

# \$853,057,273 Government National Mortgage Association GINNIE MAE®

# Guaranteed REMIC Pass-Through Securities and MX Securities Ginnie Mae REMIC Trust 2020-009

#### 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-10 which highlights some of these risks.

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

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

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

nie Mae REN	iic trus	1 202	0-009			
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						
PB	\$ 5,421,234	3.00%	SCH/AD	FIX	38382CAA9	January 2050
PE(1)	63,000,000	2.50	SCH/AD	FIX	38382CAB7	November 2048
PI(1)	10,500,000	3.00	NTL(SCH/AD)	FIX/IO	38382CAC5	November 2048
Z	5,634,028	3.00	SUP	FIX/Z	38382CAD3	January 2050
Security Group 2						
BF(1)	7,142,857	(5)	PAC/AD	FLT	38382CAE1	July 2049
BS(1)	7,142,857	(5)	NTL(PAC/AD)	INV/IO	38382CAF8	July 2049
CF(1)	7,142,857	(5)	PAC/AD	FLT	38382CAG6	January 2050
CS(1)	7,142,857	(5)	NTL(PAC/AD)	INV/IO	38382CAH4	January 2050
FB(1)	23,252,434	(5)	PAC/AD	FLT	38382CAJ0	January 2050
FC(1)	22,972,002	(5) (5)	PAC/AD PAC/AD	FLT FLT	38382CAK7	January 2050
FD(1)	25,000,000 50,000,000	2.50	PAC/AD PAC/AD	FIX	38382CAL5 38382CAM3	January 2050 July 2049
KB	287,150	3.00	PAC/AD	FIX	38382CAN1	January 2050
KG	50,000,000	2.50	PAC/AD	FIX	38382CAP6	January 2050
KP	50,000,000	2.75	PAC/AD	FIX	38382CAQ4	January 2050
KZ	988,228	3.00	PAC/AD	FIX/Z	38382CAR2	January 2050
SB(1)	23,252,434	(5)	NTL(PAC/AD)	INV/IO	38382CAS0	January 2050
SC(1)	22,972,002	(5)	NTL(PAC/AD)	INV/IO	38382CAT8	January 2050
SD(1)	25,000,000	(5)	NTL(PAC/AD)	INV/IO	38382CAU5	January 2050
ZA(1)	8,259,869	4.00	SUP	FIX/Z	38382CAV3	January 2050
ZB(1)	10,009,684	4.00	SUP	FIX/Z	38382CAW1	January 2050
ZC(1)	15,256,426	4.00	SUP	FIX/Z	38382CAX9	January 2050
Security Group 3						-
FA	110,000,000	(5)	PT	FLT	38382CAY7	January 2050
SA	110,000,000	(5)	NTL(PT)	INV/IO	38382CAZ4	January 2050
	,,	(=)	()			
Security Group 4	42,485,653	4.00	NTL(PAC/TAC/AD)	FIX/IO	38382CBA8	January 2050
IM	1,699,426	2.00	PAC/TAC/AD	FIX	38382CBB6	January 2050
MI	46,091,062	4.00	NTL(PAC/AD)	FIX/IO	38382CBC4	January 2050
MP	168,243,187	2.00	PAC/TAC/AD	FIX	38382CBD2	December 2049
MZ	14,421,637	3.00	PAC/AD	FIX/Z	38382CBE0	January 2050
ZM(1)	34,551,377	4.00	SUP	FIX/Z	38382CBF7	January 2050
Security Group 5	- 1,000,000					
*	42,822,839	3.50	NTL(SC/PT)	FIX/IO	38382CBG5	April 2048
AI	42,022,039	3.30	NIL(SC/FI)	TIA/IO	36362CBG3	April 2046
Security Group 6	76 250 407	4.00	NEW (CCOPE)	ETY///O	2020207112	0 1 2017
BI	76,359,407	4.00	NTL(SC/PT)	FIX/IO	38382CBH3	October 2047
Security Group 7						
CI	99,286,302	4.00	NTL(SC/PT)	FIX/IO	38382CBJ9	December 2049
Security Group 8						
BE	100,000	2.50	PAC/TAC/AD	FIX	38382CBK6	January 2050
EA(1)	106,675,081	2.50	PAC/TAC/AD	FIX	38382CBL4	April 2049
EB(1)	6,509,563	2.50	PAC/TAC/AD	FIX	38382CBM2	January 2050
EF	41,300,199	(5)	PAC/AD	FLT	38382CBN0	January 2050
EJ(1)	6,369,573	2.50	PAC/AD	FIX	38382CBP5	July 2049
EK(1)	4,146,382	2.50	PAC/AD	FIX	38382CBQ3	January 2050
ES	41,300,199	(5)	NTL(PAC/AD)	INV/IO	38382CBR1	January 2050
EZ	14,574,079	3.50	SUP	FIX/Z	38382CBS9	January 2050
ZE	100,000	2.50	PAC/AD	FIX/Z	38382CBT7	January 2050
	•		•		•	

