

\$936,159,518
Government National Mortgage Association

GINNIE MAE®

**Guaranteed REMIC Pass-Through Securities
and MX Securities
Ginnie Mae REMIC Trust 2019-090**

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-12 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 July 30, 2019.

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

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

Class of REMIC Securities	Original Principal Balance(2)	Interest Rate	Principal Type(3)	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
Security Group 1						
FA	\$ 50,000,000	(5)	PT	FLT	38381XDY9	July 2049
FB(1)	12,500,000	(5)	PT	FLT	38381XDZ6	July 2049
SA	50,000,000	(5)	NTL(PT)	INV/IO	38381XEA0	July 2049
SB(1)	12,500,000	(5)	NTL(PT)	INV/IO	38381XEB8	July 2049
Security Group 2						
BZ	10,677,756	3.00%	SUP	FIX/Z	38381XEC6	July 2049
CB	100,000,000	2.75	PAC/AD	FIX	38381XED4	July 2049
DF(1)	44,271,102	(5)	PT	FLT	38381XEE2	July 2049
DS(1)	44,271,102	(5)	NTL(PT)	INV/IO	38381XEF9	July 2049
IO	5,555,555	4.50	NTL(PAC/AD)	FIX/IO	38381XEG7	July 2049
Security Group 3						
IJ	7,142,857	3.50	NTL(SCH/AD)	FIX/IO	38381XEH5	July 2049
JA	50,000,000	3.00	SCH/AD	FIX	38381XEJ1	July 2049
JZ	2,466,995	3.50	SUP	FIX/Z	38381XEK8	July 2049
Security Group 4						
IM	48,068,995	3.00	NTL(SC/PT)	FIX/IO	38381XEL6	December 2047
Security Group 5						
IH	112,076,642	3.00	NTL(SC/PT)	FIX/IO	38381XEM4	May 2048
Security Group 6						
DB(1)	21,932,000	3.50	PAC/AD	FIX	38381XEN2	January 2049
DL	1,003,942	3.50	PAC/AD	FIX	38381XEP7	July 2049
DZ	5,000,000	3.50	SUP	FIX/Z	38381XEQ5	July 2049
Security Group 7						
FG	29,409,582	(5)	PAC/AD	FLT	38381XER3	July 2049
GF(1)	30,000,000	(5)	PT	FLT	38381XES1	July 2049
GS(1)	30,000,000	(5)	NTL(PT)	INV/IO	38381XET9	July 2049
GY	1,648,300	3.00	PAC/AD	FIX	38381XEU6	July 2049
NA(1)	68,331,458	3.00	PAC/AD	FIX	38381XEV4	September 2048
NY(1)	3,544,197	3.00	PAC/AD	FIX	38381XEW2	April 2049
SG	29,409,582	(5)	NTL(PAC/AD)	INV/IO	38381XEX0	July 2049
ZP	17,066,463	4.00	SUP	FIX/Z	38381XEY8	July 2049
Security Group 8						
AB	132,000,000	3.00	PT	FIX	38381XEZ5	July 2049
F	52,800,000	(5)	PT	FLT	38381XFA9	July 2049
SE	37,800,000	(5)	NTL(PT)	INV/IO	38381XFB7	July 2049
SH	15,000,000	(5)	NTL(PT)	INV/IO	38381XFC5	July 2049
Security Group 9						
AC(1)	39,090,000	3.00	PAC/AD	FIX	38381XFD3	September 2048
AF	39,976,497	(5)	PT	FLT	38381XFE1	July 2049
AY(1)	3,140,000	3.00	PAC/AD	FIX	38381XFF8	July 2049
AZ	72,000	3.00	PAC/AD	FIX/Z	38381XFG6	July 2049
SJ(1)	29,690,784	(5)	NTL(PT)	INV/IO	38381XFH4	July 2049
SL(1)	10,285,713	(5)	NTL(PT)	INV/IO	38381XFI0	July 2049
UZ	11,000,000	3.00	SUP	FIX/Z	38381XFK7	July 2049
Security Group 10						
BA(1)	66,274,000	3.00	PAC/AD	FIX	38381XFL5	July 2049
BI	29,757,640	4.50	NTL(PT)	FIX/IO	38381XFM3	July 2049
ZB(1)	22,811,921	3.00	SUP	FIX/Z	38381XFN1	July 2049
ZC(1)	187,000	3.00	PAC/AD	FIX/Z	38381XFP6	July 2049
Security Group 11						
CA	52,942,597	3.00	PAC/AD	FIX	38381XFP4	April 2049
CZ	763,974	3.00	PAC/AD	FIX/Z	38381XFR2	July 2049
EA(1)	22,690,790	3.00	PAC/AD	FIX	38381XFS0	April 2049
EF(1)	34,558,944	(5)	PT	FLT	38381XFT8	July 2049
ES(1)	34,558,944	(5)	NTL(PT)	INV/IO	38381XFU5	July 2049
PZ	10,000,000	3.00	SUP	FIX/Z	38381XFW3	July 2049
Residuals						
RR7	0	0.00	NPR	NPR	38381XFW1	July 2049
RR	0	0.00	NPR	NPR	38381XFX9	July 2049

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

Trustee: U.S. Bank National Association

Tax Administrator: The Trustee

Closing Date: July 30, 2019

Distribution Date: The 20th day of each month or, if the 20th day is not a Business Day, the first Business Day thereafter, commencing in August 2019.

Trust Assets:

<u>Trust Asset Group or Subgroup⁽²⁾</u>	<u>Trust Asset Type</u>	<u>Certificate Rate</u>	<u>Original Term To Maturity (in years)</u>
1	Ginnie Mae II	4.5%	30
2	Ginnie Mae II	4.0%	30
3	Ginnie Mae II	3.5%	30
4	Underlying Certificates	(1)	(1)
5	Underlying Certificates	(1)	(1)
6	Ginnie Mae II	3.5%	30
7	Ginnie Mae II	4.5%	30
8A	Ginnie Mae II	4.0%	30
8B	Ginnie Mae II	4.0%	30
9A	Ginnie Mae II	4.5%	30
9B	Ginnie Mae II	4.5%	30
9C	Ginnie Mae II	4.5%	30
9D	Ginnie Mae II	4.5%	30
10	Ginnie Mae II	4.5%	30
11	Ginnie Mae II	4.0%	30

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

⁽²⁾ The Group 8 and 9 Trust Assets consist of subgroups, Subgroups 8A, 8B, 9A, 9B, 9C and 9D (each, a “Subgroup”).

Security Groups: This series of Securities consists of multiple Security Groups (each, a “Group”), as shown on the front cover of this Supplement and on Schedule I to this Supplement. Except in the case of certain MX Classes in Groups 1, 2, 7 and 11, payments on each Group will be based solely on payments on the Trust Asset Group with the same numerical designation.

Assumed Characteristics of the Mortgage Loans Underlying the Group 1, 2, 3, 6, 7, 8, 9, 10 and 11 Trust Assets⁽¹⁾:

<u>Principal Balance</u>	<u>Weighted Average Remaining Term to Maturity (in months)</u>	<u>Weighted Average Loan Age (in months)</u>	<u>Weighted Average Mortgage Rate⁽²⁾</u>
Group 1 Trust Assets			
\$62,500,000	357	3	4.883%
Group 2 Trust Assets			
\$154,948,858	354	3	4.494%
Group 3 Trust Assets			
\$52,466,995	357	2	4.031%
Group 6 Trust Assets			
\$27,935,942 ⁽³⁾	356	2	3.993%
Group 7 Trust Assets			
\$150,000,000	356	2	4.943%
Subgroup 8A Trust Assets			
\$132,300,000	357	1	4.450%
Subgroup 8B Trust Assets			
\$52,500,000	357	1	4.450%
Subgroup 9A Trust Assets			
\$24,278,500	358	1	4.974%
Subgroup 9B Trust Assets			
\$15,000,000	358	1	4.974%
Subgroup 9C Trust Assets			
\$30,000,000	358	1	4.974%
Subgroup 9D Trust Assets			
\$23,999,997	358	1	4.974%
Group 10 Trust Assets			
\$89,272,921 ⁽³⁾	356	3	5.020%
Group 11 Trust Assets			
\$120,956,305	352	3	4.477%

⁽¹⁾ As of July 1, 2019.

⁽²⁾ The Mortgage Loans underlying the Group 1, 2, 3, 6, 7, 8, 9, 10 and 11 Trust Assets may bear interest at rates ranging from 0.25% to 1.50% per annum above the related Certificate Rate.

⁽³⁾ More than 10% of the Mortgage Loans underlying the Group 6 and 10 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 1, 2, 3, 6, 7, 8, 9, 10 and 11 Trust Assets will differ from the weighted averages shown above, perhaps significantly. See “The Trust Assets — The Mortgage Loans” in this Supplement.

Characteristics of the Mortgage Loans Underlying the Group 4 and 5 Trust Assets: See Exhibit A to this Supplement for certain information regarding the characteristics of the Mortgage Loans included in the related Underlying Trusts.

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

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

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

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

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

Class	Interest Rate Formula(1)	Initial Interest Rate(2)	Minimum Rate	Maximum Rate	Delay (in days)	LIBOR for Minimum Interest Rate
AF	LIBOR + 0.40%	2.76913%	0.40%	6.50%	0	0.00%
BF	LIBOR + 0.35%	2.74800%	0.35%	6.50%	0	0.00%
BS	6.15% – LIBOR	3.75200%	0.00%	6.15%	0	6.15%
DF	LIBOR + 0.35%	2.72950%	0.35%	6.50%	0	0.00%
DS	6.15% – LIBOR	3.77050%	0.00%	6.15%	0	6.15%
EF	LIBOR + 0.35%	2.72950%	0.35%	6.50%	0	0.00%
ES	6.15% – LIBOR	3.77050%	0.00%	6.15%	0	6.15%
F	LIBOR + 0.45%	2.81913%	0.45%	6.50%	0	0.00%
FA	LIBOR + 0.70%	3.09800%	0.70%	4.00%	0	0.00%
FB	LIBOR + 0.35%	2.74800%	0.35%	6.50%	0	0.00%
FD	LIBOR + 0.35%	2.72950%	0.35%	6.50%	0	0.00%
FG	LIBOR + 0.35%	2.74800%	0.35%	6.50%	0	0.00%
GF	LIBOR + 0.35%	2.74800%	0.35%	6.50%	0	0.00%
GS	6.15% – LIBOR	3.75200%	0.00%	6.15%	0	6.15%
S	6.10% – LIBOR	3.73087%	0.00%	6.10%	0	6.10%
SA	3.30% – LIBOR	0.90200%	0.00%	3.30%	0	3.30%
SB	6.15% – LIBOR	3.75200%	0.00%	6.15%	0	6.15%
SD	6.15% – LIBOR	3.77050%	0.00%	6.15%	0	6.15%
SE	6.05% – LIBOR	3.68087%	0.00%	6.05%	0	6.05%
SG	6.15% – LIBOR	3.75200%	0.00%	6.15%	0	6.15%
SH	6.05% – LIBOR	3.68087%	0.00%	6.05%	0	6.05%
SJ	6.10% – LIBOR	3.73087%	0.00%	6.10%	0	6.10%
SL	6.10% – LIBOR	3.73087%	0.00%	6.10%	0	6.10%

(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.

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

SECURITY GROUP 1

The Group 1 Principal Distribution Amount will be allocated, concurrently, to FA and FB, pro rata, until retired

SECURITY GROUP 2

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

- The BZ Accrual Amount in the following order of priority:
 1. To CB, until reduced to its Scheduled Principal Balance for that Distribution Date
 2. To BZ, until retired
- The Group 2 Principal Distribution Amount, concurrently, as follows:
 1. 28.571428387% to DF, until retired
 2. 71.428571613% in the following order of priority:
 - a. To CB, until reduced to its Scheduled Principal Balance for that Distribution Date
 - b. To BZ, until retired
 - c. To CB, but without regard to its Scheduled Principal Balance, until retired

SECURITY GROUP 3

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

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

SECURITY GROUP 6

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

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

SECURITY GROUP 7

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

- The ZP Accrual Amount in the following order of priority:
 1. To FG, GY, NA and NY, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date, concurrently, as follows:
 - a. 28.5714285714% to FG, until retired
 - b. 71.4285714286%, sequentially, to NA, NY and GY, in that order, until retired
 2. To ZP, until retired
- The Group 7 Principal Distribution Amount, concurrently, as follows:
 1. 20% to GF, until retired
 2. 80% in the following order of priority:
 - a. To FG, GY, NA and NY, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date, concurrently, as follows:
 - i. 28.5714285714% to FG, until retired
 - ii. 71.4285714286%, sequentially, to NA, NY and GY, in that order, until retired
 - b. To ZP, until retired
 - c. To FG, GY, NA and NY, in the same manner and priority as step 2.a., but without regard to their Aggregate Scheduled Principal Balance, until retired

SECURITY GROUP 8

The Group 8 Principal Distribution Amount will be allocated, concurrently, to AB and F, pro rata, until retired.

SECURITY GROUP 9

The Subgroup 9A Principal Distribution Amount, the Subgroup 9B Principal Distribution Amount, the Subgroup 9C Principal Distribution Amount, the Subgroup 9D Principal Distribution Amount, the AZ Accrual Amount and the UZ Accrual Amount will be allocated as follows:

- The AZ Accrual Amount, sequentially, to AC, AY and AZ, in that order, until retired
- 42.8571410919% of the Subgroup 9A Principal Distribution Amount, 42.85714% of the Subgroup 9B Principal Distribution Amount, 42.85714% of the Subgroup 9C Principal Distribution Amount and 42.8571428571% of the Subgroup 9D Principal Distribution Amount to AF, until retired
- The remainder of the Subgroup 9A Principal Distribution Amount, the remainder of the Subgroup 9B Principal Distribution Amount, the remainder of the Subgroup 9C Principal Distribution Amount, the remainder of the Subgroup 9D Principal Distribution Amount and the UZ Accrual Amount in the following order of priority:
 1. Sequentially, to AC, AY and AZ, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date

2. To UZ, until retired
3. Sequentially, to AC, AY and AZ, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired

SECURITY GROUP 10

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

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

SECURITY GROUP 11

The Group 11 Principal Distribution Amount, the CZ Accrual Amount and the PZ Accrual Amount will be allocated as follows:

- The CZ Accrual Amount in the following order of priority:
 1. Concurrently, to CA and EA, pro rata, until retired
 2. To CZ, until retired
- The PZ Accrual Amount in the following order of priority:
 1. To CA, CZ and EA, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date in the following order of priority:
 - a. Concurrently, to CA and EA, pro rata, until retired
 - b. To CZ, until retired
 2. To PZ, until retired
- The Group 11 Principal Distribution Amount, concurrently, as follows:
 1. 28.5714283352% to EF, until retired
 2. 71.4285716648% in the following order of priority:
 - a. To CA, CZ and EA, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date in the following order of priority:
 - i. Concurrently, to CA and EA, pro rata, until retired
 - ii. To CZ, until retired
 - b. To PZ, until retired

c. To CA, CZ and EA, in the same manner and priority as step 2.a., but without regard to their Aggregate Scheduled Principal Balance, until retired

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

	<u>Structuring Ranges</u>
PAC Classes	
AC, AY and AZ (in the aggregate)	200% PSA through 400% PSA
BA and ZC (in the aggregate)	165% PSA through 400% PSA
CA, CZ and EA (in the aggregate)	200% PSA through 300% PSA
CB	175% PSA through 250% PSA
DB and DL (in the aggregate)	150% PSA through 300% PSA
FG, GY, NA and NY (in the aggregate)	175% PSA through 300% PSA
Scheduled Class	
JA	149% PSA through 182% PSA

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

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

Class	Original Class Notional Balance	Represents Approximately
AI	\$ 13,030,000	33.3333333333% of AC (PAC/AD Class)
BI	29,757,640	33.3333333333% of the Group 10 Trust Assets
BS	42,500,000	100% of the FB and GF (in the aggregate) (PT Classes)
DI	6,266,285	28.5714285714% of DB (PAC/AD Class)
DS	44,271,102	100% of DF (PT Class)
ES	34,558,944	100% of EF (PT Class)
GS	30,000,000	100% of GF (PT Class)
IA	14,076,666	33.3333333333% of AC and AY (in the aggregate) (PAC/AD Classes)
IB	29,455,111	44.4444444444% of BA (PAC/AD Class)
IE	5,672,697	25% of EA (PAC/AD Class)
IG	15,972,367	22.2222222222% of NA and NY (in the aggregate) (PAC/AD Classes)
IH	112,076,642	100% of the Group 5 Trust Assets
IJ	7,142,857	14.2857142857% of JA (SCH/AD Class)
IM	48,068,995	100% of the Group 4 Trust Assets
IN	18,980,960	27.7777777778% of NA (PAC/AD Class)
IO	5,555,555	5.5555555556% of CB (PAC/AD Class)
S	\$ 10,405,071	42.8571410919% of the Subgroup 9A Trust Assets
	6,428,571	42.85714% of the Subgroup 9B Trust Assets
	12,857,142	42.85714% of the Subgroup 9C Trust Assets
	10,285,713	42.8571428571% of the Subgroup 9D Trust Assets
	<u>\$ 39,976,497</u>	
SA	\$ 50,000,000	100% of FA (PT Class)
SB	12,500,000	100% of FB (PT Class)
SD	78,830,046	100% of DF and EF (in the aggregate) (PT Classes)
SE	37,800,000	28.5714285714% of the Subgroup 8A Trust Assets
SG	29,409,582	100% of FG (PAC/AD Class)
SH	15,000,000	28.5714285714% of the Subgroup 8B Trust Assets
SJ	\$ 10,405,071	42.8571410919% of the Subgroup 9A Trust Assets
	6,428,571	42.85714% of the Subgroup 9B Trust Assets
	12,857,142	42.85714% of the Subgroup 9C Trust Assets
	<u>\$ 29,690,784</u>	
SL	\$ 10,285,713	42.8571428571% of the Subgroup 9D Trust Assets

Tax Status: Double REMIC Series as to the Group 1, 2, 3, 4, 5, 6, 8, 9, 10 and 11 Trust Assets and Double REMIC Series as to the Group 7 Trust Assets. Separate REMIC elections will be made as to the Issuing REMIC and the Pooling REMIC with respect to the Group 1, 2, 3, 4, 5, 6, 8, 9, 10 and 11 Trust Assets (the “Group 1, 2, 3, 4, 5, 6, 8, 9, 10 and 11 Issuing REMIC” and the “Group 1, 2, 3, 4, 5, 6, 8, 9, 10 and 11 Pooling REMIC,” respectively) and as to the Issuing REMIC and the Pooling REMIC with respect to the Group 7 Trust Assets (the “Group 7 Issuing REMIC” and the “Group 7 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 and RR7 are Residual Classes. Class RR represents the Residual Interest of the Group 1, 2, 3, 4, 5, 6, 8, 9, 10 and 11 Issuing and Pooling REMICs. Class RR7 represents the Residual Interest of the Group 7 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 and principal payments are slower than you expected.

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

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

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

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

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

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

The rate of payments on the underlying certificates will directly affect the rate of payments on the group 4 and 5 securities. The underlying certificates will be sensitive in varying degrees to the rate of payments of principal (including prepayments) of the related mortgage loans.

Certain of the trust assets underlying certain of the underlying certificates included in trust asset groups 4 and 5 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 4 and 5 securities. You should read the related under-

lying certificate disclosure documents, including the risk factors contained therein, to understand the payments on and related risks of the previously issued certificates backing these underlying certificates.

This supplement contains no information as to whether the underlying certificates have 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, 4, 5, 7, 8, 9 and 11 trust assets and up to 100% of the mortgage loans underlying the group 6 and 10 trust assets may be higher balance mortgage loans.

