed by a previously issued REMIC certificate, Class PC from Ginnie Mae 2008-042, and by previously issued MX certificates, Class B from Ginnie Mae 2005-096 and Class PY from Ginnie Mae 2009-081. Ginnie Mae 2009-081 Class PY is an MX Class that is derived from REMIC Classes of separate Security Groups, one of which is backed by a previously issued MX certificate, Class P from Ginnie Mae 2009-067. This Security Group and these previously issued certificates are backed by certain mortgage loans whose approximate weighted average characteristics are as follows:

Series	Class or Trust Asset Group	Approximate Weighted		Ginnie Mae I or II
		Average Coupon of Mortgage Loans(3)	Average Remaining Term to Maturity of Mortgage Loans (in months)(3)	
2005-096	B	6.000%	150	I
2008-042	PC	5.931	205	II
2009-067	P	5.370	225	II
2009-081	3	5.398	226	II

- (12) Ginnie Mae 2017-123 Class AM is a REMIC Class that is related to separate Trust Asset Subgroups, which are backed by certain mortgage loans whose approximate weighted average characteristics are as follows:

Series	Trust Asset Subgroup	Approximate Weighted		Approximate Weighted	
		Average Coupon of Mortgage Loans(3)	Remaining Term to Maturity of Mortgage Loans (in months)(3)	Average Weighted Loan Age of Mortgage Loans (in months)(3)	Weighted Average Loan Age of Mortgage Loans (in months)(3)
2017-123	2A	5.500%	251	99	
2017-123	2B	5.600	124	234	

- (13) More than 10% of the Mortgage Loans underlying this Underlying Certificate may be higher balance Mortgage Loans. See “Risk Factors” in this Supplement.

- (14) Ginnie Mae 2019-103 Class KC is an MX Class that is related to separate Trust Asset Subgroups, which are backed by certain mortgage loans whose approximate weighted average characteristics are as follows:

Series	Trust Asset Subgroup	Approximate Weighted		Approximate Weighted	
		Average Coupon of Mortgage Loans(3)	Remaining Term to Maturity of Mortgage Loans (in months)(3)	Average Weighted Loan Age of Mortgage Loans (in months)(3)	Weighted Average Loan Age of Mortgage Loans (in months)(3)
2019-103	4A	4.576%	351	8	
2019-103	4B	4.541	353	7	
2019-103	4C	4.500	351	7	

- (15) Ginnie Mae 2018-001 Class KA is backed by a previously issued REMIC certificate, Class EO from Ginnie Mae 2017-134, and by a previously issued MX certificate, Class HS from Ginnie Mae 2017-112. Ginnie Mae 2017-134 Class EO is in turn backed by previously issued REMIC certificates, Classes BC and HB from Ginnie Mae 2012-136. These previously issued certificates are backed by certain mortgage loans whose approximate weighted average characteristics are as follows:

Series	Class	Approximate Weighted		Approximate Weighted	
		Average Coupon of Mortgage Loans(3)	Remaining Term to Maturity of Mortgage Loans (in months)(3)	Average Weighted Loan Age of Mortgage Loans (in months)(3)	Weighted Average Loan Age of Mortgage Loans (in months)(3)
2012-136	BC	3.796%	260	88	
2012-136	HB	3.783	261	88	
2017-112	HS	4.365	324	32	

- (16) The Interest Rate will be calculated as described under “Terms Sheet—Interest Rates” in the related Underlying Certificate Disclosure Document.

- (17) Ginnie Mae 2018-001 Class KI is backed by a previously issued MX certificate, Class PI from Ginnie Mae 2016-083.