Subject to special pooling parameters set forth in the Ginnie Mae Mortgage-Backed Securities Guide, qualifying federally-insured or guaranteed mortgage loans that exceed certain balance thresholds established by Ginnie Mae (“higher balance mortgage loans”) may be included in Ginnie Mae guaranteed pools. There are no historical performance data regarding the prepayment rates for higher balance mortgage loans. If the higher balance mortgage loans prepay faster or slower than expected, the weighted average lives and yields of the related securities are likely to be affected, perhaps significantly. Furthermore, higher balance mortgage loans tend to be concentrated in certain geographic areas, which may experience relatively higher rates of defaults in the event of adverse economic conditions. No assurances can be given about the prepayment experience or performance of the higher balance mortgage loans.

Changes to, or elimination of, LIBOR could adversely affect your investment in the securities. On July 27, 2017, the U.K.-based Financial Conduct Authority (the “FCA”) announced its intention to cease sustaining LIBOR after 2021. The FCA indicated that it does not intend to sustain LIBOR through using its influence or legal powers beyond that date. It is

possible that the ICE Benchmark Administration (“IBA”) and the reference banks could continue to produce LIBOR on the current basis after 2021, if they are willing and able to do so, but it cannot be assured that LIBOR will survive in its current form, or at all. In the event IBA ceases to set or publish a rate for LIBOR, the Trustee shall propose a new index for approval by Ginnie Mae based upon comparable information and methodology. The Trustee shall propose an alternative index only if it receives an opinion of counsel that the selection of such alternative index will not cause the related Trust REMIC or REMICs to lose their classification as REMICs for United States federal income tax purposes. The effect of the FCA’s decision not to sustain LIBOR, or, if changes are ultimately made to LIBOR, the effect of those changes, cannot be predicted. In addition, it cannot be predicted what alternative index would be chosen should this occur. If LIBOR in its current form does not survive or if an alternative index is chosen, the market value and/or liquidity of securities with distributions or interest rates based on LIBOR could be adversely affected.

The securities may not be a suitable investment for you. The securities, especially the group 4 and 5 securities and, in particular, the support, interest only, accrual and residual classes, are not suitable investments for all investors.

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

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

The secondary markets for mortgage-related securities have experienced periods of illiquidity and can be expected to do so in the future. Illi-

quidity can have a severely adverse effect on the prices of classes that are especially sensitive to prepayment or interest rate risk or that have been structured to meet the investment requirements of limited categories of investors.

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

You are encouraged to consult advisors regarding the financial, legal, tax and other aspects of an investment in the securities. You should not purchase the securities of any class unless you

understand and are able to bear the prepayment, yield, liquidity and market risks associated with that class.

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

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

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

THE TRUST ASSETS

General

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

The Trust MBS (Groups 1, 2, 3, 6, 7, 8, 9, 10 and 11)

The Trust MBS are either:

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

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

The Underlying Certificates (Groups 4 and 5)

The Group 4 and 5 Trust Assets are Underlying Certificates that represent beneficial ownership interests in one or more separate trusts, the assets of which evidence direct or indirect beneficial owner-

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

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

The Mortgage Loans

The Mortgage Loans underlying the Group 1, 2, 3, 6, 7, 8, 9, 10 and 11 Trust Assets are expected to have, on a weighted average basis, the characteristics set forth in the Terms Sheet under “Assumed Characteristics of the Mortgage Loans Underlying the Group 1, 2, 3, 6, 7, 8, 9, 10 and 11 Trust Assets” and the general characteristics described in the Base Offering Circular. The Mortgage Loans underlying the Underlying Certificates are expected to have, on a weighted average basis, the characteristics set forth in Exhibit A to this Supplement. The Mortgage Loans will consist of first lien, single-family, fixed rate, residential mortgage loans that are insured or guaranteed by the Federal Housing Administration, the United States Department of Veterans Affairs, Rural Development (formerly the Rural Housing Service) or the United States Department of Housing and Urban Development (“HUD”). *See “The Ginnie Mae Certificates — General” in the Base Offering Circular.*

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

The Trustee Fee

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

GINNIE MAE GUARANTY

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

DESCRIPTION OF THE SECURITIES

General

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

Form of Securities

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

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

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

Distributions

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

Interest Distributions

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

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

Categories of Classes

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

Accrual Periods

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

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

Fixed Rate Classes

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

Floating Rate and Inverse Floating Rate Classes

The Floating Rate and Inverse Floating Rate Classes will bear interest as shown under “Terms Sheet — Interest Rates” in this Supplement. The Interest Rates for the Floating Rate and Inverse Floating Rate Classes will be based on LIBOR. The Trustee or its agent will determine LIBOR on the basis of the ICE LIBOR method, as described under “Description of the Securities — Interest Rate Indices — Determination of LIBOR — ICE LIBOR” in the Base Offering Circular.

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

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

Accrual Classes

Each of Classes AZ, BZ, CZ, DZ, JZ, PZ, UZ, ZB, ZC and ZP is an Accrual Class. Interest will accrue on the Accrual Classes and be distributed as described under “Terms Sheet — Accrual Classes” in this Supplement.

Principal Distributions

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

Categories of Classes

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

Notional Classes

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

Residual Securities

The Class RR Securities will represent the beneficial ownership of the Residual Interest in the Group 1, 2, 3, 4, 5, 6, 8, 9, 10 and 11 Issuing REMIC and the beneficial ownership of the Residual Interest in the Group 1, 2, 3, 4, 5, 6, 8, 9, 10 and 11 Pooling REMIC, as described in “Certain United States Federal Income Tax Consequences” in the Base Offering Circular. The Class RR7 Securities will represent the beneficial ownership of the Residual Interest in the Group 7 Issuing REMIC and the beneficial ownership of the Residual Interest in the Group 7 Pooling REMIC, as described in “Certain United States Federal Income Tax Consequences” in the Base Offering Circular. The Class RR and RR7 Securities have no Class Principal Balance and do not accrue interest. The Class RR and RR7 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 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, 6, 8, 9, 10 and 11 Issuing and Pooling REMICs	Group 1, 2, 3, 4, 5, 6, 8, 9, 10 and 11 Securities
Group 7 Issuing and Pooling REMICs	Group 7 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 Security Group 7, a Holder of all of the outstanding Regular Securities of 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 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 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, 9 and 11, 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, 9 and 11, the related REMIC Securities may be exchanged for proportionate interests in various subcombinations of MX Classes. Similarly, all or a portion of these MX Classes may be exchanged for proportionate interests in the related REMIC Securities or in other subcombinations of the related MX Classes. Each subcombination may be effected only in proportions that result in the principal and interest entitlements of the Securities received being equal to the entitlements of the Securities surrendered. *See the example under “Description of the Securities — Modification and Exchange” in the Base Offering Circular.*

A Beneficial Owner proposing to effect an exchange must notify the Trustee through the Beneficial Owner's Book-Entry Depository participant. This notice must be received by the Trustee not later than two Business Days before the proposed exchange date. The exchange date can be any Business Day other than the last Business Day of the month. The notice must contain the outstanding principal or notional balances of the Securities to be included in the exchange and the proposed exchange date. The notice is required to be delivered to the Trustee by email to USBGNMTeam@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 2019-090. The Trustee may be contacted by telephone at (617) 603-6451 and by fax at (617) 603-6644.

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

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

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

YIELD, MATURITY AND PREPAYMENT CONSIDERATIONS

General

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

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

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

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

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

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

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

Investors in the Group 4 and 5 Securities are urged to review the discussion under "Risk Factors — *The rate of payments on the underlying certificates will directly affect the rate of payments on the group 4 and 5 securities*" in this Supplement.

Accretion Directed Classes

Classes AC, AY, AZ, BA, CA, CB, CZ, DB, DL, EA, FG, GY, JA, NA, NY and ZC 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 IJ, IO and SG is a Notional Class whose Class Notional Balance is determined by reference to the Class Principal Balance of the related Accretion Directed Class shown under "Terms Sheet — Notional Classes" in this Supplement.

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

Securities that Receive Principal on the Basis of Schedules

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

Each PAC and Scheduled 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 and Scheduled Classes are as follows:

	<u>Initial Effective Ranges</u>
PAC Classes	
AC, AY and AZ (in the aggregate)	200% PSA through 400% PSA
BA and ZC (in the aggregate)	165% PSA through 400% PSA
CA, CZ and EA (in the aggregate)	200% PSA through 300% PSA
CB	175% PSA through 250% PSA
DB and DL (in the aggregate)	150% PSA through 300% PSA
FG, GY, NA and NY (in the aggregate)	175% PSA through 300% PSA
Scheduled Class	
JA	149% PSA through 182% PSA

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

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

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

Moreover, the related Mortgage Loans will not prepay at any *constant* rate. Non-constant prepayment rates can cause any PAC or Scheduled Class not to receive Scheduled Payments, even if prepayment rates remain within the initial Effective Range for that Class. Further, the Effective Range for any PAC or Scheduled 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 or Scheduled Class, the amount available to pay principal on the Securities may be insufficient to produce Scheduled Payments on such related PAC or Scheduled 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 or Scheduled Class, its supporting Class may be retired earlier than that PAC or Scheduled Class, and its Weighted Average Life may be shortened, perhaps significantly.

Assumability

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

Final Distribution Date

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

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

Modeling Assumptions

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

1. The Mortgage Loans underlying the Group 1, 2, 3, 6, 7, 8, 9, 10 and 11 Trust Assets have the assumed characteristics shown under “Assumed Characteristics of the Mortgage Loans Underlying the Group 1, 2, 3, 6, 7, 8, 9, 10 and 11 Trust Assets” in the Terms Sheet, except in the case of information set forth under the 0% PSA Prepayment Assumption Rate, for which each Mortgage Loan underlying a Group 1, 2, 3, 6, 7, 8, 9, 10 and 11 Trust Asset is assumed to have an original and a remaining term to maturity of 360 months a Mortgage Rate of 1.50% per annum higher than the related Certificate Rate.
2. The Mortgage Loans prepay at the constant percentages of PSA (described below) shown in the related table.
3. Distributions on the Securities are always received on the 20th day of the month whether or not a Business Day, commencing in August 2019.
4. A termination of the Trust, any Trust REMIC or the Underlying Trusts does not occur.
5. The Closing Date for the Securities is July 30, 2019.
6. No expenses or fees are paid by the Trust other than the Trustee Fee, which is paid as described under “The Trust Assets — The Trustee Fee” in this Supplement.
7. Distributions on the Underlying Certificates are made as described in the related Underlying Certificate Disclosure Documents.
8. Each Class is held from the Closing Date and is not exchanged in whole or in part.

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

- For example, most of the Mortgage Loans will not have the characteristics assumed, many Distribution Dates will occur on a Business Day after the 20th day of the month, and the Trustee may cause a termination of the Trust as described under “Description of the Securities — Termination” in this Supplement.

- In addition, distributions on the Securities are based on Certificate Factors and Calculated Certificate Factors, as applicable, which may not reflect actual receipts on the Trust Assets.

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

Decrement Tables

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

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

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

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

- 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,
- summing the results, and
- dividing the sum by the aggregate amount of the assumed net reductions in principal balance or notional balance, as applicable, referred to in clause (a).

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

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

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

Security Group 1 PSA Prepayment Assumption Rates					
Distribution Date	Classes FA, FB, SA and SB				
	0%	150%	300%	450%	600%
Initial Percent	100	100	100	100	100
July 2020	99	96	93	90	87
July 2021	97	88	80	71	64
July 2022	96	79	64	51	40
July 2023	95	70	52	37	25
July 2024	93	63	42	26	16
July 2025	91	56	33	19	10
July 2026	90	50	27	13	6
July 2027	88	44	21	10	4
July 2028	86	39	17	7	2
July 2029	84	35	14	5	1
July 2030	81	30	11	3	1
July 2031	79	27	9	2	1
July 2032	77	23	7	2	0
July 2033	74	21	5	1	0
July 2034	71	18	4	1	0
July 2035	68	15	3	1	0
July 2036	65	13	3	0	0
July 2037	61	11	2	0	0
July 2038	58	10	2	0	0
July 2039	54	8	1	0	0
July 2040	50	7	1	0	0
July 2041	46	6	1	0	0
July 2042	41	5	0	0	0
July 2043	36	4	0	0	0
July 2044	31	3	0	0	0
July 2045	26	2	0	0	0
July 2046	20	1	0	0	0
July 2047	14	1	0	0	0
July 2048	7	0	0	0	0
July 2049	0	0	0	0	0
Weighted Average Life (years)	19.3	8.8	5.4	3.9	3.1

Security Group 2 PSA Prepayment Assumption Rates															
Distribution Date	Class BZ					Classes CB and IO					Classes DF and DS				
	0%	175%	220%	250%	500%	0%	175%	220%	250%	500%	0%	175%	220%	250%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2020	103	103	94	88	40	98	94	94	94	94	99	95	94	94	89
July 2021	106	106	80	62	0	96	84	84	84	76	97	86	84	82	69
July 2022	109	109	63	33	0	94	72	72	72	52	96	76	71	69	47
July 2023	113	113	53	15	0	92	62	62	62	36	94	67	61	57	32
July 2024	116	116	47	4	0	90	52	52	52	25	92	58	52	47	22
July 2025	120	120	45	0	0	88	44	44	44	17	91	51	44	39	15
July 2026	123	122	45	0	0	85	36	36	36	11	89	45	37	33	10
July 2027	127	121	44	0	0	83	30	30	30	8	87	39	31	27	7
July 2028	131	118	42	0	0	80	25	25	25	5	85	34	26	22	5
July 2029	135	112	39	0	0	77	20	20	20	4	83	29	22	18	3
July 2030	139	106	36	0	0	74	17	17	17	2	80	25	19	15	2
July 2031	143	98	33	0	0	71	14	14	14	2	78	22	16	12	1
July 2032	148	90	30	0	0	67	11	11	11	1	75	19	13	10	1
July 2033	152	82	27	0	0	64	9	9	9	1	72	16	11	8	1
July 2034	157	73	24	0	0	60	7	7	7	0	69	14	9	7	0
July 2035	162	65	21	0	0	56	6	6	6	0	66	12	7	5	0
July 2036	166	58	18	0	0	52	5	5	5	0	63	10	6	4	0
July 2037	171	50	15	0	0	48	4	4	4	0	60	8	5	3	0
July 2038	177	44	13	0	0	43	3	3	3	0	56	7	4	3	0
July 2039	182	37	11	0	0	38	2	2	2	0	52	6	3	2	0
July 2040	188	31	9	0	0	33	2	2	2	0	48	5	3	2	0
July 2041	193	26	7	0	0	28	1	1	1	0	44	4	2	1	0
July 2042	199	21	6	0	0	22	1	1	1	0	40	3	2	1	0
July 2043	205	17	5	0	0	17	1	1	1	0	35	2	1	1	0
July 2044	212	13	3	0	0	10	1	1	1	0	30	2	1	1	0
July 2045	218	9	2	0	0	4	0	0	0	0	24	1	1	0	0
July 2046	193	6	2	0	0	0	0	0	0	0	19	1	0	0	0
July 2047	132	3	1	0	0	0	0	0	0	0	13	0	0	0	0
July 2048	68	1	0	0	0	0	0	0	0	0	7	0	0	0	0
July 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	28.3	17.2	8.7	2.5	0.9	16.2	6.6	6.6	6.6	3.9	19.0	7.9	6.8	6.2	3.6

**Security Group 3
PSA Prepayment Assumption Rates**

Distribution Date	Classes IJ and JA					Class JZ				
	0%	100%	160%	300%	400%	0%	100%	160%	300%	400%
Initial Percent	100	100	100	100	100	100	100	100	100	100
July 2020	98	96	95	95	95	104	104	100	50	14
July 2021	96	90	87	84	79	107	107	95	0	0
July 2022	95	82	77	68	59	111	111	88	0	0
July 2023	93	75	68	54	44	115	115	84	0	0
July 2024	90	68	60	44	33	119	119	82	0	0
July 2025	88	62	52	35	24	123	123	82	0	0
July 2026	86	56	45	28	18	128	128	84	0	0
July 2027	84	51	39	22	13	132	132	85	0	0
July 2028	81	45	34	18	10	137	137	85	0	0
July 2029	78	40	29	14	7	142	142	83	0	0
July 2030	76	36	25	11	5	147	147	80	0	0
July 2031	73	32	22	9	4	152	152	77	0	0
July 2032	70	27	19	7	3	158	158	72	0	0
July 2033	66	24	16	5	2	163	163	67	0	0
July 2034	63	20	13	4	1	169	169	62	0	0
July 2035	59	17	11	3	1	175	175	57	0	0
July 2036	56	14	10	3	1	181	181	51	0	0
July 2037	52	11	8	2	1	188	188	46	0	0
July 2038	48	8	7	2	0	194	194	41	0	0
July 2039	43	5	5	1	0	201	196	36	0	0
July 2040	39	4	4	1	0	208	173	31	0	0
July 2041	34	4	4	1	0	216	151	26	0	0
July 2042	29	3	3	0	0	223	129	22	0	0
July 2043	24	2	2	0	0	231	108	18	0	0
July 2044	18	2	2	0	0	240	87	14	0	0
July 2045	12	1	1	0	0	248	67	11	0	0
July 2046	6	1	1	0	0	257	48	7	0	0
July 2047	0	0	0	0	0	251	30	4	0	0
July 2048	0	0	0	0	0	130	12	2	0	0
July 2049	0	0	0	0	0	0	0	0	0	0
Weighted Average										
Life (years)	17.1	9.3	7.9	5.6	4.5	29.0	24.5	16.0	1.0	0.7

**Security Group 4
PSA Prepayment Assumption Rates**

Distribution Date	Class IM				
	0%	200%	400%	600%	800%
Initial Percent	100	100	100	100	100
July 2020	98	87	75	63	52
July 2021	96	75	56	40	26
July 2022	95	65	42	25	13
July 2023	93	56	31	16	7
July 2024	90	48	23	10	3
July 2025	88	41	17	6	2
July 2026	86	35	13	4	1
July 2027	83	30	9	2	0
July 2028	81	26	7	1	0
July 2029	78	22	5	1	0
July 2030	75	18	4	1	0
July 2031	72	16	3	0	0
July 2032	69	13	2	0	0
July 2033	66	11	1	0	0
July 2034	62	9	1	0	0
July 2035	59	8	1	0	0
July 2036	55	6	1	0	0
July 2037	51	5	0	0	0
July 2038	46	4	0	0	0
July 2039	42	3	0	0	0
July 2040	37	3	0	0	0
July 2041	32	2	0	0	0
July 2042	27	1	0	0	0
July 2043	22	1	0	0	0
July 2044	16	1	0	0	0
July 2045	10	0	0	0	0
July 2046	4	0	0	0	0
July 2047	0	0	0	0	0
July 2048	0	0	0	0	0
Weighted Average					
Life (years)	16.9	6.4	3.4	2.2	1.5

**Security Group 5
PSA Prepayment Assumption Rates**

Distribution Date	Class IH				
	0%	200%	400%	600%	800%
Initial Percent	100	100	100	100	100
July 2020	98	88	77	67	56
July 2021	97	76	58	42	29
July 2022	95	66	43	26	15
July 2023	93	57	32	16	7
July 2024	91	49	24	10	4
July 2025	89	42	18	6	2
July 2026	86	36	13	4	1
July 2027	84	31	10	3	0
July 2028	82	26	7	2	0
July 2029	79	23	5	1	0
July 2030	76	19	4	1	0
July 2031	73	16	3	0	0
July 2032	70	14	2	0	0
July 2033	67	12	1	0	0
July 2034	64	10	1	0	0
July 2035	60	8	1	0	0
July 2036	57	7	1	0	0
July 2037	53	5	0	0	0
July 2038	49	4	0	0	0
July 2039	44	4	0	0	0
July 2040	40	3	0	0	0
July 2041	35	2	0	0	0
July 2042	30	2	0	0	0
July 2043	25	1	0	0	0
July 2044	19	1	0	0	0
July 2045	13	0	0	0	0
July 2046	7	0	0	0	0
July 2047	1	0	0	0	0
July 2048	0	0	0	0	0
Weighted Average					
Life (years)	17.3	6.5	3.5	2.3	1.6