- (18) Ginnie Mae 2019-140 Class QO is backed by a previously issued MX certificate, Class KO from Ginnie Mae 2019-119. Ginnie Mae 2019-119 Class KO is derived from a REMIC Class related to separate Trust Asset Subgroups, which are backed by certain mortgage loans whose approximate weighted average characteristics are as follows:

Series	Trust Asset Subgroup	Approximate Weighted		Approximate Weighted	
		Average Coupon of Mortgage Loans(3)	Average Remaining Term to Maturity of Mortgage Loans (in months)(3)	Average Loan Age of Mortgage Loans (in months)(3)	Average Loan Age of Mortgage Loans (in months)(3)
2019-119	6A	3.500%	345	8	
2019-119	6B	4.000	350	6	
2019-119	6C	4.500	350	6	
2019-119	6D	5.000	347	10	
2019-119	6E	5.500	341	12	
2019-119	6F	6.000	345	11	

- (19) Ginnie Mae 2019-140 Class QS is backed by a previously issued REMIC certificate, Class YS from Ginnie Mae 2019-085.  
(20) Ginnie Mae 2018-078 Class IH is backed by a previously issued REMIC certificate, Class IC from Ginnie Mae 2016-150.  
(21) Ginnie Mae 2018-078 Class MO is backed by previously issued REMIC certificates, Class JS from Ginnie Mae 2016-168, Class TY from Ginnie Mae 2017-133, Class NM from Ginnie Mae 2017-175, Class LP from Ginnie Mae 2018-005 and Class PO from Ginnie Mae 2018-064. Ginnie Mae 2016-168 Class JS is backed by previously issued REMIC certificates, Class YA from Ginnie Mae 2016-146 and Classes QK, UA, UI and UK from Ginnie Mae 2016-160. Ginnie Mae 2018-064 Class PO is backed by a previously issued MX certificate, Class SJ from Ginnie Mae 2017-114. These previously issued certificates are backed by certain mortgage loans whose approximate weighted average characteristics are as follows:

Series	Class(es)	Approximate Weighted		Approximate Weighted	
		Average Coupon of Mortgage Loans(3)	Average Remaining Term to Maturity of Mortgage Loans (in months)(3)	Average Loan Age of Mortgage Loans (in months)(3)	Average Loan Age of Mortgage Loans (in months)(3)
2016-146	YA	3.914%	312	40	
2016-160	QK and UK	3.876	315	39	
2016-160	UA and UI	3.891	314	40	
2017-133	TY	3.459	326	30	
2017-175	NM	3.903	331	27	
2018-005	LP	4.877	326	31	
2017-114	SJ	4.385	324	33	

- (22) Ginnie Mae 2018-078 Class MS is backed by a previously issued REMIC certificate, Class SC from Ginnie Mae 2017-162.

- (23) Ginnie Mae 2019-152 Class OL is backed by a previously issued REMIC certificate, Class GS from Ginnie Mae 2014-021. Ginnie Mae 2014-021 Class GS is in turn related to separate Trust Asset Subgroups, which are backed by certain mortgage loans whose approximate weighted average characteristics are as follows:

Series	Trust Asset Subgroup	Approximate Weighted Average Coupon of Mortgage Loans(3)	Approximate Weighted Average Remaining Term to Maturity of Mortgage Loans (in months)(3)	Approximate Weighted Average Loan Age of Mortgage Loans (in months)(3)
2014-021	5A	4.363%	255	94
2014-021	5B	4.466	238	112
2014-021	5C	4.295	256	95

- (24) Ginnie Mae 2019-152 Class SL is backed by a previously issued REMIC certificate, Class SB from Ginnie Mae 2019-112.  
 (25) Ginnie Mae 2019-140 Class KO is an MX Class that is derived from REMIC Classes of separate Security Groups, which are backed by certain mortgage loans whose approximate weighted average characteristics are as follows:

Series	Trust Asset Group	Approximate Weighted Average Coupon of Mortgage Loans(3)	Approximate Weighted Average Remaining Term to Maturity of Mortgage Loans (in months)(3)	Approximate Weighted Average Loan Age of Mortgage Loans (in months)(3)
2019-140	12	4.995%	356	3
2019-140	13	5.529	354	5