**Security Group 6
PSA Prepayment Assumption Rates**

Distribution Date	Classes DA, DB, DC, DE, DG and DI					Class DL					Class DZ				
	0%	150%	200%	300%	400%	0%	150%	200%	300%	400%	0%	150%	200%	300%	400%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2020	97	94	94	94	94	100	100	100	100	100	104	104	99	89	80
July 2021	94	83	83	83	83	100	100	100	100	100	107	107	92	63	34
July 2022	92	70	70	70	67	100	100	100	100	100	111	111	84	33	0
July 2023	88	58	58	58	49	100	100	100	100	100	115	115	79	13	0
July 2024	85	48	48	48	35	100	100	100	100	100	119	119	76	3	0
July 2025	82	38	38	38	25	100	100	100	100	100	123	123	76	0	0
July 2026	78	29	29	29	17	100	100	100	100	100	128	126	76	0	0
July 2027	75	22	22	22	11	100	100	100	100	100	132	124	74	0	0
July 2028	71	17	17	17	7	100	100	100	100	100	137	120	70	0	0
July 2029	67	12	12	12	4	100	100	100	100	100	142	114	65	0	0
July 2030	62	9	9	9	2	100	100	100	100	100	147	107	60	0	0
July 2031	58	6	6	6	0	100	100	100	100	100	152	99	54	0	0
July 2032	53	4	4	4	0	100	100	100	100	74	158	90	48	0	0
July 2033	48	2	2	2	0	100	100	100	100	54	163	82	43	0	0
July 2034	43	1	1	1	0	100	100	100	100	39	169	73	38	0	0
July 2035	38	0	0	0	0	100	87	87	87	28	175	65	33	0	0
July 2036	32	0	0	0	0	100	68	68	68	20	181	58	28	0	0
July 2037	27	0	0	0	0	100	52	52	52	14	188	50	24	0	0
July 2038	20	0	0	0	0	100	40	40	40	10	194	43	20	0	0
July 2039	14	0	0	0	0	100	30	30	30	7	201	37	17	0	0
July 2040	7	0	0	0	0	100	23	23	23	5	208	31	14	0	0
July 2041	0	0	0	0	0	100	17	17	17	3	216	26	11	0	0
July 2042	0	0	0	0	0	12	12	12	12	2	210	21	9	0	0
July 2043	0	0	0	0	0	9	9	9	9	2	185	17	7	0	0
July 2044	0	0	0	0	0	6	6	6	6	1	158	13	5	0	0
July 2045	0	0	0	0	0	4	4	4	4	1	129	10	4	0	0
July 2046	0	0	0	0	0	2	2	2	2	0	100	7	2	0	0
July 2047	0	0	0	0	0	1	1	1	1	0	68	4	1	0	0
July 2048	0	0	0	0	0	0	0	0	0	0	35	1	1	0	0
July 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average															
Life (years)	12.9	5.4	5.4	5.4	4.5	22.7	19.0	19.0	19.0	15.1	26.6	17.0	12.5	2.5	1.6

**Security Group 7
PSA Prepayment Assumption Rates**

Distribution Date	Classes FG and SG					Classes GA, GB, GC, GD, GE and IG					Classes GF and GS					Class GY				
	0%	175%	210%	300%	500%	0%	175%	210%	300%	500%	0%	175%	210%	300%	500%	0%	175%	210%	300%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2020	98	94	94	94	94	98	94	94	94	94	99	96	95	93	90	100	100	100	100	100
July 2021	96	84	84	84	82	96	83	83	83	82	97	87	85	81	70	100	100	100	100	100
July 2022	93	71	71	71	57	93	70	70	70	56	96	77	73	65	49	100	100	100	100	100
July 2023	91	59	59	59	39	91	58	58	58	38	95	68	63	52	33	100	100	100	100	100
July 2024	88	49	49	49	27	88	48	48	48	25	93	59	54	42	23	100	100	100	100	100
July 2025	85	39	39	39	18	85	38	38	38	16	91	52	46	34	16	100	100	100	100	100
July 2026	83	32	32	32	13	82	30	30	30	11	90	45	39	27	11	100	100	100	100	100
July 2027	80	25	25	25	9	79	24	24	24	6	88	40	34	22	7	100	100	100	100	100
July 2028	76	20	20	20	6	76	18	18	18	4	86	35	29	17	5	100	100	100	100	100
July 2029	73	16	16	16	4	72	14	14	14	2	84	30	24	14	3	100	100	100	100	100
July 2030	69	13	13	13	3	69	11	11	11	0	81	26	21	11	2	100	100	100	100	100
July 2031	65	10	10	10	2	65	8	8	8	0	79	23	17	9	2	100	100	100	100	81
July 2032	61	8	8	8	1	61	6	6	6	0	77	19	15	7	1	100	100	100	100	55
July 2033	57	6	6	6	1	56	4	4	4	0	74	17	12	5	1	100	100	100	100	37
July 2034	53	5	5	5	1	52	3	3	3	0	71	14	10	4	0	100	100	100	100	25
July 2035	48	4	4	4	0	47	2	2	2	0	68	12	9	3	0	100	100	100	100	16
July 2036	43	3	3	3	0	42	1	1	1	0	65	10	7	3	0	100	100	100	100	11
July 2037	38	2	2	2	0	36	0	0	0	0	61	9	6	2	0	100	100	100	100	7
July 2038	32	2	2	2	0	30	0	0	0	0	58	7	5	2	0	100	79	79	79	5
July 2039	26	1	1	1	0	24	0	0	0	0	54	6	4	1	0	100	60	60	60	3
July 2040	20	1	1	1	0	18	0	0	0	0	50	5	3	1	0	100	45	45	45	2
July 2041	13	1	1	1	0	11	0	0	0	0	46	4	2	1	0	100	34	34	34	1
July 2042	6	1	1	1	0	4	0	0	0	0	41	3	2	0	0	100	25	25	25	1
July 2043	0	0	0	0	0	0	0	0	0	0	36	2	1	0	0	17	17	17	17	0
July 2044	0	0	0	0	0	0	0	0	0	0	31	2	1	0	0	12	12	12	12	0
July 2045	0	0	0	0	0	0	0	0	0	0	26	1	1	0	0	8	8	8	8	0
July 2046	0	0	0	0	0	0	0	0	0	0	20	1	0	0	0	5	5	5	5	0
July 2047	0	0	0	0	0	0	0	0	0	0	14	1	0	0	0	3	3	3	3	0
July 2048	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	1	1	1	1	0
July 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	14.5	6.0	6.0	6.0	4.1	14.2	5.6	5.6	5.6	3.8	19.3	8.0	7.1	5.5	3.7	24.1	21.4	21.4	21.4	14.0

PSA Prepayment Assumption Rates

Distribution Date	Classes IN, NA, NB, NC, ND, NE and NG					Class NY					Class ZP				
	0%	175%	210%	300%	500%	0%	175%	210%	300%	500%	0%	175%	210%	300%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2020	98	94	94	94	94	100	100	100	100	100	104	104	100	89	65
July 2021	95	83	83	83	81	100	100	100	100	100	108	108	95	62	0
July 2022	93	69	69	69	54	100	100	100	100	100	113	113	89	30	0
July 2023	90	56	56	56	34	100	100	100	100	100	117	117	86	11	0
July 2024	87	45	45	45	21	100	100	100	100	100	122	122	85	2	0
July 2025	84	35	35	35	12	100	100	100	100	100	127	127	87	0	0
July 2026	81	26	26	26	6	100	100	100	100	100	132	128	87	0	0
July 2027	78	20	20	20	2	100	100	100	100	100	138	126	84	0	0
July 2028	74	14	14	14	0	100	100	100	100	75	143	121	79	0	0
July 2029	71	10	10	10	0	100	100	100	100	36	149	114	74	0	0
July 2030	67	6	6	6	0	100	100	100	100	9	155	106	68	0	0
July 2031	63	3	3	3	0	100	100	100	100	0	161	97	61	0	0
July 2032	58	1	1	1	0	100	100	100	100	0	168	88	55	0	0
July 2033	54	0	0	0	0	100	84	84	84	0	175	79	48	0	0
July 2034	49	0	0	0	0	100	56	56	56	0	182	71	42	0	0
July 2035	44	0	0	0	0	100	34	34	34	0	189	62	37	0	0
July 2036	39	0	0	0	0	100	16	16	16	0	197	55	32	0	0
July 2037	33	0	0	0	0	100	2	2	2	0	205	47	27	0	0
July 2038	27	0	0	0	0	100	0	0	0	0	214	41	23	0	0
July 2039	20	0	0	0	0	100	0	0	0	0	222	34	19	0	0
July 2040	14	0	0	0	0	100	0	0	0	0	231	29	16	0	0
July 2041	7	0	0	0	0	100	0	0	0	0	241	24	13	0	0
July 2042	0	0	0	0	0	84	0	0	0	0	251	19	10	0	0
July 2043	0	0	0	0	0	0	0	0	0	0	252	15	8	0	0
July 2044	0	0	0	0	0	0	0	0	0	0	216	12	6	0	0
July 2045	0	0	0	0	0	0	0	0	0	0	178	8	4	0	0
July 2046	0	0	0	0	0	0	0	0	0	0	138	6	3	0	0
July 2047	0	0	0	0	0	0	0	0	0	0	95	3	2	0	0
July 2048	0	0	0	0	0	0	0	0	0	0	49	1	1	0	0
July 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	13.8	5.1	5.1	5.1	3.5	23.2	15.4	15.4	15.4	9.7	27.1	16.5	13.6	2.5	1.2

Security Groups 1 and 7 PSA Prepayment Assumption Rates								
Distribution Date	Classes BF and BS							
	0%	150%	175%	210%	300%	450%	500%	600%
Initial Percent	100	100	100	100	100	100	100	100
July 2020	99	96	95	95	93	91	90	88
July 2021	97	88	87	85	80	72	70	65
July 2022	96	79	77	73	65	52	48	41
July 2023	95	71	67	63	52	37	33	26
July 2024	93	63	59	54	42	27	23	16
July 2025	91	56	52	46	34	19	16	10
July 2026	90	50	45	39	27	14	11	6
July 2027	88	44	40	34	22	10	7	4
July 2028	86	39	34	29	17	7	5	2
July 2029	84	35	30	24	14	5	3	2
July 2030	81	31	26	21	11	3	2	1
July 2031	79	27	22	17	9	2	2	1
July 2032	77	24	19	15	7	2	1	0
July 2033	74	21	17	12	5	1	1	0
July 2034	71	18	14	10	4	1	0	0
July 2035	68	16	12	9	3	1	0	0
July 2036	65	13	10	7	3	0	0	0
July 2037	61	12	9	6	2	0	0	0
July 2038	58	10	7	5	2	0	0	0
July 2039	54	8	6	4	1	0	0	0
July 2040	50	7	5	3	1	0	0	0
July 2041	46	6	4	2	1	0	0	0
July 2042	41	5	3	2	0	0	0	0
July 2043	36	4	2	1	0	0	0	0
July 2044	31	3	2	1	0	0	0	0
July 2045	26	2	1	1	0	0	0	0
July 2046	20	1	1	0	0	0	0	0
July 2047	14	1	1	0	0	0	0	0
July 2048	7	0	0	0	0	0	0	0
July 2049	0	0	0	0	0	0	0	0
Weighted Average Life (years)	19.3	8.8	8.0	7.1	5.5	4.0	3.6	3.1

Security Group 8 PSA Prepayment Assumption Rates															
Distribution Date	Classes AB and F					Class SE					Class SH				
	0%	150%	300%	450%	600%	0%	150%	300%	450%	600%	0%	150%	300%	450%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2020	99	96	94	92	89	99	96	94	92	89	99	96	94	92	89
July 2021	97	89	81	74	67	97	89	81	74	67	97	89	81	74	67
July 2022	96	80	66	54	43	96	80	66	54	43	96	80	66	54	43
July 2023	94	71	53	38	27	94	71	53	38	27	94	71	53	38	27
July 2024	92	63	43	27	17	92	63	43	27	17	92	63	43	27	17
July 2025	91	56	34	20	11	91	56	34	20	11	91	56	34	20	11
July 2026	89	50	27	14	7	89	50	27	14	7	89	50	27	14	7
July 2027	87	44	22	10	4	87	44	22	10	4	87	44	22	10	4
July 2028	85	39	17	7	3	85	39	17	7	3	85	39	17	7	3
July 2029	83	35	14	5	2	83	35	14	5	2	83	35	14	5	2
July 2030	80	30	11	4	1	80	30	11	4	1	80	30	11	4	1
July 2031	78	27	9	2	1	78	27	9	2	1	78	27	9	2	1
July 2032	75	23	7	2	0	75	23	7	2	0	75	23	7	2	0
July 2033	72	20	5	1	0	72	20	5	1	0	72	20	5	1	0
July 2034	69	18	4	1	0	69	18	4	1	0	69	18	4	1	0
July 2035	66	15	3	1	0	66	15	3	1	0	66	15	3	1	0
July 2036	63	13	3	0	0	63	13	3	0	0	63	13	3	0	0
July 2037	60	11	2	0	0	60	11	2	0	0	60	11	2	0	0
July 2038	56	10	2	0	0	56	10	2	0	0	56	10	2	0	0
July 2039	52	8	1	0	0	52	8	1	0	0	52	8	1	0	0
July 2040	48	7	1	0	0	48	7	1	0	0	48	7	1	0	0
July 2041	44	6	1	0	0	44	6	1	0	0	44	6	1	0	0
July 2042	40	4	0	0	0	40	4	0	0	0	40	4	0	0	0
July 2043	35	4	0	0	0	35	4	0	0	0	35	4	0	0	0
July 2044	30	3	0	0	0	30	3	0	0	0	30	3	0	0	0
July 2045	24	2	0	0	0	24	2	0	0	0	24	2	0	0	0
July 2046	19	1	0	0	0	19	1	0	0	0	19	1	0	0	0
July 2047	13	1	0	0	0	13	1	0	0	0	13	1	0	0	0
July 2048	7	0	0	0	0	7	0	0	0	0	7	0	0	0	0
July 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	19.0	8.8	5.5	4.0	3.2	19.0	8.8	5.5	4.0	3.2	19.0	8.8	5.5	4.0	3.2

**Security Group 9
PSA Prepayment Assumption Rates**

Distribution Date	Classes AC, AD, AE, AG, AH, AI, AJ and AK					Classes AF and S					Classes AL, AM, AN, AP, AQ, AT, AW and IA					Class AY				
	0%	200%	250%	400%	500%	0%	200%	250%	400%	500%	0%	200%	250%	400%	500%	0%	200%	250%	400%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2020	97	93	93	93	93	99	96	95	93	91	98	94	94	94	94	100	100	100	100	100
July 2021	95	80	80	80	80	97	87	84	77	72	95	82	82	82	82	100	100	100	100	100
July 2022	92	64	64	64	60	96	75	71	58	50	93	66	66	66	63	100	100	100	100	100
July 2023	89	49	49	49	39	95	65	59	43	34	90	52	52	52	43	100	100	100	100	100
July 2024	86	36	36	36	24	93	56	49	32	24	87	40	40	40	30	100	100	100	100	100
July 2025	83	24	24	24	14	91	48	41	24	16	84	30	30	30	20	100	100	100	100	100
July 2026	79	16	16	16	7	90	42	34	18	11	81	22	22	22	14	100	100	100	100	100
July 2027	76	10	10	10	2	88	36	28	13	8	77	16	16	16	9	100	100	100	100	100
July 2028	72	5	5	5	0	86	31	23	10	5	74	12	12	12	6	100	100	100	100	85
July 2029	68	2	2	2	0	84	26	19	7	4	70	9	9	9	4	100	100	100	100	57
July 2030	64	0	0	0	0	81	22	16	5	2	66	6	6	6	3	100	87	87	87	37
July 2031	59	0	0	0	0	79	19	13	4	2	62	5	5	5	2	100	63	63	63	24
July 2032	55	0	0	0	0	77	16	11	3	1	58	3	3	3	1	100	45	45	45	15
July 2033	50	0	0	0	0	74	14	9	2	1	53	2	2	2	1	100	32	32	32	9
July 2034	44	0	0	0	0	71	11	7	2	0	49	2	2	2	0	100	22	22	22	5
July 2035	39	0	0	0	0	68	10	6	1	0	44	1	1	1	0	100	15	15	15	2
July 2036	33	0	0	0	0	65	8	5	1	0	38	1	1	1	0	100	10	10	10	0
July 2037	27	0	0	0	0	61	7	4	1	0	33	0	0	0	0	100	6	6	6	0
July 2038	21	0	0	0	0	58	5	3	0	0	27	0	0	0	0	100	3	3	3	0
July 2039	14	0	0	0	0	54	4	2	0	0	20	0	0	0	0	100	1	1	1	0
July 2040	7	0	0	0	0	50	4	2	0	0	14	0	0	0	0	100	0	0	0	0
July 2041	0	0	0	0	0	46	3	1	0	0	7	0	0	0	0	93	0	0	0	0
July 2042	0	0	0	0	0	41	2	1	0	0	0	0	0	0	0	0	0	0	0	0
July 2043	0	0	0	0	0	36	2	1	0	0	0	0	0	0	0	0	0	0	0	0
July 2044	0	0	0	0	0	31	1	1	0	0	0	0	0	0	0	0	0	0	0	0
July 2045	0	0	0	0	0	26	1	0	0	0	0	0	0	0	0	0	0	0	0	0
July 2046	0	0	0	0	0	20	1	0	0	0	0	0	0	0	0	0	0	0	0	0
July 2047	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0
July 2048	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
July 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	13.0	4.3	4.3	4.3	3.7	19.3	7.4	6.4	4.5	3.7	13.7	5.0	5.0	5.0	4.2	22.5	13.4	13.4	13.4	10.9

PSA Prepayment Assumption Rates

Distribution Date	Class AZ					Classes SJ					Class SL					Class UZ				
	0%	200%	250%	400%	500%	0%	200%	250%	400%	500%	0%	200%	250%	400%	500%	0%	200%	250%	400%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2020	103	103	103	103	103	99	96	95	93	91	99	96	95	93	91	103	103	99	89	81
July 2021	106	106	106	106	106	97	87	84	77	72	97	87	84	77	72	106	106	94	58	35
July 2022	109	109	109	109	109	96	75	71	58	50	96	75	71	58	50	109	109	87	25	0
July 2023	113	113	113	113	113	95	65	59	43	34	95	65	59	43	34	113	113	83	7	0
July 2024	116	116	116	116	116	93	56	49	32	24	93	56	49	32	24	116	116	82	0	0
July 2025	120	120	120	120	120	91	48	41	24	16	91	48	41	24	16	120	118	82	0	0
July 2026	123	123	123	123	123	90	42	34	18	11	90	42	34	18	11	123	115	78	0	0
July 2027	127	127	127	127	127	88	36	28	13	8	88	36	28	13	8	127	109	73	0	0
July 2028	131	131	131	131	131	86	31	23	10	5	86	31	23	10	5	131	101	66	0	0
July 2029	135	135	135	135	135	84	26	19	7	4	84	26	19	7	4	135	92	58	0	0
July 2030	139	139	139	139	139	81	22	16	5	2	81	22	16	5	2	139	82	51	0	0
July 2031	143	143	143	143	143	79	19	13	4	2	79	19	13	4	2	143	73	44	0	0
July 2032	148	148	148	148	148	77	16	11	3	1	77	16	11	3	1	148	64	38	0	0
July 2033	152	152	152	152	152	74	14	9	2	1	74	14	9	2	1	152	56	32	0	0
July 2034	157	157	157	157	157	71	11	7	2	0	71	11	7	2	0	157	48	27	0	0
July 2035	162	162	162	162	162	68	10	6	1	0	68	10	6	1	0	162	41	23	0	0
July 2036	166	166	166	166	161	65	8	5	1	0	65	8	5	1	0	166	35	19	0	0
July 2037	171	171	171	171	106	61	7	4	1	0	61	7	4	1	0	171	30	15	0	0
July 2038	177	177	177	177	70	58	5	3	0	0	58	5	3	0	0	177	25	12	0	0
July 2039	182	182	182	182	45	54	4	2	0	0	54	4	2	0	0	182	20	10	0	0
July 2040	188	148	148	148	29	50	4	2	0	0	50	4	2	0	0	188	17	8	0	0
July 2041	193	102	102	102	19	46	3	1	0	0	46	3	1	0	0	193	13	6	0	0
July 2042	69	69	69	69	12	41	2	1	0	0	41	2	1	0	0	198	11	5	0	0
July 2043	46	46	46	46	7	36	2	1	0	0	36	2	1	0	0	175	8	4	0	0
July 2044	30	30	30	30	4	31	1	1	0	0	31	1	1	0	0	150	6	3	0	0
July 2045	18	18	18	18	2	26	1	0	0	0	26	1	0	0	0	124	4	2	0	0
July 2046	10	10	10	10	1	20	1	0	0	0	20	1	0	0	0	95	3	1	0	0
July 2047	5	5	5	5	1	14	0	0	0	0	14	0	0	0	0	66	2	1	0	0
July 2048	2	2	2	2	0	7	0	0	0	0	7	0	0	0	0	34	1	0	0	0
July 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	23.7	22.9	22.9	22.9	19.3	19.3	7.4	6.4	4.5	3.7	19.3	7.4	6.4	4.5	3.7	26.8	14.6	11.5	2.3	1.7

Security Group 10
PSA Prepayment Assumption Rates

Distribution Date	Classes BA, BC, BD, BE, BG, BH, BJ, BK, BL, BM, BN, BP, BQ, BT and IB					Classes BI and HE					Class ZB					Class ZC				
	0%	165%	250%	400%	500%	0%	165%	250%	400%	500%	0%	165%	250%	400%	500%	0%	165%	250%	400%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2020	97	93	93	93	93	99	95	94	91	89	103	103	97	86	78	103	103	103	103	103
July 2021	94	81	81	81	81	97	87	82	74	69	106	106	87	55	34	106	106	106	106	106
July 2022	91	66	66	66	64	96	77	69	55	47	109	109	77	24	0	109	109	109	109	109
July 2023	88	53	53	53	44	95	68	57	41	33	113	113	70	7	0	113	113	113	113	113
July 2024	85	41	41	41	30	93	60	48	31	22	116	116	67	1	0	116	116	116	116	116
July 2025	82	31	31	31	20	91	53	40	23	15	120	119	66	0	0	120	120	120	120	120
July 2026	78	23	23	23	14	90	47	33	17	10	123	117	63	0	0	123	123	123	123	123
July 2027	74	17	17	17	9	88	41	27	13	7	127	112	58	0	0	127	127	127	127	127
July 2028	70	12	12	12	6	86	36	23	9	5	131	105	52	0	0	131	131	131	131	131
July 2029	66	9	9	9	4	84	32	19	7	3	135	97	46	0	0	135	135	135	135	135
July 2030	61	6	6	6	3	81	28	15	5	2	139	88	41	0	0	139	139	139	139	139
July 2031	57	5	5	5	2	79	24	13	4	2	143	80	35	0	0	143	143	143	143	143
July 2032	52	3	3	3	1	77	21	10	3	1	148	71	30	0	0	148	148	148	148	148
July 2033	47	2	2	2	1	74	18	9	2	1	152	63	25	0	0	152	152	152	152	152
July 2034	41	2	2	2	0	71	16	7	1	0	157	55	21	0	0	157	157	157	157	157
July 2035	36	1	1	1	0	68	13	6	1	0	162	48	18	0	0	162	162	162	162	148
July 2036	30	1	1	1	0	65	11	5	1	0	166	42	15	0	0	166	166	166	166	98
July 2037	23	0	0	0	0	61	10	4	1	0	171	36	12	0	0	171	171	171	171	65
July 2038	17	0	0	0	0	58	8	3	0	0	177	31	10	0	0	177	177	177	177	42
July 2039	10	0	0	0	0	54	7	2	0	0	182	26	8	0	0	182	130	130	130	27
July 2040	2	0	0	0	0	50	6	2	0	0	188	21	6	0	0	188	90	90	90	18
July 2041	0	0	0	0	0	46	5	1	0	0	178	18	5	0	0	62	62	62	62	11
July 2042	0	0	0	0	0	41	4	1	0	0	160	14	4	0	0	42	42	42	42	7
July 2043	0	0	0	0	0	36	3	1	0	0	141	11	3	0	0	28	28	28	28	4
July 2044	0	0	0	0	0	31	2	1	0	0	121	8	2	0	0	18	18	18	18	3
July 2045	0	0	0	0	0	26	2	0	0	0	100	6	1	0	0	11	11	11	11	1
July 2046	0	0	0	0	0	20	1	0	0	0	77	4	1	0	0	6	6	6	6	1
July 2047	0	0	0	0	0	14	1	0	0	0	53	2	0	0	0	3	3	3	3	0
July 2048	0	0	0	0	0	7	0	0	0	0	27	1	0	0	0	1	1	1	1	0
July 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	12.5	5.0	5.0	5.0	4.2	19.3	8.3	6.2	4.3	3.6	26.1	15.4	9.7	2.2	1.6	22.3	21.7	21.7	21.7	18.2

Security Group 11
PSA Prepayment Assumption Rates

Distribution Date	Classes CA, EA, EB, EC, ED, EG, EH, EM and IE					Class CZ					Classes EF and ES					Class PZ				
	0%	200%	240%	300%	500%	0%	200%	240%	300%	500%	0%	200%	240%	300%	500%	0%	200%	240%	300%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 2020	98	93	93	93	93	103	103	103	103	103	99	95	94	93	89	103	103	97	87	54
July 2021	96	82	82	82	77	106	106	106	106	106	97	85	83	79	68	106	106	87	58	0
July 2022	94	68	68	68	53	109	109	109	109	109	96	73	69	64	47	109	109	76	28	0
July 2023	91	56	56	56	36	113	113	113	113	113	94	63	58	51	32	113	113	70	10	0
July 2024	89	46	46	46	24	116	116	116	116	116	92	54	49	41	22	116	116	67	1	0
July 2025	87	36	36	36	16	120	120	120	120	120	91	47	41	33	15	120	119	68	0	0
July 2026	84	29	29	29	11	123	123	123	123	123	89	40	34	26	10	123	119	66	0	0
July 2027	81	23	23	23	7	127	127	127	127	127	87	34	28	21	7	127	115	63	0	0
July 2028	78	18	18	18	4	131	131	131	131	131	85	29	24	17	5	131	109	59	0	0
July 2029	75	14	14	14	2	135	135	135	135	135	83	25	20	13	3	135	102	54	0	0
July 2030	72	11	11	11	1	139	139	139	139	139	80	21	16	11	2	139	93	49	0	0
July 2031	68	8	8	8	0	143	143	143	143	143	78	18	13	8	1	143	84	43	0	0
July 2032	65	6	6	6	0	148	148	148	148	113	75	15	11	7	1	148	75	38	0	0
July 2033	61	4	4	4	0	152	152	152	152	76	72	13	9	5	1	152	67	33	0	0
July 2034	57	3	3	3	0	157	157	157	157	50	69	11	7	4	0	157	59	29	0	0
July 2035	53	2	2	2	0	162	162	162	162	34	66	9	6	3	0	162	51	24	0	0
July 2036	48	1	1	1	0	166	166	166	166	22	63	8	5	2	0	166	44	21	0	0
July 2037	44	0	0	0	0	171	171	171	171	15	60	6	4	2	0	171	37	17	0	0
July 2038	39	0	0	0	0	177	161	161	161	9	56	5	3	1	0	177	31	14	0	0
July 2039	34	0	0	0	0	182	122	122	122	6	52	4	2	1	0	182	26	12	0	0
July 2040	28	0	0	0	0	188	91	91	91	4	48	3	2	1	0	188	22	9	0	0
July 2041	23	0	0	0	0	193	67	67	67	2	44	3	1	1	0	193	17	7	0	0
July 2042	17	0	0	0	0	199	49	49	49	2	40	2	1	0	0	199	14	6	0	0
July 2043	10	0	0	0	0	205	34	34	34	1	35	2	1	0	0	205	11	4	0	0
July 2044	4	0	0	0	0	212	23	23	23	1	30	1	1	0	0	212	8	3	0	0
July 2045	0	0	0	0	0	15	15	15	15	0	24	1	0	0	0	210	6	2	0	0
July 2046	0	0	0	0	0	9	9	9	9	0	19	0	0	0	0	162	4	1	0	0
July 2047	0	0	0	0	0	4	4	4	4	0	13	0	0	0	0	111	2	1	0	0
July 2048	0	0	0	0	0	1	1	1	1	0	7	0	0	0	0	57	0	0	0	0
July 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	15.5	5.5	5.5	5.5	3.8	25.8	21.8	21.8	21.8	14.8	19.0	7.2	6.3	5.4	3.6	28.0	15.7	10.7	2.3	1.0

**Security Groups 2 and 11
PSA Prepayment Assumption Rates**

	Classes FD and SD							
Distribution Date	0%	175%	200%	220%	240%	250%	300%	500%
Initial Percent . . .	100	100	100	100	100	100	100	100
July 2020	99	95	95	94	94	94	93	89
July 2021	97	86	85	84	83	82	79	68
July 2022	96	76	73	71	69	69	64	47
July 2023	94	67	63	61	58	57	51	32
July 2024	92	58	54	52	49	47	41	22
July 2025	91	51	47	44	41	39	33	15
July 2026	89	44	40	37	34	33	26	10
July 2027	87	39	34	31	28	27	21	7
July 2028	85	34	29	26	24	22	17	5
July 2029	83	29	25	22	20	18	13	3
July 2030	80	25	21	19	16	15	11	2
July 2031	78	22	18	16	13	12	8	1
July 2032	75	19	15	13	11	10	7	1
July 2033	72	16	13	11	9	8	5	1
July 2034	69	14	11	9	7	7	4	0
July 2035	66	12	9	7	6	5	3	0
July 2036	63	10	8	6	5	4	2	0
July 2037	60	8	6	5	4	3	2	0
July 2038	56	7	5	4	3	3	1	0
July 2039	52	6	4	3	2	2	1	0
July 2040	48	5	3	3	2	2	1	0
July 2041	44	4	3	2	1	1	1	0
July 2042	40	3	2	2	1	1	0	0
July 2043	35	2	2	1	1	1	0	0
July 2044	30	2	1	1	1	0	0	0
July 2045	24	1	1	1	0	0	0	0
July 2046	19	1	1	0	0	0	0	0
July 2047	13	0	0	0	0	0	0	0
July 2048	7	0	0	0	0	0	0	0
July 2049	0	0	0	0	0	0	0	0
Weighted Average Life (years)	19.0	7.9	7.2	6.8	6.3	6.2	5.4	3.6

Yield Considerations

An investor seeking to maximize yield should make a decision whether to invest in any Regular or MX Class based on the anticipated yield of that Class resulting from its purchase price, the investor's own projection of Mortgage Loan prepayment rates under a variety of scenarios, in the case of the Group 4 and 5 Securities, the investor's own projection of payment rates on the Underlying Certificates under a variety of scenarios and, in the case of a Floating Rate or an Inverse Floating Rate Class, the investor's own projection of levels of LIBOR under a variety of scenarios. **No representation is made regarding Mortgage Loan prepayment rates, Underlying Certificate payment rates, LIBOR levels or the yield of any Class.**

Prepayments: Effect on Yields

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

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

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

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

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

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

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

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

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

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

Payment Delay: Effect on Yields of the Fixed Rate Classes

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

Yield Tables

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

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

The yields were calculated by

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

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

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

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

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

SECURITY GROUP 1

Sensitivity of Class SA to Prepayments Assumed Price 5.5%*

LIBOR	PSA Prepayment Assumption Rates			
	150%	300%	450%	600%
1.000%	35.3%	27.5%	19.6%	11.5%
2.398%	6.0%	(2.5)%	(11.4)%	(20.6)%
2.849%	(4.2)%	(12.9)%	(22.1)%	(31.7)%
3.300% and above	**	**	**	**

Sensitivity of Class SB to Prepayments Assumed Price 17.5%*

LIBOR	PSA Prepayment Assumption Rates			
	150%	300%	450%	600%
1.000%	21.1%	13.0%	4.6%	(4.0)%
2.398%	11.9%	3.6%	(5.1)%	(14.1)%
4.274%	(0.8)%	(9.5)%	(18.6)%	(28.1)%
6.150% and above	**	**	**	**

SECURITY GROUP 2

Sensitivity of Class DS to Prepayments Assumed Price 17.0%*

LIBOR	PSA Prepayment Assumption Rates			
	175%	220%	250%	500%
1.00000%	20.6%	18.2%	16.6%	2.7%
2.37950%	11.3%	8.8%	7.1%	(7.3)%
4.26475%	(1.9)%	(4.5)%	(6.3)%	(21.4)%
6.15000% 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 IO to Prepayments
Assumed Price 22.0%*

PSA Prepayment Assumption Rates				
<u>175%</u>	<u>220%</u>	<u>250%</u>	<u>368%</u>	<u>500%</u>
6.1%	6.1%	6.1%	0.0%	(7.5)%

SECURITY GROUP 3

Sensitivity of Class IJ to Prepayments
Assumed Price 10.0%*

PSA Prepayment Assumption Rates				
<u>100%</u>	<u>160%</u>	<u>300%</u>	<u>400%</u>	<u>694%</u>
28.6%	26.0%	20.7%	15.6%	0.0%

SECURITY GROUP 4

Sensitivity of Class IM to Prepayments
Assumed Price 9.0%*

PSA Prepayment Assumption Rates				
<u>200%</u>	<u>400%</u>	<u>443%</u>	<u>600%</u>	<u>800%</u>
18.5%	3.4%	0.0%	(12.9)%	(30.9)%

SECURITY GROUP 5

Sensitivity of Class IH to Prepayments
Assumed Price 9.0%*

PSA Prepayment Assumption Rates				
<u>200%</u>	<u>400%</u>	<u>456%</u>	<u>600%</u>	<u>800%</u>
19.1%	4.4%	0.1%	(11.4)%	(28.7)%

SECURITY GROUP 6

Sensitivity of Class DI to Prepayments
Assumed Price 10.0%*

PSA Prepayment Assumption Rates				
<u>150%</u>	<u>200%</u>	<u>300%</u>	<u>400%</u>	<u>700%</u>
21.0%	21.0%	21.0%	16.7%	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.

SECURITY GROUP 7

Sensitivity of Class GS to Prepayments Assumed Price 15.5%*

<u>LIBOR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>175%</u>	<u>210%</u>	<u>300%</u>	<u>500%</u>
1.000%	24.4%	22.6%	17.9%	7.3%
2.398%	14.0%	12.1%	7.2%	(4.0)%
4.274%	(0.4)%	(2.3)%	(7.5)%	(19.5)%
6.150% and above	**	**	**	**

Sensitivity of Class IG to Prepayments Assumed Price 18.0%*

<u>PSA Prepayment Assumption Rates</u>				
<u>175%</u>	<u>210%</u>	<u>300%</u>	<u>466%</u>	<u>500%</u>
9.0%	9.0%	9.0%	0.0%	(2.0)%

Sensitivity of Class IN to Prepayments Assumed Price 17.0%*

<u>PSA Prepayment Assumption Rates</u>				
<u>175%</u>	<u>210%</u>	<u>300%</u>	<u>449%</u>	<u>500%</u>
9.0%	9.0%	9.0%	0.0%	(3.4)%

Sensitivity of Class SG to Prepayments Assumed Price 17.5%*

<u>LIBOR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>175%</u>	<u>210%</u>	<u>300%</u>	<u>500%</u>
1.000%	15.6%	15.6%	15.6%	6.4%
2.398%	5.9%	5.9%	5.9%	(4.3)%
4.274%	(7.8)%	(7.8)%	(7.8)%	(19.4)%
6.150% and above	**	**	**	**

SECURITY GROUPS 1 AND 7

Sensitivity of Class BS to Prepayments Assumed Price 16.0%*

<u>LIBOR</u>	<u>PSA Prepayment Assumption Rates</u>						
	<u>150%</u>	<u>175%</u>	<u>210%</u>	<u>300%</u>	<u>450%</u>	<u>500%</u>	<u>600%</u>
1.000%	24.4%	23.1%	21.3%	16.6%	8.5%	5.8%	0.2%
2.398%	14.4%	13.0%	11.1%	6.2%	(2.2)%	(5.1)%	(11.0)%
4.274%	0.5%	(0.9)%	(2.9)%	(8.1)%	(17.0)%	(20.1)%	(26.4)%
6.150% 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 8

Sensitivity of Class SE to Prepayments Assumed Price 18.0%*

<u>LIBOR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>150%</u>	<u>300%</u>	<u>450%</u>	<u>600%</u>
1.000000%	19.7%	11.9%	4.0%	(4.1)%
2.369130%	10.9%	2.8%	(5.5)%	(14.1)%
4.209565%	(1.4)%	(9.9)%	(18.8)%	(28.1)%
6.050000% and above	**	**	**	**

Sensitivity of Class SH to Prepayments Assumed Price 16.0%*

<u>LIBOR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>150%</u>	<u>300%</u>	<u>450%</u>	<u>600%</u>
1.000000%	23.8%	16.2%	8.4%	0.5%
2.369130%	13.9%	5.9%	(2.2)%	(10.7)%
4.209565%	0.2%	(8.2)%	(17.0)%	(26.2)%
6.050000% and above	**	**	**	**

SECURITY GROUP 9

Sensitivity of Class AI to Prepayments Assumed Price 18.0%*

<u>PSA Prepayment Assumption Rates</u>				
<u>200%</u>	<u>250%</u>	<u>400%</u>	<u>438%</u>	<u>500%</u>
2.0%	2.0%	2.0%	0.0%	(3.7)%

Sensitivity of Class IA to Prepayments Assumed Price 20.0%*

<u>PSA Prepayment Assumption Rates</u>				
<u>200%</u>	<u>250%</u>	<u>400%</u>	<u>461%</u>	<u>500%</u>
2.8%	2.8%	2.8%	0.0%	(2.0)%

Sensitivity of Class S to Prepayments Assumed Price 17.0%*

<u>LIBOR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>200%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>
1.000000%	19.6%	17.1%	9.3%	4.0%
2.369130%	10.2%	7.5%	(0.7)%	(6.2)%
4.234565%	(3.0)%	(5.9)%	(14.6)%	(20.6)%
6.100000% 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 SJ to Prepayments
Assumed Price 17.0%*