- (26) Ginnie Mae 2019-015 Class IO is backed by a previously issued REMIC certificate, Class KY from Ginnie Mae 2017-149.  
 (27) Ginnie Mae 2019-015 Class NI is backed by a previously issued MX certificate, Class KI from Ginnie Mae 2018-040. Ginnie Mae 2018-040 Class KI is an MX class that is derived from REMIC Classes, which are backed by previously issued REMIC certificates, Class JI from Ginnie Mae 2017-139, Class NS from Ginnie Mae 2018-011 and Class SH from Ginnie Mae 2018-018. The Trust Assets underlying Ginnie Mae 2017-139 Class JI and Ginnie Mae 2018-011 Class NS consist of adjustable rate Ginnie Mae II MBS Certificates, the assumed characteristics of which as of the date of the related Underlying Certificate Disclosure Documents are set forth in Exhibit C and Exhibit B, respectively, thereto. Investors can obtain updates to certain of the information set forth in Exhibit C and Exhibit B, respectively, of the related Underlying Certificate Disclosure Documents on Ginnie Mae's website. These previously issued certificates are indirectly backed by certain mortgage loans whose approximate weighted average characteristics are as follows:

Series	Class	Approximate Weighted Average Coupon of Mortgage Loans(3)	Approximate Weighted Average Remaining Term to Maturity of Mortgage Loans (in months)(3)	Approximate Weighted Average Loan Age of Mortgage Loans (in months)(3)
2017-139	JI	4.481%	208	151
2018-011	NS	4.429	209	151
2018-018	SH	4.458	333	24

(28) Ginnie Mae 2019-015 Class PO is backed by a previously issued REMIC certificate, Class PC from Ginnie Mae 2016-082.

(29) Ginnie Mae 2019-015 Class QO is backed by a previously issued REMIC certificate, Class BG from Ginnie Mae 2018-091. Ginnie Mae 2018-091 Class BG is in turn related to separate Trust Asset Subgroups, which are backed by certain mortgage loans whose approximate weighted average characteristics are as follows:

Series	Trust Asset Subgroup	Approximate Weighted	
		Average Remaining Term to Maturity of Mortgage Loans (in months)(3)	Average Loan Age of Mortgage Loans (in months)(3)
2018-091	8B	340	19
2018-091	8C	340	19

(30) Ginnie Mae 2019-145 Class PB is an MX Class that is related to separate Trust Asset Subgroups, which are backed by certain mortgage loans whose approximate weighted average characteristics are as follows:

Series	Trust Asset Subgroup	Approximate Weighted	
		Average Remaining Term to Maturity of Mortgage Loans (in months)(3)	Average Loan Age of Mortgage Loans (in months)(3)
2019-145	2A	355	4
2019-145	2B	356	4

(31) Ginnie Mae 2019-152 Class TX is a REMIC Class that is related to separate Trust Asset Subgroups, which are backed by certain mortgage loans whose approximate weighted average characteristics are as follows:

Series	Trust Asset Subgroup	Approximate Weighted	
		Average Remaining Term to Maturity of Mortgage Loans (in months)(3)	Average Loan Age of Mortgage Loans (in months)(3)
2019-152	6A	333	24
2019-152	6B	358	2

Assumed Characteristics of the Mortgage Loans Underlying the Group 17 Trust Assets(1)

Pool Number	Ginnie Mae Certificate Principal Balance(2)	Approximate Weighted Remaining Term to Maturity (in months)(3)	Approximate Weighted Average Loan Age (in months)(4)	Approximate Weighted Current Mortgage Rate(5)	Current Certificate Rate(6)	Approximate Weighted Average Servicing and Guaranty Fee Rate(7)	Index	Certificate Margin(8)	Issue Date	Next Mortgage Rate Adjustment Date(9)	Mortgage Rate Reset Frequency(10)	Periodic Certificate Interest Rate Limit(11)	Lifetime Certificate Interest Rate Cap(12)	Lifetime Certificate Interest Rate Floor(13)	Final Maturity Date	Initial Certificate Rate at MBS Issuance(14)
MA1388	\$22,802,976.37	284	76	3.851%	3.500%	0.351%	1-Year CMT	1.500%	October 1, 2013	January 1, 2021	Annually	1.000%	7.500%	1.500%	October 20, 2043	2.500%
MA1692	2,179,599.62	289	71	4.320	4.000	0.320	1-Year CMT	1.500	February 1, 2014	April 1, 2020	Annually	1.000	8.000	1.500	February 20, 2044	3.000
MA1775	2,355,991.58	289	71	4.307	4.000	0.307	1-Year CMT	1.500	March 1, 2014	April 1, 2020	Annually	1.000	8.000	1.500	March 20, 2044	3.000
MA1853	8,511,428.65	290	68	4.291	3.875	0.416	1-Year CMT	1.500	April 1, 2014	July 1, 2020	Annually	1.000	8.000	1.500	April 20, 2044	3.000
MA1934	9,513,111.42	292	68	4.269	3.875	0.394	1-Year CMT	1.500	May 1, 2014	July 1, 2020	Annually	1.000	8.000	1.500	May 20, 2044	3.000
MA2008	5,338,852.89	292	68	3.877	3.500	0.377	1-Year CMT	1.500	June 1, 2014	July 1, 2020	Annually	1.000	7.500	1.500	June 20, 2044	2.500
MA2010	2,981,792.74	292	68	4.277	3.875	0.402	1-Year CMT	1.500	June 1, 2014	July 1, 2020	Annually	1.000	8.000	1.500	June 20, 2044	3.000