<u>LIBOR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>200%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>
1.000000%	19.6%	17.1%	9.3%	4.0%
2.369130%	10.2%	7.5%	(0.7)%	(6.2)%
4.234565%	(3.0)%	(5.9)%	(14.6)%	(20.6)%
6.100000% and above	**	**	**	**

Sensitivity of Class SL to Prepayments
Assumed Price 17.0%*

<u>LIBOR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>200%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>
1.000000%	19.6%	17.1%	9.3%	4.0%
2.369130%	10.2%	7.5%	(0.7)%	(6.2)%
4.234565%	(3.0)%	(5.9)%	(14.6)%	(20.6)%
6.100000% and above	**	**	**	**

SECURITY GROUP 10

Sensitivity of Class BI to Prepayments
Assumed Price 9.0%*

<u>PSA Prepayment Assumption Rates</u>				
<u>165%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>	<u>987%</u>
43.7%	39.4%	31.8%	26.6%	0.0%

Sensitivity of Class IB to Prepayments
Assumed Price 12.0%*

<u>PSA Prepayment Assumption Rates</u>				
<u>165%</u>	<u>250%</u>	<u>400%</u>	<u>500%</u>	<u>862%</u>
21.5%	21.5%	21.5%	17.9%	0.0%

SECURITY GROUP 11

Sensitivity of Class ES to Prepayments
Assumed Price 17.0%*

<u>LIBOR</u>	<u>PSA Prepayment Assumption Rates</u>			
	<u>200%</u>	<u>240%</u>	<u>300%</u>	<u>500%</u>
1.00000%	19.2%	17.1%	13.8%	2.7%
2.37950%	9.8%	7.6%	4.3%	(7.3)%
4.26475%	(3.4)%	(5.7)%	(9.2)%	(21.4)%
6.15000% 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 IE to Prepayments
Assumed Price 22.0%*

PSA Prepayment Assumption Rates				
<u>195%</u>	<u>200%</u>	<u>240%</u>	<u>300%</u>	<u>500%</u>
0.0%	(0.2)%	(0.2)%	(0.2)%	(12.6)%

SECURITY GROUPS 2 AND 11
Sensitivity of Class SD to Prepayments
Assumed Price 17.0%*

<u>LIBOR</u>	PSA Prepayment Assumption Rates						
	<u>175%</u>	<u>200%</u>	<u>220%</u>	<u>240%</u>	<u>250%</u>	<u>300%</u>	<u>500%</u>
1.00000%	20.6%	19.3%	18.2%	17.1%	16.6%	13.9%	2.7%
2.37950%	11.2%	9.9%	8.8%	7.6%	7.1%	4.3%	(7.3)%
4.26475%	(2.0)%	(3.4)%	(4.5)%	(5.7)%	(6.3)%	(9.2)%	(21.4)%
6.15000% 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 Double REMIC Series as to the Group 1, 2, 3, 4, 5, 6, 8, 9, 10 and 11 Trust Assets and a Double REMIC Series as to the Group 7 Trust Assets, each for United States federal income tax purposes. Separate REMIC elections will be made for the Group 1, 2, 3, 4, 5, 6, 8, 9, 10 and 11 Pooling REMIC, the Group 1, 2, 3, 4, 5, 6, 8, 9, 10 and 11 Issuing REMIC, the Group 7 Pooling REMIC and the Group 7 Issuing REMIC.

Regular Securities

The Regular Securities will be treated as debt instruments issued by the Group 1, 2, 3, 4, 5, 6, 8, 9, 10 and 11 Issuing REMIC or the Group 7 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 Notional and Accrual Classes of Regular Securities will be issued with original issue discount (“OID”), and certain other Classes of Regular Securities may be issued with OID. *See “Certain United States Federal Income Tax Consequences — Tax Treatment of Regular Securities — Original Issue Discount,” “— Variable Rate Securities” and “— Interest Weighted Securities and Non-VRDI Securities” in the Base Offering Circular.*

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

<u>Group(s)</u>	<u>PSA</u>
1 and 8	300%
2	220%
3	160%
4 and 5	400%
6	200%
7	210%
9 and 10	250%
11	240%

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

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

A Holder of Regular Securities that uses an accrual method of accounting for tax purposes generally will be required to include certain amounts in income no later than the time such amounts are reflected on certain financial statements. The application of this rule thus may require the accrual of income earlier than would be the case under the general tax rules described under “Certain United States Federal Income Tax Consequences — Tax Treatment of Regular Securities” in the Base Offering Circular, although the precise application of this rule is unclear at this time. This rule generally will be effective for Regular Securities issued with original issue discount, for tax years beginning after December 31, 2018. The Service issued Notice 2018-80 stating its intention to issue regulations that would exclude market discount from this rule. Prospective investors in Regular Securities that use an accrual method of accounting for tax purposes are urged to consult with their tax advisors regarding the potential applicability of this legislation to their particular situation.

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

Residual Securities

The Class RR Securities will represent the beneficial ownership of the Residual Interest in the Group 1, 2, 3, 4, 5, 6, 8, 9, 10 and 11 Pooling REMIC and the beneficial ownership of the Residual Interest in the Group 1, 2, 3, 4, 5, 6, 8, 9, 10 and 11 Issuing REMIC. The Class RR7 Securities will represent the beneficial ownership of the Residual Interest in the Group 7 Pooling REMIC and the beneficial ownership of the Residual Interest in the Group 7 Issuing REMIC. The Residual Securities, i.e., the Class RR and RR7 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 REMICs’ fees or expenses under Section 212 of the Code for any taxable year beginning before January 1, 2026. Prospective investors in Residual Securities are urged to consult with their tax advisors regarding the potential applicability of this legislation to their particular situation.

MX Securities

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

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

Foreign Account Tax Compliance Act

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

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

ERISA MATTERS

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

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

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

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

See “ERISA Considerations” in the Base Offering Circular.

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

LEGAL INVESTMENT CONSIDERATIONS

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

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

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

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

PLAN OF DISTRIBUTION

Subject to the terms and conditions of the Sponsor Agreement, the Sponsor has agreed to purchase all of the Securities if any are sold and purchased. The Sponsor proposes to offer the Regular and MX Classes to the public from time to time for sale in negotiated transactions at varying prices to be determined at the time of sale, plus accrued interest from (1) July 1, 2019 on the Fixed Rate Classes and (2) July 20, 2019 on the Floating Rate and Inverse Floating Rate Classes. The Sponsor may effect these transactions by sales to or through certain securities dealers. These dealers may receive compensation in the form of discounts, concessions or commissions from the Sponsor and/or commissions from any purchasers for which they act as agents. Some of the Securities may be sold through dealers in relatively small sales. In the usual case, the commission charged on a relatively small sale of securities will be a higher percentage of the sales price than that charged on a large sale of securities.

INCREASE IN SIZE

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

LEGAL MATTERS

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

Available Combinations(1)

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)	
Security Group 6 Combination 1(5)	\$21,932,000	DA	\$21,932,000	PAC/AD	2.50%	FIX	38381XFY7	January 2049	
		DC	21,932,000	PAC/AD	2.75	FIX	38381XFZ4	January 2049	
		DE	21,932,000	PAC/AD	3.00	FIX	38381XGA8	January 2049	
		DG	21,932,000	PAC/AD	3.25	FIX	38381XGB6	January 2049	
		DI	6,266,285	NTL(PAC/AD)	3.50	FIX/IO	38381XGC4	January 2049	
Security Group 7 Combination 2(5)	\$68,331,458	IN	\$18,980,960	NTL(PAC/AD)	4.50%	FIX/IO	38381XGD2	September 2048	
		NB	68,331,458	PAC/AD	2.75	FIX	38381XGE0	September 2048	
		NC	68,331,458	PAC/AD	2.50	FIX	38381XGF7	September 2048	
		ND	68,331,458	PAC/AD	2.25	FIX	38381XGG5	September 2048	
		NE	68,331,458	PAC/AD	2.00	FIX	38381XGH3	September 2048	
Combination 3(5)	\$68,331,458 3,544,197	NG	68,331,458	PAC/AD	1.75	FIX	38381XGJ9	September 2048	
		GA	\$71,875,655	PAC/AD	3.00%	FIX	38381XGK6	April 2049	
		GB	71,875,655	PAC/AD	2.75	FIX	38381XGL4	April 2049	
		GC	71,875,655	PAC/AD	2.50	FIX	38381XGM2	April 2049	
		GD	71,875,655	PAC/AD	2.25	FIX	38381XGN0	April 2049	
Security Groups 1 and 7 Combination 4(6)	\$12,500,000 30,000,000	GE	71,875,655	PAC/AD	2.00	FIX	38381XGP5	April 2049	
		IG	15,972,367	NTL(PAC/AD)	4.50	FIX/IO	38381XGQ3	April 2049	
		BF	\$42,500,000	PT	(7)	FLT	38381XGR1	July 2049	
		GF							

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)
Combination 5(6)	GS	BS	\$42,500,000	NTL(PT)	(7)	INV/IO	38381XGS9	July 2049
	SB							
Security Group 9								
	Combination 6(5)							
Combination 7(5)	AC	AD	\$39,090,000	PAC/AD	2.75%	FIX	38381XGT7	September 2048
	AY	AE	39,090,000	PAC/AD	2.50	FIX	38381XGU4	September 2048
		AG	39,090,000	PAC/AD	2.25	FIX	38381XGV2	September 2048
		AH	39,090,000	PAC/AD	2.00	FIX	38381XGW0	September 2048
		AI	13,030,000	NTL(PAC/AD)	4.50	FIX/IO	38381XGX8	September 2048
		AJ	39,090,000	PAC/AD	1.75	FIX	38381XGY6	September 2048
		AK	39,090,000	PAC/AD	1.50	FIX	38381XGZ3	September 2048
		AL	\$42,230,000	PAC/AD	3.00%	FIX	38381XHA7	July 2049
		AM	42,230,000	PAC/AD	2.75	FIX	38381XHB5	July 2049
		AN	42,230,000	PAC/AD	2.50	FIX	38381XHC3	July 2049
		AP	42,230,000	PAC/AD	2.25	FIX	38381XHD1	July 2049
	AQ	42,230,000	PAC/AD	2.00	FIX	38381XHE9	July 2049	
AT	42,230,000	PAC/AD	1.75	FIX	38381XHF6	July 2049		
Combination 8	AW	42,230,000	PAC/AD	1.50	FIX	38381XHG4	July 2049	
	IA	14,076,666	NTL(PAC/AD)	4.50	FIX/IO	38381XHH2	July 2049	
	SJ	\$29,690,784	S	\$39,976,497	NTL(PT)	(7)	INV/IO	38381XHJ8
SL	10,285,713							

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)
Security Group 10 Combination 9(5) BA	\$66,274,000	BC	\$66,274,000	PAC/AD	1.00%	FIX	38381XHK5	July 2049
		BD	66,274,000	PAC/AD	1.25	FIX	38381XHL3	July 2049
		BE	66,274,000	PAC/AD	1.50	FIX	38381XHM1	July 2049
		BG	66,274,000	PAC/AD	1.75	FIX	38381XHN9	July 2049
		BH	66,274,000	PAC/AD	2.00	FIX	38381XHP4	July 2049
		BJ	66,274,000	PAC/AD	2.25	FIX	38381XHQ2	July 2049
		BK	66,274,000	PAC/AD	2.50	FIX	38381XHR0	July 2049
		BL	66,274,000	PAC/AD	2.75	FIX	38381XHS8	July 2049
		BM	53,019,200	PAC/AD	3.50	FIX	38381XHT6	July 2049
		BN	44,182,666	PAC/AD	4.00	FIX	38381XHU3	July 2049
		BP	37,870,857	PAC/AD	4.50	FIX	38381XHV1	July 2049
		BQ	33,137,000	PAC/AD	5.00	FIX	38381XHW9	July 2049
		BT	29,455,111	PAC/AD	5.50	FIX	38381XHX7	July 2049
		IB	29,455,111	NTL(PAC/AD)	4.50	FIX/IO	38381XHY5	July 2049
Combination 10 BA ZB ZC	\$66,274,000 22,811,921 187,000	HE	\$89,272,921	PT	3.00%	FIX	38381XHZ2	July 2049
Security Group 11 Combination 11(5) EA	\$22,690,790	EB	\$22,690,790	PAC/AD	2.75%	FIX	38381XJA5	April 2049
		EC	22,690,790	PAC/AD	2.50	FIX	38381XJB3	April 2049
		ED	22,690,790	PAC/AD	2.25	FIX	38381XJC1	April 2049
		EG	22,690,790	PAC/AD	2.00	FIX	38381XJD9	April 2049
		EH	18,152,632	PAC/AD	3.25	FIX	38381XJE7	April 2049
		EM	15,127,193	PAC/AD	3.50	FIX	38381XJF4	April 2049
		IE	5,672,697	NTL(PAC/AD)	4.00	FIX/IO	38381XJG2	April 2049

REMIC Securities			MX Securities					
Class	Original Class Principal Balance or Class Notional Balance	Maximum Original Class Principal Balance or Class Notional Balance(2)		Principal Type(3)	Interest Rate	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
		Related MX Class						
Security Groups 2 and 11								
Combination 12(6)								
DF	\$44,271,102	FD	\$78,830,046	PT	(7)	FLT	38381XJH0	July 2049
EF	34,558,944							
Combination 13(6)								
DS	\$44,271,102	SD	\$78,830,046	NTL(PT)	(7)	INV/IO	38381XJJ6	July 2049
ES	34,558,944							

(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, 9 and 11, 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.

Schedule II

SCHEDULED PRINCIPAL BALANCES

Distribution Date	Classes AC, AY and AZ (in the aggregate)	Classes BA and ZC (in the aggregate)	Classes CA, CZ and EA (in the aggregate)	Class CB
Initial Balance	\$42,302,000.00	\$66,461,000.00	\$76,397,361.00	\$100,000,000.00
August 2019	42,173,832.41	66,196,096.21	76,137,492.13	99,693,106.64
September 2019	42,027,561.70	65,906,144.23	75,848,430.49	99,353,463.29
October 2019	41,863,234.70	65,591,254.63	75,530,325.02	98,981,230.91
November 2019	41,680,916.64	65,251,559.13	75,183,354.58	98,576,599.81
December 2019	41,480,691.15	64,887,210.46	74,807,727.83	98,139,789.61
January 2020	41,262,660.25	64,498,382.33	74,403,683.08	97,671,049.02
February 2020	41,026,944.31	64,085,269.30	73,971,488.08	97,170,655.71
March 2020	40,773,681.94	63,648,086.57	73,511,439.78	96,638,916.02
April 2020	40,503,029.94	63,187,069.88	73,023,864.05	96,076,164.73
May 2020	40,215,163.07	62,702,475.21	72,509,115.26	95,482,764.66
June 2020	39,910,273.96	62,194,578.61	71,967,575.94	94,859,106.38
July 2020	39,588,572.88	61,663,675.86	71,399,656.28	94,205,607.73
August 2020	39,250,287.46	61,110,082.23	70,805,793.67	93,522,713.43
September 2020	38,895,662.48	60,534,132.11	70,186,452.09	92,810,894.52
October 2020	38,524,959.57	59,936,178.66	69,542,121.58	92,070,647.86
November 2020	38,138,456.84	59,316,593.45	68,873,317.52	91,302,495.55
December 2020	37,736,448.55	58,675,765.99	68,180,579.99	90,506,984.31
January 2021	37,319,244.74	58,014,103.36	67,464,473.02	89,684,684.79
February 2021	36,887,170.80	57,332,029.68	66,725,583.79	88,836,190.93
March 2021	36,440,567.00	56,629,985.66	65,964,521.82	87,962,119.21
April 2021	35,979,788.07	55,908,428.09	65,181,918.14	87,063,107.87
May 2021	35,505,202.70	55,167,829.27	64,378,424.32	86,139,816.10
June 2021	35,017,192.98	54,408,676.46	63,554,711.59	85,192,923.27
July 2021	34,516,153.89	53,631,471.31	62,711,469.84	84,223,128.00
August 2021	34,002,492.72	52,836,729.26	61,849,406.64	83,231,147.29
September 2021	33,476,628.49	52,024,978.87	60,969,246.17	82,217,715.61
October 2021	32,938,991.34	51,196,761.24	60,071,728.16	81,183,583.95
November 2021	32,390,021.88	50,375,509.95	59,184,142.57	80,159,426.90
December 2021	31,830,170.57	49,561,160.88	58,306,377.96	79,145,147.48
January 2022	31,276,269.02	48,753,650.46	57,438,324.08	78,140,649.65
February 2022	30,728,250.59	47,952,915.70	56,579,871.92	77,145,838.26
March 2022	30,186,049.38	47,158,894.14	55,730,913.63	76,160,619.06
April 2022	29,649,600.17	46,371,523.87	54,891,342.54	75,184,898.69
May 2022	29,118,838.49	45,590,743.52	54,061,053.17	74,218,584.66
June 2022	28,593,700.53	44,816,492.26	53,239,941.16	73,261,585.38
July 2022	28,074,123.19	44,048,709.80	52,427,903.30	72,313,810.08
August 2022	27,560,044.04	43,287,336.36	51,624,837.51	71,375,168.89
September 2022	27,051,401.33	42,532,312.68	50,830,642.83	70,445,572.77
October 2022	26,548,134.00	41,783,580.04	50,045,219.38	69,524,933.51
November 2022	26,050,181.61	41,041,080.22	49,268,468.39	68,613,163.74
December 2022	25,557,484.40	40,304,755.49	48,500,292.17	67,710,176.92
January 2023	25,069,983.26	39,574,548.66	47,740,594.08	66,815,887.32
February 2023	24,587,619.71	38,850,403.02	46,989,278.54	65,930,210.02

<u>Distribution Date</u>	<u>Classes AC, AY and AZ (in the aggregate)</u>	<u>Classes BA and ZC (in the aggregate)</u>	<u>Classes CA, CZ and EA (in the aggregate)</u>	<u>Class CB</u>
March 2023	\$24,110,335.90	\$38,132,262.35	\$46,246,251.03	\$ 65,053,060.91
April 2023	23,638,074.61	37,420,070.92	45,511,418.05	64,184,356.65
May 2023	23,170,779.24	36,713,773.51	44,784,687.11	63,324,014.72
June 2023	22,708,393.81	36,013,315.37	44,065,966.76	62,471,953.34
July 2023	22,250,862.93	35,318,642.21	43,355,166.52	61,628,091.55
August 2023	21,798,131.82	34,629,700.23	42,652,196.92	60,792,349.11
September 2023	21,350,146.30	33,946,436.11	41,956,969.45	59,964,646.55
October 2023	20,906,852.75	33,268,796.98	41,269,396.58	59,144,905.18
November 2023	20,468,198.17	32,596,730.43	40,589,391.73	58,333,047.00
December 2023	20,034,130.10	31,930,184.53	39,916,869.28	57,528,994.79
January 2024	19,604,596.66	31,269,107.76	39,251,744.52	56,732,672.05
February 2024	19,179,546.54	30,613,449.10	38,593,933.69	55,944,002.98
March 2024	18,758,928.97	29,963,157.95	37,943,353.93	55,162,912.53
April 2024	18,342,693.74	29,318,184.15	37,299,923.31	54,389,326.33
May 2024	17,930,791.19	28,678,477.98	36,663,560.77	53,623,170.73
June 2024	17,523,172.18	28,043,990.16	36,034,186.14	52,864,372.77
July 2024	17,119,788.12	27,414,671.83	35,411,720.14	52,112,860.17
August 2024	16,720,590.93	26,790,474.57	34,796,084.35	51,368,561.36
September 2024	16,325,533.07	26,171,350.37	34,187,201.21	50,631,405.41
October 2024	15,934,567.49	25,557,251.66	33,584,994.01	49,901,322.10
November 2024	15,547,647.68	24,948,131.25	32,989,386.87	49,178,241.83
December 2024	15,169,579.66	24,343,942.39	32,400,304.75	48,462,095.70
January 2025	14,800,552.24	23,751,514.40	31,817,673.43	47,752,815.44
February 2025	14,440,351.87	23,173,259.31	31,241,419.51	47,050,333.41
March 2025	14,088,770.00	22,608,842.26	30,671,470.37	46,354,582.64
April 2025	13,745,602.96	22,057,936.23	30,108,522.07	45,665,496.79
May 2025	13,410,651.85	21,520,221.85	29,555,569.50	44,983,010.12
June 2025	13,083,722.44	20,995,387.23	29,012,439.00	44,307,057.53
July 2025	12,764,625.02	20,483,127.78	28,478,959.89	43,637,574.55
August 2025	12,453,174.34	19,983,146.06	27,954,964.42	42,974,497.29
September 2025	12,149,189.50	19,495,151.57	27,440,287.69	42,317,762.49
October 2025	11,852,493.83	19,018,860.66	26,934,767.64	41,667,307.46
November 2025	11,562,914.79	18,553,996.28	26,438,244.98	41,023,070.14
December 2025	11,280,283.90	18,100,287.90	25,950,563.16	40,388,265.19
January 2026	11,004,436.63	17,657,471.33	25,471,568.28	39,762,809.10
February 2026	10,735,212.29	17,225,288.58	25,001,109.11	39,146,568.24
March 2026	10,472,453.98	16,803,487.69	24,539,036.99	38,539,410.81
April 2026	10,216,008.46	16,391,822.64	24,085,205.84	37,941,206.88
May 2026	9,965,726.11	15,990,053.15	23,639,472.05	37,351,828.34
June 2026	9,721,460.80	15,597,944.60	23,201,694.48	36,771,148.87
July 2026	9,483,069.85	15,215,267.87	22,771,734.43	36,199,043.93
August 2026	9,250,413.89	14,841,799.22	22,349,455.56	35,635,390.73
September 2026	9,023,356.88	14,477,320.16	21,934,723.87	35,080,068.21
October 2026	8,801,765.92	14,121,617.33	21,527,407.68	34,532,956.99
November 2026	8,585,511.27	13,774,482.39	21,127,377.55	33,993,939.39
December 2026	8,374,466.21	13,435,711.87	20,734,506.26	33,462,899.37
January 2027	8,168,507.02	13,105,107.12	20,348,668.80	32,939,722.54

Distribution Date	Classes AC, AY and AZ (in the aggregate)	Classes BA and ZC (in the aggregate)	Classes CA, CZ and EA (in the aggregate)	Class CB
February 2027	\$ 7,967,512.88	\$12,782,474.12	\$19,969,742.28	\$ 32,424,296.08
March 2027	7,771,365.80	12,467,623.44	19,597,605.93	31,916,508.78
April 2027	7,579,950.58	12,160,370.09	19,232,141.07	31,416,251.02
May 2027	7,393,154.72	11,860,533.41	18,873,231.04	30,923,414.66
June 2027	7,210,868.36	11,567,937.04	18,520,761.18	30,437,893.14
July 2027	7,032,984.23	11,282,408.71	18,174,618.83	29,959,581.37
August 2027	6,859,397.60	11,003,780.25	17,834,693.25	29,488,375.74
September 2027	6,690,006.17	10,731,887.42	17,500,875.60	29,024,174.10
October 2027	6,524,710.09	10,466,569.86	17,173,058.93	28,566,875.75
November 2027	6,363,411.82	10,207,670.98	16,851,138.11	28,116,381.39
December 2027	6,206,016.14	9,955,037.87	16,535,009.82	27,672,593.13
January 2028	6,052,430.07	9,708,521.23	16,224,572.55	27,235,414.45
February 2028	5,902,562.81	9,467,975.28	15,919,726.50	26,804,750.21
March 2028	5,756,325.72	9,233,257.66	15,620,373.61	26,380,506.59
April 2028	5,613,632.24	9,004,229.39	15,326,417.51	25,962,591.09
May 2028	5,474,397.83	8,780,754.75	15,037,763.47	25,550,912.54
June 2028	5,338,539.97	8,562,701.21	14,754,318.42	25,145,381.02
July 2028	5,205,978.07	8,349,939.38	14,475,990.87	24,745,907.91
August 2028	5,076,633.46	8,142,342.92	14,202,690.93	24,352,405.82
September 2028	4,950,429.30	7,939,788.47	13,934,330.25	23,964,788.60
October 2028	4,827,290.58	7,742,155.57	13,670,822.00	23,582,971.33
November 2028	4,707,144.06	7,549,326.63	13,412,080.84	23,206,870.25
December 2028	4,589,918.22	7,361,186.81	13,158,022.94	22,836,402.82
January 2029	4,475,543.24	7,177,623.99	12,908,565.87	22,471,487.66
February 2029	4,363,950.93	6,998,528.70	12,663,628.65	22,112,044.51
March 2029	4,255,074.74	6,823,794.05	12,423,131.70	21,757,994.29
April 2029	4,148,849.67	6,653,315.68	12,186,996.81	21,409,258.99
May 2029	4,045,212.26	6,486,991.70	11,955,147.10	21,065,761.74
June 2029	3,944,100.56	6,324,722.62	11,727,507.06	20,727,426.74
July 2029	3,845,454.06	6,166,411.32	11,504,002.46	20,394,179.26
August 2029	3,749,213.72	6,011,962.95	11,284,560.34	20,065,945.63
September 2029	3,655,321.86	5,861,284.92	11,069,109.04	19,742,653.23
October 2029	3,563,722.18	5,714,286.84	10,857,578.10	19,424,230.46
November 2029	3,474,359.73	5,570,880.43	10,649,898.31	19,110,606.72
December 2029	3,387,180.81	5,430,979.53	10,446,001.64	18,801,712.43
January 2030	3,302,133.06	5,294,500.00	10,245,821.24	18,497,478.99
February 2030	3,219,165.30	5,161,359.70	10,049,291.43	18,197,838.77
March 2030	3,138,227.59	5,031,478.45	9,856,347.65	17,902,725.09
April 2030	3,059,271.17	4,904,777.94	9,666,926.47	17,612,072.23
May 2030	2,982,248.44	4,781,181.74	9,480,965.56	17,325,815.39
June 2030	2,907,112.92	4,660,615.21	9,298,403.65	17,043,890.68
July 2030	2,833,819.24	4,543,005.51	9,119,180.57	16,766,235.15
August 2030	2,762,323.10	4,428,281.50	8,943,237.15	16,492,786.70
September 2030	2,692,581.24	4,316,373.75	8,770,515.28	16,223,484.13
October 2030	2,624,551.46	4,207,214.45	8,600,957.85	15,958,267.13
November 2030	2,558,192.52	4,100,737.43	8,434,508.72	15,697,076.20
December 2030	2,493,464.20	3,996,878.07	8,271,112.76	15,439,852.72

Distribution Date	Classes AC, AY and AZ (in the aggregate)	Classes BA and ZC (in the aggregate)	Classes CA, CZ and EA (in the aggregate)	Class CB
January 2031	\$ 2,430,327.20	\$ 3,895,573.29	\$ 8,110,715.77	\$ 15,186,538.89
February 2031	2,368,743.17	3,796,761.51	7,953,264.51	14,937,077.73
March 2031	2,308,674.67	3,700,382.61	7,798,706.64	14,691,413.07
April 2031	2,250,085.15	3,606,377.91	7,646,990.75	14,449,489.55
May 2031	2,192,938.93	3,514,690.11	7,498,066.33	14,211,252.57
June 2031	2,137,201.17	3,425,263.27	7,351,883.72	13,976,648.33
July 2031	2,082,837.87	3,338,042.81	7,208,394.15	13,745,623.78
August 2031	2,029,815.83	3,252,975.41	7,067,549.69	13,518,126.64
September 2031	1,978,102.64	3,170,009.04	6,929,303.24	13,294,105.36
October 2031	1,927,666.68	3,089,092.91	6,793,608.52	13,073,509.14
November 2031	1,878,477.05	3,010,177.43	6,660,420.06	12,856,287.87
December 2031	1,830,503.61	2,933,214.20	6,529,693.18	12,642,392.18
January 2032	1,783,716.94	2,858,155.97	6,401,383.97	12,431,773.40
February 2032	1,738,088.30	2,784,956.60	6,275,449.32	12,224,383.56
March 2032	1,693,589.65	2,713,571.08	6,151,846.82	12,020,175.35
April 2032	1,650,193.62	2,643,955.45	6,030,534.83	11,819,102.15
May 2032	1,607,873.49	2,576,066.80	5,911,472.43	11,621,118.01
June 2032	1,566,603.17	2,509,863.27	5,794,619.42	11,426,177.61
July 2032	1,526,357.21	2,445,303.95	5,679,936.29	11,234,236.31
August 2032	1,487,110.73	2,382,348.96	5,567,384.23	11,045,250.09
September 2032	1,448,839.50	2,320,959.33	5,456,925.10	10,859,175.55
October 2032	1,411,519.83	2,261,097.05	5,348,521.43	10,675,969.92
November 2032	1,375,128.59	2,202,725.00	5,242,136.40	10,495,591.03
December 2032	1,339,643.23	2,145,806.95	5,137,733.85	10,317,997.34
January 2033	1,305,041.73	2,090,307.54	5,035,278.23	10,143,147.86
February 2033	1,271,302.58	2,036,192.26	4,934,734.61	9,971,002.23
March 2033	1,238,404.81	1,983,427.42	4,836,068.70	9,801,520.63
April 2033	1,206,327.93	1,931,980.13	4,739,246.78	9,634,663.83
May 2033	1,175,051.95	1,881,818.30	4,644,235.74	9,470,393.15
June 2033	1,144,557.36	1,832,910.60	4,551,003.04	9,308,670.49
July 2033	1,114,825.12	1,785,226.44	4,459,516.70	9,149,458.25
August 2033	1,085,836.63	1,738,735.99	4,369,745.33	8,992,719.40
September 2033	1,057,573.75	1,693,410.12	4,281,658.06	8,838,417.43
October 2033	1,030,018.78	1,649,220.39	4,195,224.57	8,686,516.36
November 2033	1,003,154.43	1,606,139.05	4,110,415.08	8,536,980.71
December 2033	976,963.82	1,564,139.01	4,027,200.33	8,389,775.53
January 2034	951,430.50	1,523,193.85	3,945,551.56	8,244,866.35
February 2034	926,538.40	1,483,277.77	3,865,440.54	8,102,219.21
March 2034	902,271.83	1,444,365.57	3,786,839.50	7,961,800.63
April 2034	878,615.48	1,406,432.69	3,709,721.19	7,823,577.60
May 2034	855,554.42	1,369,455.14	3,634,058.82	7,687,517.60
June 2034	833,074.06	1,333,409.51	3,559,826.09	7,553,588.57
July 2034	811,160.17	1,298,272.96	3,486,997.14	7,421,758.91
August 2034	789,798.87	1,264,023.18	3,415,546.58	7,291,997.47
September 2034	768,976.59	1,230,638.42	3,345,449.45	7,164,273.56
October 2034	748,680.13	1,198,097.44	3,276,681.25	7,038,556.92
November 2034	728,896.55	1,166,379.51	3,209,217.91	6,914,817.72

Distribution Date	Classes AC, AY and AZ (in the aggregate)	Classes BA and ZC (in the aggregate)	Classes CA, CZ and EA (in the aggregate)	Class CB
December 2034	\$ 709,613.28	\$ 1,135,464.42	\$ 3,143,035.75	\$ 6,793,026.57
January 2035	690,818.00	1,105,332.41	3,078,111.56	6,673,154.50
February 2035	672,498.72	1,075,964.23	3,014,422.49	6,555,172.96
March 2035	654,643.74	1,047,341.08	2,951,946.12	6,439,053.79
April 2035	637,241.62	1,019,444.60	2,890,660.43	6,324,769.27
May 2035	620,281.21	992,256.91	2,830,543.77	6,212,292.05
June 2035	603,751.63	965,760.52	2,771,574.88	6,101,595.18
July 2035	587,642.26	939,938.39	2,713,732.88	5,992,652.12
August 2035	571,942.74	914,773.88	2,656,997.24	5,885,436.68
September 2035	556,642.95	890,250.75	2,601,347.82	5,779,923.06
October 2035	541,733.03	866,353.17	2,546,764.82	5,676,085.85
November 2035	527,203.34	843,065.66	2,493,228.79	5,573,899.98
December 2035	513,044.48	820,373.16	2,440,720.63	5,473,340.75
January 2036	499,247.29	798,260.92	2,389,221.57	5,374,383.83
February 2036	485,802.83	776,714.60	2,338,713.18	5,277,005.22
March 2036	472,702.34	755,720.17	2,289,177.34	5,181,181.28
April 2036	459,937.33	735,263.95	2,240,596.28	5,086,888.72
May 2036	447,499.46	715,332.61	2,192,952.53	4,994,104.55
June 2036	435,380.64	695,913.11	2,146,228.91	4,902,806.17
July 2036	423,572.94	676,992.75	2,100,408.57	4,812,971.24
August 2036	412,068.65	658,559.13	2,055,474.96	4,724,577.81
September 2036	400,860.22	640,600.16	2,011,411.81	4,637,604.19
October 2036	389,940.30	623,104.03	1,968,203.14	4,552,029.05
November 2036	379,301.72	606,059.23	1,925,833.25	4,467,831.33
December 2036	368,937.48	589,454.51	1,884,286.75	4,384,990.30
January 2037	358,840.75	573,278.92	1,843,548.48	4,303,485.53
February 2037	349,004.86	557,521.75	1,803,603.57	4,223,296.87
March 2037	339,423.31	542,172.58	1,764,437.42	4,144,404.48
April 2037	330,089.76	527,221.21	1,726,035.69	4,066,788.79
May 2037	320,998.02	512,657.71	1,688,384.27	3,990,430.54
June 2037	312,142.05	498,472.39	1,651,469.34	3,915,310.71
July 2037	303,515.96	484,655.80	1,615,277.29	3,841,410.60
August 2037	295,114.00	471,198.70	1,579,794.77	3,768,711.75
September 2037	286,930.56	458,092.10	1,545,008.68	3,697,195.99
October 2037	278,960.17	445,327.22	1,510,906.13	3,626,845.39
November 2037	271,197.50	432,895.48	1,477,474.47	3,557,642.30
December 2037	263,637.34	420,788.54	1,444,701.28	3,489,569.32
January 2038	256,274.61	408,998.23	1,412,574.36	3,422,609.31
February 2038	249,104.35	397,516.61	1,381,081.72	3,356,745.36
March 2038	242,121.73	386,335.91	1,350,211.59	3,291,960.84
April 2038	235,322.03	375,448.57	1,319,952.41	3,228,239.33
May 2038	228,700.65	364,847.20	1,290,292.83	3,165,564.66
June 2038	222,253.10	354,524.60	1,261,221.70	3,103,920.90
July 2038	215,975.01	344,473.73	1,232,728.07	3,043,292.36
August 2038	209,862.11	334,687.76	1,204,801.19	2,983,663.55
September 2038	203,910.22	325,159.98	1,177,430.49	2,925,019.23
October 2038	198,115.29	315,883.88	1,150,605.61	2,867,344.39

Distribution Date	Classes AC, AY and AZ (in the aggregate)	Classes BA and ZC (in the aggregate)	Classes CA, CZ and EA (in the aggregate)	Class CB
November 2038	\$ 192,473.35	\$ 306,853.10	\$ 1,124,316.35	\$ 2,810,624.21
December 2038	186,980.53	298,061.43	1,098,552.72	2,754,844.12
January 2039	181,633.06	289,502.81	1,073,304.89	2,699,989.73
February 2039	176,427.27	281,171.35	1,048,563.21	2,646,046.88
March 2039	171,359.56	273,061.28	1,024,318.21	2,593,001.62
April 2039	166,426.43	265,166.99	1,000,560.59	2,540,840.19
May 2039	161,624.47	257,482.99	977,281.21	2,489,549.05
June 2039	156,950.35	250,003.94	954,471.09	2,439,114.84
July 2039	152,400.83	242,724.64	932,121.44	2,389,524.41
August 2039	147,972.72	235,639.99	910,223.59	2,340,764.79
September 2039	143,662.95	228,745.04	888,769.06	2,292,823.20
October 2039	139,468.50	222,034.96	867,749.49	2,245,687.07
November 2039	135,386.43	215,505.01	847,156.70	2,199,343.99
December 2039	131,413.87	209,150.62	826,982.65	2,153,781.74
January 2040	127,548.03	202,967.28	807,219.43	2,108,988.28
February 2040	123,786.18	196,950.63	787,859.29	2,064,951.75
March 2040	120,125.67	191,096.40	768,894.60	2,021,660.46
April 2040	116,563.89	185,400.43	750,317.91	1,979,102.89
May 2040	113,098.32	179,858.65	732,121.85	1,937,267.70
June 2040	109,726.50	174,467.12	714,299.22	1,896,143.71
July 2040	106,446.02	169,221.97	696,842.95	1,855,719.90
August 2040	103,254.53	164,119.44	679,746.07	1,815,985.42
September 2040	100,149.74	159,155.85	663,001.77	1,776,929.57
October 2040	97,129.43	154,327.64	646,603.34	1,738,541.82
November 2040	94,191.42	149,631.31	630,544.21	1,700,811.80
December 2040	91,333.60	145,063.46	614,817.90	1,663,729.27
January 2041	88,553.88	140,620.78	599,418.09	1,627,284.15
February 2041	85,850.26	136,300.01	584,338.54	1,591,466.53
March 2041	83,220.76	132,098.02	569,573.13	1,556,266.62
April 2041	80,663.48	128,011.72	555,115.87	1,521,674.78
May 2041	78,176.54	124,038.12	540,960.86	1,487,681.53
June 2041	75,758.11	120,174.29	527,102.31	1,454,277.51
July 2041	73,406.43	116,417.38	513,534.54	1,421,453.51
August 2041	71,119.76	112,764.61	500,251.98	1,389,200.44
September 2041	68,896.41	109,213.27	487,249.15	1,357,509.38
October 2041	66,734.72	105,760.71	474,520.67	1,326,371.50
November 2041	64,633.11	102,404.37	462,061.27	1,295,778.12
December 2041	62,589.99	99,141.73	449,865.76	1,265,720.71
January 2042	60,603.85	95,970.34	437,929.06	1,236,190.83
February 2042	58,673.19	92,887.81	426,246.17	1,207,180.18
March 2042	56,796.56	89,891.82	414,812.20	1,178,680.59
April 2042	54,972.56	86,980.10	403,622.33	1,150,684.01
May 2042	53,199.79	84,150.43	392,671.83	1,123,182.50
June 2042	51,476.93	81,400.67	381,956.08	1,096,168.24
July 2042	49,802.64	78,728.70	371,470.51	1,069,633.55
August 2042	48,175.67	76,132.48	361,210.67	1,043,570.82
September 2042	46,594.76	73,610.02	351,172.15	1,017,972.60