- (1) The information in this Exhibit B is provided by the Sponsor as of January 1, 2020. It is based on information regarding the Group 17 Trust Assets and the related Mortgage Loans. All weighted averages provided in this Exhibit B are weighted based on the outstanding principal amounts of the Mortgage Loans as of January 1, 2020.
- (2) The Ginnie Mae Certificate Principal Balance is the sum of the outstanding principal amounts of the Mortgage Loans underlying the related Trust MBS.
- (3) The Approximate Weighted Average Remaining Term to Maturity (in months) is the approximate weighted average remaining term to maturity of the Mortgage Loans underlying the related Trust MBS.
- (4) The Approximate Weighted Average Loan Age (in months) is the approximate weighted average loan age of the Mortgage Loans underlying the related Trust MBS.
- (5) The Approximate Weighted Average Current Mortgage Rate is the approximate weighted average of the interest rates of the Mortgage Loans underlying the related Trust MBS.
- (6) The Current Certificate Rate is the current certificate rate of the related Trust MBS.
- (7) The Approximate Weighted Average Servicing and Guaranty Fee Rate is the approximate weighted average monthly fee rate for servicing and for the Ginnie Mae Certificate Guaranty Fee.
- (8) The Certificate Margin is the margin of the Mortgage Loans underlying the related Trust MBS net of the Servicing and Guaranty Fee Rate.
- (9) The Next Mortgage Rate Adjustment Date is the next date on which the Mortgage Rate of each Mortgage Loan underlying the related Trust MBS resets under the Mortgage Rate formula and the related Mortgage Loan documents.
- (10) The Mortgage Rate Reset Frequency is the frequency that the Mortgage Rate of each Mortgage Loan resets under the Mortgage Rate formula and related Mortgage Loan documents applicable to each Mortgage Loan underlying the related Trust MBS after the first Mortgage Rate adjustment date.
- (11) The Periodic Certificate Interest Rate Limit is the maximum periodic interest rate adjustment possible based on the MBS Guide.
- (12) The Lifetime Certificate Interest Rate Cap is the maximum certificate interest rate possible based on the MBS Guide.
- (13) The Lifetime Certificate Interest Rate Floor is the minimum certificate interest rate possible based on the MBS Guide.
- (14) The Initial Certificate Rate at MBS Issuance is the initial certificate rate of the related Trust MBS.

The remaining terms to maturity, loan ages, Mortgage Rates, Mortgage Margins and next Mortgage Rate adjustment dates of many of the Mortgage Loans underlying the Group 17 Trust Assets will differ from the characteristics assumed, perhaps significantly. See “*The Trust Assets — The Mortgage Loans*” in *this Supplement*.



**\$1,452,515,302**

**Government National  
Mortgage Association**

**GINNIE MAE<sup>®</sup>**

**Guaranteed REMIC Pass-Through Securities  
and MX Securities  
Ginnie Mae REMIC Trust 2020-005**

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***OFFERING CIRCULAR SUPPLEMENT***  
**January 24, 2020**

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**Citigroup  
Mischler Financial Group, Inc.**