Distribution Date	Classes AC, AY and AZ (in the aggregate)	Classes BA and ZC (in the aggregate)	Classes CA, CZ and EA (in the aggregate)	Class CB
October 2042	\$ 45,058.70	\$ 71,159.37	\$ 341,350.67	\$ 992,831.52
November 2042	43,566.31	68,778.62	331,741.98	968,140.33
December 2042	42,116.43	66,465.93	322,341.95	943,891.90
January 2043	40,707.95	64,219.50	313,146.49	920,079.18
February 2043	39,339.75	62,037.57	304,151.62	896,695.24
March 2043	38,010.78	59,918.43	295,353.41	873,733.26
April 2043	36,720.00	57,860.41	286,748.01	851,186.52
May 2043	35,466.39	55,861.88	278,331.63	829,048.38
June 2043	34,248.96	53,921.26	270,100.57	807,312.34
July 2043	33,066.75	52,037.00	262,051.19	785,971.96
August 2043	31,918.81	50,207.60	254,179.92	765,020.90
September 2043	30,804.24	48,431.58	246,483.23	744,452.94
October 2043	29,722.15	46,707.53	238,957.70	724,261.94
November 2043	28,671.66	45,034.04	231,599.95	704,441.84
December 2043	27,651.92	43,409.75	224,406.65	684,986.69
January 2044	26,662.11	41,833.35	217,374.55	665,890.62
February 2044	25,701.43	40,303.55	210,500.46	647,147.84
March 2044	24,769.10	38,819.08	203,781.24	628,752.67
April 2044	23,864.34	37,378.73	197,213.82	610,699.50
May 2044	22,986.41	35,981.30	190,795.18	592,982.80
June 2044	22,134.60	34,625.62	184,522.35	575,597.13
July 2044	21,308.19	33,310.57	178,392.42	558,537.14
August 2044	20,506.49	32,035.05	172,402.55	541,797.55
September 2044	19,728.83	30,797.97	166,549.94	525,373.16
October 2044	18,974.57	29,598.29	160,831.82	509,258.86
November 2044	18,243.06	28,434.99	155,245.52	493,449.60
December 2044	17,533.68	27,307.07	149,788.38	477,940.41
January 2045	16,845.83	26,213.57	144,457.80	462,726.42
February 2045	16,178.92	25,153.55	139,251.25	447,802.80
March 2045	15,532.38	24,126.08	134,166.21	433,164.81
April 2045	14,905.65	23,130.26	129,200.24	418,807.78
May 2045	14,298.17	22,165.24	124,350.92	404,727.12
June 2045	13,709.44	21,230.15	119,615.91	390,918.28
July 2045	13,138.92	20,324.17	114,992.87	377,376.81
August 2045	12,586.11	19,446.50	110,479.54	364,098.32
September 2045	12,050.53	18,596.34	106,073.69	351,078.49
October 2045	11,531.70	17,772.94	101,773.12	338,313.04
November 2045	11,029.15	16,975.55	97,575.69	325,797.79
December 2045	10,542.42	16,203.45	93,479.29	313,528.60
January 2046	10,071.09	15,455.92	89,481.86	301,501.41
February 2046	9,614.72	14,732.29	85,581.37	289,712.21
March 2046	9,172.88	14,031.87	81,775.82	278,157.05
April 2046	8,745.18	13,354.02	78,063.28	266,832.06
May 2046	8,331.22	12,698.11	74,441.81	255,733.40
June 2046	7,930.61	12,063.51	70,909.55	244,857.30
July 2046	7,542.98	11,449.63	67,464.65	234,200.07
August 2046	7,167.95	10,855.87	64,105.31	223,758.05

<u>Distribution Date</u>	<u>Classes AC, AY and AZ (in the aggregate)</u>	<u>Classes BA and ZC (in the aggregate)</u>	<u>Classes CA, CZ and EA (in the aggregate)</u>	<u>Class CB</u>
September 2046	\$ 6,805.18	\$ 10,281.67	\$ 60,829.74	\$ 213,527.63
October 2046	6,454.32	9,726.46	57,636.22	203,505.29
November 2046	6,115.02	9,189.72	54,523.03	193,687.53
December 2046	5,786.96	8,670.90	51,488.50	184,070.93
January 2047	5,469.81	8,169.51	48,531.00	174,652.09
February 2047	5,163.28	7,685.03	45,648.90	165,427.70
March 2047	4,867.05	7,216.99	42,840.63	156,394.48
April 2047	4,580.82	6,764.91	40,104.65	147,549.19
May 2047	4,304.31	6,328.32	37,439.43	138,888.67
June 2047	4,037.25	5,906.79	34,843.48	130,409.79
July 2047	3,779.35	5,499.87	32,315.34	122,109.47
August 2047	3,530.35	5,107.14	29,853.58	113,984.68
September 2047	3,289.99	4,728.19	27,456.78	106,032.42
October 2047	3,058.03	4,362.61	25,123.59	98,249.78
November 2047	2,834.21	4,010.01	22,852.63	90,633.84
December 2047	2,618.30	3,670.02	20,642.58	83,181.77
January 2048	2,410.07	3,342.25	18,492.15	75,890.76
February 2048	2,209.29	3,026.36	16,400.06	68,758.05
March 2048	2,015.74	2,721.98	14,365.05	61,780.92
April 2048	1,829.21	2,428.78	12,385.91	54,956.71
May 2048	1,649.49	2,146.43	10,461.42	48,282.76
June 2048	1,476.38	1,874.59	8,590.42	41,756.51
July 2048	1,309.68	1,612.96	6,771.74	35,375.38
August 2048	1,149.21	1,361.23	5,004.24	29,136.88
September 2048	994.76	1,119.10	3,286.83	23,038.52
October 2048	846.17	886.29	1,618.41	17,077.87
November 2048	703.26	662.51	0.00	11,252.55
December 2048	565.85	447.48	0.00	5,560.18
January 2049	433.78	240.94	0.00	0.00
February 2049	306.89	42.63	0.00	0.00
March 2049	185.02	0.00	0.00	0.00
April 2049	68.01	0.00	0.00	0.00
May 2049 and thereafter	0.00	0.00	0.00	0.00

<u>Distribution Date</u>	<u>Classes DB and DL (in the aggregate)</u>	<u>Classes FG, GY, NA and NY (in the aggregate)</u>	<u>Class JA</u>
Initial Balance	\$22,935,942.00	\$102,933,537.00	\$50,000,000.00
August 2019	22,859,272.51	102,622,415.61	49,877,344.88
September 2019	22,775,475.84	102,275,568.14	49,741,449.32
October 2019	22,684,582.80	101,893,124.33	49,592,370.28
November 2019	22,586,629.65	101,475,245.83	49,430,174.83
December 2019	22,481,658.08	101,022,126.09	49,254,940.14
January 2020	22,369,715.22	100,533,990.32	49,066,753.42
February 2020	22,250,853.58	100,011,095.29	48,865,711.86
March 2020	22,125,131.01	99,453,729.16	48,651,922.57
April 2020	21,992,610.65	98,862,211.25	48,425,502.48
May 2020	21,853,360.91	98,236,891.73	48,186,578.26
June 2020	21,707,455.37	97,578,151.32	47,935,286.19
July 2020	21,554,972.74	96,886,400.88	47,671,772.05
August 2020	21,395,996.76	96,162,080.95	47,396,190.99
September 2020	21,230,616.17	95,405,661.37	47,108,707.38
October 2020	21,058,924.54	94,617,640.65	46,809,494.61
November 2020	20,881,020.27	93,798,545.50	46,498,735.00
December 2020	20,697,006.43	92,948,930.13	46,176,619.53
January 2021	20,506,990.64	92,069,375.67	45,843,347.71
February 2021	20,311,085.04	91,160,489.46	45,499,127.33
March 2021	20,109,406.08	90,222,904.28	45,144,174.27
April 2021	19,902,074.45	89,257,277.60	44,778,712.27
May 2021	19,689,214.92	88,264,290.79	44,402,972.66
June 2021	19,470,956.25	87,244,648.20	44,017,194.16
July 2021	19,247,430.98	86,199,076.35	43,621,622.59
August 2021	19,018,775.37	85,128,322.95	43,216,510.59
September 2021	18,785,129.16	84,033,155.99	42,802,117.40
October 2021	18,546,635.49	82,914,362.70	42,378,708.51
November 2021	18,303,440.70	81,772,748.61	41,946,555.42
December 2021	18,062,160.78	80,641,599.69	41,518,008.02
January 2022	17,822,779.41	79,520,813.26	41,093,036.59
February 2022	17,585,280.43	78,410,287.59	40,671,611.63
March 2022	17,349,647.80	77,309,921.88	40,253,703.87
April 2022	17,115,865.60	76,219,616.29	39,839,284.28
May 2022	16,883,918.03	75,139,271.89	39,428,324.06
June 2022	16,653,789.45	74,068,790.69	39,020,794.64
July 2022	16,425,464.30	73,008,075.61	38,616,667.69
August 2022	16,198,927.18	71,957,030.44	38,215,915.08
September 2022	15,974,162.79	70,915,559.92	37,818,508.92
October 2022	15,751,155.96	69,883,569.62	37,424,421.55
November 2022	15,529,891.65	68,860,966.03	37,033,625.51
December 2022	15,310,354.92	67,847,656.50	36,646,093.57
January 2023	15,092,530.96	66,843,549.22	36,261,798.72
February 2023	14,876,405.09	65,848,553.27	35,880,714.17
March 2023	14,661,962.73	64,862,578.55	35,502,813.33
April 2023	14,449,189.41	63,885,535.80	35,128,069.82
May 2023	14,238,070.79	62,917,336.59	34,756,457.50

<u>Distribution Date</u>	<u>Classes DB and DL (in the aggregate)</u>	<u>Classes FG, GY, NA and NY (in the aggregate)</u>	<u>Class JA</u>
June 2023	\$14,028,592.65	\$ 61,957,893.34	\$34,387,950.39
July 2023	13,820,740.87	61,007,119.24	34,022,522.76
August 2023	13,614,501.43	60,064,928.32	33,660,149.08
September 2023	13,409,860.46	59,131,235.40	33,300,803.99
October 2023	13,206,804.17	58,205,956.09	32,944,462.37
November 2023	13,005,318.88	57,289,006.78	32,591,099.28
December 2023	12,805,391.03	56,380,304.64	32,240,689.99
January 2024	12,607,007.17	55,479,767.63	31,893,209.96
February 2024	12,410,153.94	54,587,314.44	31,548,634.84
March 2024	12,214,818.12	53,702,864.54	31,206,940.50
April 2024	12,020,986.55	52,826,338.14	30,868,102.98
May 2024	11,828,646.20	51,957,656.18	30,532,098.51
June 2024	11,637,784.16	51,096,740.37	30,198,903.52
July 2024	11,448,387.59	50,243,513.10	29,868,494.63
August 2024	11,260,443.77	49,397,897.51	29,540,848.63
September 2024	11,073,940.07	48,559,817.47	29,215,942.51
October 2024	10,888,863.98	47,729,197.51	28,893,753.44
November 2024	10,705,203.07	46,905,962.91	28,574,258.78
December 2024	10,522,945.02	46,090,039.60	28,257,436.06
January 2025	10,342,077.60	45,281,354.24	27,943,262.98
February 2025	10,162,588.69	44,479,834.15	27,631,717.45
March 2025	9,984,466.25	43,685,407.31	27,322,777.53
April 2025	9,807,698.35	42,898,002.40	27,016,421.46
May 2025	9,632,273.14	42,117,548.75	26,712,627.65
June 2025	9,458,178.89	41,350,583.79	26,411,374.71
July 2025	9,285,403.93	40,597,138.98	26,112,641.38
August 2025	9,113,936.71	39,856,980.94	25,816,406.60
September 2025	8,945,335.93	39,129,880.27	25,522,649.46
October 2025	8,779,751.46	38,415,611.49	25,231,349.23
November 2025	8,617,130.54	37,713,952.93	24,942,485.34
December 2025	8,457,421.30	37,024,686.71	24,656,037.38
January 2026	8,300,572.78	36,347,598.67	24,371,985.12
February 2026	8,146,534.89	35,682,478.27	24,090,308.47
March 2026	7,995,258.40	35,029,118.59	23,810,987.52
April 2026	7,846,694.95	34,387,316.20	23,534,002.50
May 2026	7,700,796.99	33,756,871.16	23,259,333.80
June 2026	7,557,517.80	33,137,586.93	22,986,962.00
July 2026	7,416,811.45	32,529,270.32	22,716,867.79
August 2026	7,278,632.83	31,931,731.45	22,449,032.04
September 2026	7,142,937.59	31,344,783.65	22,183,610.34
October 2026	7,009,682.16	30,768,243.44	21,921,048.04
November 2026	6,878,823.69	30,201,930.50	21,661,315.75
December 2026	6,750,320.10	29,645,667.54	21,404,384.36
January 2027	6,624,130.03	29,099,280.33	21,150,225.09
February 2027	6,500,212.84	28,562,597.61	20,898,809.41
March 2027	6,378,528.57	28,035,451.03	20,650,109.10
April 2027	6,259,037.97	27,517,675.11	20,404,096.21

<u>Distribution Date</u>	<u>Classes DB and DL (in the aggregate)</u>	<u>Classes FG, GY, NA and NY (in the aggregate)</u>	<u>Class JA</u>
May 2027	\$ 6,141,702.46	\$ 27,009,107.22	\$20,160,743.08
June 2027	6,026,484.14	26,509,587.50	19,920,022.30
July 2027	5,913,345.74	26,018,958.80	19,681,906.78
August 2027	5,802,250.66	25,537,066.69	19,446,369.67
September 2027	5,693,162.92	25,063,759.34	19,213,384.39
October 2027	5,586,047.16	24,598,887.55	18,982,924.63
November 2027	5,480,868.64	24,142,304.66	18,754,964.36
December 2027	5,377,593.22	23,693,866.51	18,529,477.79
January 2028	5,276,187.35	23,253,431.41	18,306,439.40
February 2028	5,176,618.06	22,820,860.09	18,085,823.91
March 2028	5,078,852.95	22,396,015.68	17,867,606.32
April 2028	4,982,860.18	21,978,763.63	17,651,761.86
May 2028	4,888,608.47	21,568,971.71	17,438,266.02
June 2028	4,796,067.07	21,166,509.95	17,227,094.53
July 2028	4,705,205.77	20,771,250.60	17,018,223.36
August 2028	4,615,994.88	20,383,068.10	16,811,628.73
September 2028	4,528,405.24	20,001,839.04	16,607,287.09
October 2028	4,442,408.18	19,627,442.14	16,405,175.15
November 2028	4,357,975.53	19,259,758.18	16,205,269.81
December 2028	4,275,079.60	18,898,669.98	16,007,548.25
January 2029	4,193,693.21	18,544,062.40	15,811,987.84
February 2029	4,113,789.61	18,195,822.23	15,618,566.21
March 2029	4,035,342.56	17,853,838.24	15,427,261.18
April 2029	3,958,326.25	17,518,001.10	15,238,050.84
May 2029	3,882,715.31	17,188,203.34	15,050,913.45
June 2029	3,808,484.83	16,864,339.34	14,865,827.52
July 2029	3,735,610.33	16,546,305.32	14,682,771.77
August 2029	3,664,067.74	16,233,999.24	14,501,725.14
September 2029	3,593,833.44	15,927,320.84	14,322,666.75
October 2029	3,524,884.18	15,626,171.57	14,145,575.98
November 2029	3,457,197.15	15,330,454.60	13,970,432.38
December 2029	3,390,749.91	15,040,074.72	13,797,215.71
January 2030	3,325,520.44	14,754,938.40	13,625,905.96
February 2030	3,261,487.07	14,474,953.68	13,456,483.29
March 2030	3,198,628.54	14,200,030.21	13,288,928.08
April 2030	3,136,923.94	13,930,079.18	13,123,220.90
May 2030	3,076,352.73	13,665,013.33	12,959,342.51
June 2030	3,016,894.73	13,404,746.86	12,797,273.88
July 2030	2,958,530.09	13,149,195.48	12,636,996.16
August 2030	2,901,239.36	12,898,276.36	12,478,490.70
September 2030	2,845,003.36	12,651,908.05	12,321,739.01
October 2030	2,789,803.31	12,410,010.56	12,166,722.83
November 2030	2,735,620.70	12,172,505.24	12,013,424.05
December 2030	2,682,437.40	11,939,314.80	11,861,824.75
January 2031	2,630,235.54	11,710,363.30	11,711,907.21
February 2031	2,578,997.61	11,485,576.09	11,563,653.87
March 2031	2,528,706.37	11,264,879.83	11,417,047.34

<u>Distribution Date</u>	<u>Classes DB and DL (in the aggregate)</u>	<u>Classes FG, GY, NA and NY (in the aggregate)</u>	<u>Class JA</u>
April 2031	\$ 2,479,344.91	\$ 11,048,202.41	\$11,272,070.44
May 2031	2,430,896.60	10,835,473.01	11,128,706.12
June 2031	2,383,345.10	10,626,621.99	10,986,937.53
July 2031	2,336,674.35	10,421,580.95	10,846,747.98
August 2031	2,290,868.60	10,220,282.63	10,708,120.97
September 2031	2,245,912.35	10,022,660.96	10,571,040.13
October 2031	2,201,790.37	9,828,651.02	10,435,489.28
November 2031	2,158,487.71	9,638,188.98	10,301,452.40
December 2031	2,115,989.67	9,451,212.13	10,168,913.62
January 2032	2,074,281.82	9,267,658.86	10,037,857.27
February 2032	2,033,349.98	9,087,468.61	9,908,267.78
March 2032	1,993,180.21	8,910,581.85	9,780,129.78
April 2032	1,953,758.81	8,736,940.11	9,653,428.04
May 2032	1,915,072.35	8,566,485.93	9,528,147.49
June 2032	1,877,107.60	8,399,162.82	9,404,273.20
July 2032	1,839,851.59	8,234,915.29	9,281,790.42
August 2032	1,803,291.56	8,073,688.80	9,160,684.51
September 2032	1,767,414.98	7,915,429.77	9,040,941.02
October 2032	1,732,209.53	7,760,085.53	8,922,545.61
November 2032	1,697,663.14	7,607,604.34	8,805,484.10
December 2032	1,663,763.91	7,457,935.35	8,689,742.47
January 2033	1,630,500.17	7,311,028.58	8,575,306.81
February 2033	1,597,860.46	7,166,834.94	8,462,163.37
March 2033	1,565,833.51	7,025,306.17	8,350,298.55
April 2033	1,534,408.25	6,886,394.87	8,239,698.87
May 2033	1,503,573.82	6,750,054.44	8,130,350.99
June 2033	1,473,319.53	6,616,239.11	8,022,241.71
July 2033	1,443,634.89	6,484,903.90	7,915,357.96
August 2033	1,414,509.60	6,356,004.59	7,809,686.80
September 2033	1,385,933.52	6,229,497.77	7,705,215.44
October 2033	1,357,896.71	6,105,340.75	7,601,931.19
November 2033	1,330,389.41	5,983,491.59	7,499,821.52
December 2033	1,303,402.00	5,863,909.09	7,398,874.01
January 2034	1,276,925.06	5,746,552.77	7,299,076.37
February 2034	1,250,949.33	5,631,382.83	7,200,416.42
March 2034	1,225,465.71	5,518,360.19	7,102,882.14
April 2034	1,200,465.26	5,407,446.44	7,006,461.59
May 2034	1,175,939.20	5,298,603.84	6,911,142.99
June 2034	1,151,878.90	5,191,795.30	6,816,914.65
July 2034	1,128,275.90	5,086,984.40	6,723,765.01
August 2034	1,105,121.85	4,984,135.33	6,631,682.64
September 2034	1,082,408.61	4,883,212.91	6,540,656.20
October 2034	1,060,128.12	4,784,182.58	6,450,674.50
November 2034	1,038,272.50	4,687,010.40	6,361,726.43
December 2034	1,016,834.01	4,591,662.98	6,273,801.02
January 2035	995,805.03	4,498,107.56	6,186,887.39
February 2035	975,178.08	4,406,311.91	6,100,974.78

<u>Distribution Date</u>	<u>Classes DB and DL (in the aggregate)</u>	<u>Classes FG, GY, NA and NY (in the aggregate)</u>	<u>Class JA</u>
March 2035	\$ 954,945.83	\$ 4,316,244.40	\$ 6,016,052.55
April 2035	935,101.05	4,227,873.93	5,932,110.16
May 2035	915,636.66	4,141,169.96	5,849,137.16
June 2035	896,545.71	4,056,102.46	5,767,123.25
July 2035	877,821.35	3,972,641.96	5,686,058.19
August 2035	859,456.88	3,890,759.47	5,605,931.87
September 2035	841,445.68	3,810,426.54	5,526,734.27
October 2035	823,781.30	3,731,615.20	5,448,455.50
November 2035	806,457.36	3,654,297.96	5,371,085.73
December 2035	789,467.61	3,578,447.85	5,294,615.25
January 2036	772,805.92	3,504,038.33	5,219,034.47
February 2036	756,466.26	3,431,043.36	5,144,333.86
March 2036	740,442.70	3,359,437.33	5,070,504.02
April 2036	724,729.43	3,289,195.09	4,997,535.62
May 2036	709,320.74	3,220,291.94	4,925,419.44
June 2036	694,211.02	3,152,703.61	4,854,146.36
July 2036	679,394.74	3,086,406.25	4,783,707.35
August 2036	664,866.52	3,021,376.43	4,714,093.45
September 2036	650,621.01	2,957,591.14	4,645,295.82
October 2036	636,653.02	2,895,027.77	4,577,305.71
November 2036	622,957.40	2,833,664.11	4,510,114.43
December 2036	609,529.13	2,773,478.33	4,443,713.42
January 2037	596,363.26	2,714,449.00	4,378,094.18
February 2037	583,454.93	2,656,555.07	4,313,248.30
March 2037	570,799.37	2,599,775.83	4,249,167.46
April 2037	558,391.89	2,544,090.98	4,185,843.44
May 2037	546,227.90	2,489,480.55	4,123,268.08
June 2037	534,302.88	2,435,924.92	4,061,433.31
July 2037	522,612.38	2,383,404.83	4,000,331.17
August 2037	511,152.06	2,331,901.36	3,939,953.73
September 2037	499,917.62	2,281,395.92	3,880,293.19
October 2037	488,904.88	2,231,870.23	3,821,341.81
November 2037	478,109.70	2,183,306.37	3,763,091.93
December 2037	467,528.02	2,135,686.70	3,705,535.97
January 2038	457,155.88	2,088,993.93	3,648,666.42
February 2038	446,989.35	2,043,211.05	3,592,475.86
March 2038	437,024.60	1,998,321.35	3,536,956.95
April 2038	427,257.86	1,954,308.42	3,482,102.40
May 2038	417,685.43	1,911,156.16	3,427,905.03
June 2038	408,303.68	1,868,848.73	3,374,357.71
July 2038	399,109.03	1,827,370.58	3,321,453.39
August 2038	390,097.98	1,786,706.44	3,269,185.09
September 2038	381,267.09	1,746,841.31	3,217,545.90
October 2038	372,612.97	1,707,760.44	3,166,529.00
November 2038	364,132.32	1,669,449.38	3,116,127.62
December 2038	355,821.87	1,631,893.89	3,066,335.06
January 2039	347,678.41	1,595,080.02	3,017,144.70

<u>Distribution Date</u>	<u>Classes DB and DL (in the aggregate)</u>	<u>Classes FG, GY, NA and NY (in the aggregate)</u>	<u>Class JA</u>
February 2039	\$ 339,698.82	\$ 1,558,994.05	\$ 2,968,549.99
March 2039	331,880.00	1,523,622.51	2,920,544.44
April 2039	324,218.92	1,488,952.17	2,873,121.62
May 2039	316,712.61	1,454,970.03	2,826,275.18
June 2039	309,358.15	1,421,663.33	2,779,998.83
July 2039	302,152.67	1,389,019.53	2,734,286.35
August 2039	295,093.36	1,357,026.32	2,689,131.58
September 2039	288,177.45	1,325,671.60	2,644,528.42
October 2039	281,402.22	1,294,943.50	2,600,470.84
November 2039	274,765.01	1,264,830.36	2,556,952.87
December 2039	268,263.21	1,235,320.71	2,513,968.60
January 2040	261,894.24	1,206,403.31	2,471,512.18
February 2040	255,655.59	1,178,067.10	2,429,577.83
March 2040	249,544.76	1,150,301.24	2,388,159.83
April 2040	243,559.35	1,123,095.05	2,347,252.49
May 2040	237,696.94	1,096,438.09	2,306,850.23
June 2040	231,955.21	1,070,320.06	2,266,947.48
July 2040	226,331.85	1,044,730.87	2,227,538.76
August 2040	220,824.61	1,019,660.60	2,188,618.62
September 2040	215,431.25	995,099.52	2,150,181.70
October 2040	210,149.62	971,038.08	2,112,222.67
November 2040	204,977.56	947,466.86	2,074,736.25
December 2040	199,912.98	924,376.67	2,037,717.25
January 2041	194,953.82	901,758.43	2,001,160.49
February 2041	190,098.06	879,603.26	1,965,060.88
March 2041	185,343.72	857,902.43	1,929,413.36
April 2041	180,688.83	836,647.36	1,894,212.94
May 2041	176,131.49	815,829.63	1,859,454.66
June 2041	171,669.83	795,440.97	1,825,133.64
July 2041	167,301.99	775,473.26	1,791,245.03
August 2041	163,026.17	755,918.53	1,757,784.03
September 2041	158,840.60	736,768.95	1,724,745.91
October 2041	154,743.51	718,016.84	1,692,125.96
November 2041	150,733.21	699,654.63	1,659,919.55
December 2041	146,808.02	681,674.92	1,628,122.07
January 2042	142,966.28	664,070.44	1,596,728.98
February 2042	139,206.38	646,834.04	1,565,735.78
March 2042	135,526.72	629,958.69	1,535,138.00
April 2042	131,925.74	613,437.51	1,504,931.26
May 2042	128,401.92	597,263.74	1,475,111.18
June 2042	124,953.76	581,430.73	1,445,673.45
July 2042	121,579.76	565,931.97	1,416,613.79
August 2042	118,278.50	550,761.04	1,387,927.99
September 2042	115,048.55	535,911.67	1,359,611.86
October 2042	111,888.50	521,377.67	1,331,661.27
November 2042	108,797.00	507,153.00	1,304,072.12
December 2042	105,772.70	493,231.70	1,276,840.35

<u>Distribution Date</u>	<u>Classes DB and DL (in the aggregate)</u>	<u>Classes FG, GY, NA and NY (in the aggregate)</u>	<u>Class JA</u>
January 2043	\$ 102,814.28	\$ 479,607.92	\$ 1,249,961.97
February 2043	99,920.45	466,275.95	1,223,432.99
March 2043	97,089.93	453,230.14	1,197,249.51
April 2043	94,321.48	440,464.97	1,171,407.64
May 2043	91,613.88	427,975.01	1,145,903.52
June 2043	88,965.92	415,754.93	1,120,733.37
July 2043	86,376.44	403,799.51	1,095,893.41
August 2043	83,844.26	392,103.61	1,071,379.93
September 2043	81,368.26	380,662.20	1,047,189.24
October 2043	78,947.32	369,470.32	1,023,317.69
November 2043	76,580.35	358,523.11	999,761.69
December 2043	74,266.28	347,815.81	976,517.65
January 2044	72,004.05	337,343.75	953,582.06
February 2044	69,792.64	327,102.31	930,951.41
March 2044	67,631.02	317,087.01	908,622.26
April 2044	65,518.21	307,293.40	886,591.17
May 2044	63,453.23	297,717.14	864,854.77
June 2044	61,435.11	288,353.97	843,409.70
July 2044	59,462.93	279,199.69	822,252.66
August 2044	57,535.76	270,250.21	801,380.37
September 2044	55,652.70	261,501.49	780,789.58
October 2044	53,812.85	252,949.56	760,477.08
November 2044	52,015.35	244,590.54	740,439.70
December 2044	50,259.35	236,420.62	720,674.30
January 2045	48,543.99	228,436.06	701,177.77
February 2045	46,868.47	220,633.17	681,947.03
March 2045	45,231.98	213,008.36	662,979.04
April 2045	43,633.72	205,558.08	644,270.79
May 2045	42,072.91	198,278.86	625,819.31
June 2045	40,548.81	191,167.29	607,621.64
July 2045	39,060.64	184,220.02	589,674.87
August 2045	37,607.70	177,433.78	571,976.12
September 2045	36,189.25	170,805.33	554,522.52
October 2045	34,804.58	164,331.53	537,311.27
November 2045	33,453.02	158,009.25	520,339.56
December 2045	32,133.87	151,835.47	503,604.63
January 2046	30,846.47	145,807.18	487,103.75
February 2046	29,590.17	139,921.46	470,834.21
March 2046	28,364.32	134,175.43	454,793.34
April 2046	27,168.31	128,566.26	438,978.48
May 2046	26,001.50	123,091.18	423,387.02
June 2046	24,863.30	117,747.48	408,016.36
July 2046	23,753.11	112,532.49	392,863.95
August 2046	22,670.36	107,443.58	377,927.24
September 2046	21,614.46	102,478.20	363,203.73
October 2046	20,584.86	97,633.81	348,690.93
November 2046	19,581.01	92,907.94	334,386.39

<u>Distribution Date</u>	<u>Classes DB and DL (in the aggregate)</u>	<u>Classes FG, GY, NA and NY (in the aggregate)</u>	<u>Class JA</u>
December 2046	\$ 18,602.37	\$ 88,298.18	\$ 320,287.67
January 2047	17,648.42	83,802.13	306,392.38
February 2047	16,718.63	79,417.47	292,698.14
March 2047	15,812.49	75,141.89	279,202.58
April 2047	14,929.52	70,973.16	265,903.40
May 2047	14,069.21	66,909.06	252,798.27
June 2047	13,231.09	62,947.44	239,884.93
July 2047	12,414.70	59,086.17	227,161.13
August 2047	11,619.56	55,323.16	214,624.62
September 2047	10,845.23	51,656.37	202,273.21
October 2047	10,091.26	48,083.81	190,104.72
November 2047	9,357.23	44,603.50	178,116.99
December 2047	8,642.69	41,213.51	166,307.88
January 2048	7,947.24	37,911.95	154,675.29
February 2048	7,270.47	34,696.97	143,217.11
March 2048	6,611.97	31,566.74	131,931.30
April 2048	5,971.35	28,519.49	120,815.79
May 2048	5,348.23	25,553.45	109,868.58
June 2048	4,742.22	22,666.92	99,087.66
July 2048	4,152.95	19,858.20	88,471.05
August 2048	3,580.06	17,125.64	78,016.79
September 2048	3,023.20	14,467.63	67,722.95
October 2048	2,482.01	11,882.57	57,587.61
November 2048	1,956.15	9,368.90	47,608.88
December 2048	1,445.28	6,925.09	37,784.89
January 2049	949.08	4,549.65	28,113.77
February 2049	467.22	2,241.11	18,593.71
March 2049	0.00	0.00	9,222.87
April 2049 and thereafter	0.00	0.00	0.00

Underlying Certificates

Trust Asset Group	Issuer	Series	Class	Issue Date	CUSIP Number	Interest Rate	Interest Type(1)	Final Distribution Date	Principal Type(1)	Original Notional Balance of Class	Underlying Certificate Factor(2)	Notional Balance in Trust	Percentage of Class in Trust	Approximate Weighted Coupon of Mortgage Loans(3)	Approximate Weighted Remaining Maturity of Mortgage Loans (in months)(3)	Approximate Weighted Average Age of Mortgage Loans (in months)(3)	Ginnie Mae I or II
4	Ginnie Mae	2017-052	TL	April 28, 2017	38376LUP17	3.0%	FIX/IO	April 2047	NTL(PT)	\$31,906,543	0.41925863	\$13,377,093	100.000000000000%	5.000%	329	29	I
4	Ginnie Mae	2017-080	ID(4)	May 30, 2017	38376L2Y14	3.0	FIX/IO	May 2047	NTL(PT)	32,038,451	0.61044082	19,357,578	100.000000000000	(4)	(4)	(4)	(4)
4	Ginnie Mae	2017-180	HI(5)	December 29, 2017	38380UEG14	3.0	FIX/IO	December 2047	NTL(SC/PT)	18,459,983	0.81984496	15,134,324	100.000000000000	(5)	(5)	(5)	(5)
5	Ginnie Mae	2017-101	IO(6)	July 28, 2017	38380FY91	3.0	FIX/IO	July 2047	NTL(PT)	34,583,174	0.70287821	13,764,586	56.6263061916	(6)	(6)	(6)	(6)
5	Ginnie Mae	2017-134	GI(7)(8)	September 29, 2017	38380GG73	3.0	FIX/IO	September 2047	NTL(SC/PT)	33,842,033	0.82067894	27,773,444	100.000000000000	(8)	(8)	(8)	(8)
5	Ginnie Mae	2017-163	DI(9)	November 30, 2017	38380KLY9	3.0	FIX/IO	November 2047	NTL(SC/PT)	19,000,000	0.84778888	16,107,989	100.000000000000	(9)	(9)	(9)	(9)
5	Ginnie Mae	2018-001	GI(10)	January 30, 2018	38380UC35	3.0	FIX/IO	January 2048	NTL(SC/PT)	12,734,010	0.89306216	11,372,263	100.000000000000	(10)	(10)	(10)	(10)
5	Ginnie Mae	2018-037	IH(11)	March 29, 2018	38380VWF4	3.0	FIX/IO	March 2048	NTL(SC/PT)	27,196,937	0.93229467	25,355,559	100.000000000000	(11)	(11)	(11)	(11)
5	Ginnie Mae	2018-059	GI(12)	April 30, 2018	38380WLG2	3.0	FIX/IO	April 2048	NTL(SC/PT)	27,522,869	0.93273929	11,890,245	46.2670152592	(12)	(12)	(12)	(12)
5	Ginnie Mae	2018-065	IH(13)	May 30, 2018	38380WV21	3.0	FIX/IO	May 2048	NTL(PT)	6,104,389	0.95219297	5,812,556	100.000000000000	(13)	(13)	(13)	II

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

(2) Underlying Certificate Factors are as of July 2019.

(3) Based on information as of July 2019.

(4) Ginnie Mae 2017-080 Class ID 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 Coupon of Mortgage Loans(3)	Approximate Weighted Remaining Maturity of Mortgage Loans (in months)(3)	Approximate Weighted Average Loan Age of Mortgage Loans (in months)(3)	Ginnie Mae I or II
2017-080	3A	5.000%	329	30	I
2017-080	3B	4.927	331	27	II

- (5) Ginnie Mae 2017-180 Class HI is a REMIC Class that is related to separate Trust Asset Subgroups. One of these Trust Asset Subgroups is backed by a previously issued REMIC certificate, Class W1 from Ginnie Mae 2017-093, which is itself related to separate Trust Asset Subgroups. These Trust Asset Subgroups 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)	Ginnie Mae I or II
2017-180	5C	5.000%	331	28	I
2017-180	5D	5.052	337	22	II
2017-093	6A	4.926	333	26	II
2017-093	6B	5.000	332	27	I
2017-093	6E	4.295	327	32	II

- (6) Ginnie Mae 2017-101 Class IO 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 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)	Ginnie Mae I or II
2017-101	8A	4.889%	334	26	II
2017-101	8B	4.393	333	26	II
2017-101	8C	5.000	331	27	I

- (7) MX Class.

- (8) Ginnie Mae 2017-134 Class GI is an MX Class that is derived from REMIC Classes of separate Security Groups, Classes DI and IC from Security Group 9 and Class EI from Security Group 10. Ginnie Mae 2017-134 Class EI 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 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)	Ginnie Mae I or II
2012-136	BC	3.797%	266	82	II
2012-136	HB	3.783	268	82	II
2017-134	DI	5.000	335	24	I
2017-134	IC	4.919	336	24	II

- (9) Ginnie Mae 2017-163 Class DI is a REMIC Class that is related to separate Trust Asset Subgroups. One of these Trust Asset Subgroups is backed by a previously issued REMIC certificate, Class IO from Ginnie Mae 2017-101, which is itself related to separate Trust Asset Subgroups. These Trust Asset Subgroups 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(%)	Approximate Weighted Average 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
2017-101	8A	4.889%	334	26	II
2017-101	8B	4.393	333	26	II
2017-101	8C	5.000	331	27	I
2017-163	5B	4.968	338	21	II

- (10) Ginnie Mae 2018-001 Class GI is a REMIC Class that is related to separate Trust Asset Subgroups. One of these Trust Asset Subgroups is backed by a previously issued REMIC certificate, Class W1 from Ginnie Mae 2017-093, which is itself related to separate Trust Asset Subgroups. These Trust Asset Subgroups 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(%)	Approximate Weighted Average 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
2017-093	6A	4.926%	333	26	II
2017-093	6B	5.000	332	27	I
2017-093	6E	4.295	327	32	II
2018-001	5C	4.959	340	20	II

- (11) Ginnie Mae 2018-037 Class IH is a REMIC Class that is related to separate Trust Asset Subgroups. One of these Trust Asset Subgroups is backed by a previously issued REMIC certificate, Class IG from Ginnie Mae 2018-021, which is itself related to separate Trust Asset Subgroups. One of these Trust Asset Subgroups is in turn backed by a previously issued REMIC certificate, Class WI from Ginnie Mae 2017-093, which is itself related to separate Trust Asset Subgroups. These Trust Asset Subgroups are backed by certain mortgage loans whose approximate weighted average characteristics are as follows:

Series	Trust Asset Subgroup	Approximate Weighted		Approximate Weighted		Ginnie Mae I or II
		Average Coupon of Mortgage Loans(3)	Remaining Term to Maturity of Mortgage Loans (in months)(3)	Average Loan Age of Mortgage Loans (in months)(3)	Average	
2017-093	6A	4.926%	333	26		II
2017-093	6B	5.000	332	27		I
2017-093	6E	4.295	327	32		II
2018-021	11A	4.466	340	19		II
2018-021	11B	4.905	341	19		II
2018-021	11C	5.000	339	19		I
2018-037	3B	4.942	341	17		II
2018-037	3C	5.355	341	18		II
2018-037	3D	4.940	341	17		II

- (12) Ginnie Mae 2018-059 Class GI is a REMIC Class that is related to separate Trust Asset Subgroups. One of these Trust Asset Subgroups is backed by a previously issued REMIC certificate, Class IG from Ginnie Mae 2018-021, which is itself related to separate Trust Asset Subgroups. One of these Trust Asset Subgroups is in turn backed by a previously issued REMIC certificate, Class WI from Ginnie Mae 2017-093, which is itself related to separate Trust Asset Subgroups. These Trust Asset Subgroups are backed by certain mortgage loans whose approximate weighted average characteristics are as follows:

Series	Trust Asset Subgroup	Approximate Weighted	Approximate Weighted	Approximate Weighted	Ginnie Mae I or II
		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)	
2017-093	6A	4.926%	333	26	II
2017-093	6B	5.000	332	27	I
2017-093	6E	4.295	327	32	II
2018-021	11A	4.466	340	19	II
2018-021	11B	4.905	341	19	II
2018-021	11C	5.000	339	19	I
2018-059	7D	5.345	344	16	II

- (13) Ginnie Mae 2018-065 Class IH 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)	Average Remaining Term to Maturity of Mortgage Loans (in months)(3)	Average Loan Age of Mortgage Loans (in months)(3)	
2018-065	6A	4.989%	344		16
2018-065	6B	5.029	343		15
2018-065	6D	5.461	344		15



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