(Cover continued on next page)

# Goldman Sachs & Co. LLC

Ramirez & Co., Inc.

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

Class of REMIC Securities	Original Principal Balance(2)	Interest Rate	Principal Type(3)	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
Residuals						
RR1	\$ 0	0.00%	NPR	NPR	38382CBU4	January 2050
RR2	0	0.00	NPR	NPR	38382CBV2	January 2050
R3	0	0.00	NPR	NPR	38382CBW0	January 2050
RR4	0	0.00	NPR	NPR	38382CBX8	January 2050
R5	0	0.00	NPR	NPR	38382CBY6	April 2048
R6	0	0.00	NPR	NPR	38382CBZ3	October 2047
R7	0	0.00	NPR	NPR	38382CCA7	December 2049
RR8	0	0.00	NPR	NPR	38382CCB5	January 2050

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

#### **AVAILABLE INFORMATION**

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

- this Offering Circular Supplement (this "Supplement"),
- the Base Offering Circular and
- in the case of the Group 5, 6 and 7 securities, each disclosure document relating to the Underlying Certificates (the "Underlying Certificate Disclosure Documents").

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

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

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

#### **TABLE OF CONTENTS**

	Page		Page
Terms Sheet	S-3	ERISA Matters	S-40
Risk Factors	S-10	Legal Investment Considerations	S-41
The Trust Assets	S-13	Plan of Distribution	S-41
Ginnie Mae Guaranty	S-15	Increase in Size	S-41
Description of the Securities	S-15	Legal Matters	S-41
Yield, Maturity and Prepayment		Schedule I: Available Combinations	S-I-1
Considerations	S-20	Schedule II: Scheduled Principal	
Certain United States Federal Income Tax		Balances	S-II-1
Consequences	S-37	Exhibit A: Underlying Certificates	A-1

#### **TERMS SHEET**

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

**Sponsor:** Goldman Sachs & Co. LLC

Co-Sponsor: Samuel A. Ramirez & Company, Inc.

Trustee: U.S. Bank National Association

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

**Distribution Date:** The 20th day of each month or, if the 20th day is not a Business Day, the first Business Day thereafter, commencing in February 2020.

# **Trust Assets:**

Trust Asset Group	Trust Asset Type	Certificate Rate	Original Term To Maturity (in years)
1	Ginnie Mae II	3.000%	30
2	Ginnie Mae II	4.000%	30
3	Ginnie Mae II	4.000%	30
4	Ginnie Mae II	4.000%	30
5	<b>Underlying Certificates</b>	(1)	(1)
6	<b>Underlying Certificates</b>	(1)	(1)
7	<b>Underlying Certificates</b>	(1)	(1)
8	Ginnie Mae II	3.500%	30

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

**Security Groups:** This series of Securities consists of multiple Security Groups (each, a "Group"), as shown on the front cover of this Supplement and on Schedule I to this Supplement. Except in the case of a certain MX Class in Groups 2 and 4, 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, 4 and 8 Trust Assets<sup>(1)</sup>:

Principal Balance	Weighted Average Remaining Term to Maturity (in months)	Weighted Average Loan Age (in months)	Weighted Average Mortgage Rate <sup>(2)</sup>
<b>Group 1 Trust Assets</b> \$74,055,262	346	1	3.55%
<b>Group 2 Trust Assets</b> \$270,311,507	350	7	4.48%
<b>Group 3 Trust Assets</b> \$110,000,000	356	3	4.34%
<b>Group 4 Trust Assets</b> \$218,915,627	350	7	4.48%
<b>Group 8 Trust Assets</b> \$179,774,877	351	2	3.96%

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

The actual remaining terms to maturity, loan ages and Mortgage Rates of many of the Mortgage Loans underlying the Group 1, 2, 3, 4 and 8 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 5, 6 and 7 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" in this Supplement.* 

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

<sup>(2)</sup> The Mortgage Loans underlying the Group 1, 2, 3, 4 and 8 Trust Assets may bear interest at rates ranging from 0.25% to 1.50% per annum above the related Certificate Rate.

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

Class	Interest Rate Formula(1)	Initial Interest Rate(2)	Minimum Rate	Maximum Rate	Delay (in days)	LIBOR for Minimum Interest Rate
Security Group 2						
BF	LIBOR + 0.45%	2.12600%	0.45%	6.50%	0	0.00%
BS	6.05% – LIBOR	4.37400%	0.00%	6.05%	0	6.05%
CF	LIBOR + 0.45%	2.12600%	0.45%	6.50%	0	0.00%
CS	6.05% - LIBOR	4.37400%	0.00%	6.05%	0	6.05%
FB	LIBOR + 0.45%	2.12600%	0.45%	6.50%	0	0.00%
FC	LIBOR + 0.45%	2.12600%	0.45%	6.50%	0	0.00%
FD	LIBOR + 0.45%	2.12600%	0.45%	6.50%	0	0.00%
KF	LIBOR + 0.45%	2.12600%	0.45%	6.50%	0	0.00%
KS	6.05% - LIBOR	4.37400%	0.00%	6.05%	0	6.05%
SB	6.05% - LIBOR	4.37400%	0.00%	6.05%	0	6.05%
SC	6.05% - LIBOR	4.37400%	0.00%	6.05%	0	6.05%
SD	6.05% - LIBOR	4.37400%	0.00%	6.05%	0	6.05%
Security Group 3						
FA	LIBOR + 0.65%	2.32770%	0.65%	4.00%	0	0.00%
SA	3.35% – LIBOR	1.67230%	0.00%	3.35%	0	3.35%
Security Group 8						
EF	LIBOR + 0.45%	2.18400%	0.45%	6.50%	0	0.00%
ES	6.05% - LIBOR	4.31600%	0.00%	6.05%	0	6.05%

- (1) LIBOR will be established on the basis of the ICE LIBOR method, as described under "Description of the Securities Interest Distributions Floating Rate and Inverse Floating Rate Classes" in this Supplement.
- (2) The initial Interest Rate will be in effect during the first Accrual Period; the Interest Rate will adjust monthly thereafter.

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

#### **SECURITY GROUP 1**

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

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

# **SECURITY GROUP 2**

The Group 2 Principal Distribution Amount, the KZ Accrual Amount, the ZA Accrual Amount, the ZB Accrual Amount and the ZC Accrual Amount will be allocated as follows:

- The KZ Accrual Amount in the following order of priority:
  - 1. Concurrently, to BF and KA, pro rata, until retired

- 2. To KZ, until retired
- 33.1629936864% of the Group 2 Principal Distribution Amount and the ZA Accrual Amount in the following order of priority:
- 1. To BF, FB, KA and KZ, until reduced to their Aggregate Scheduled Principal Distribution Amount for that Distribution Date, concurrently, as follows:
  - a. 28.5714285714% to FB, while outstanding
  - b. 71.4285714286% in the following order of priority:
    - i. Concurrently, to BF and KA, pro rata, while outstanding
    - ii. To KZ, while outstanding
  - 2. To ZA, until retired
- 3. To BF, FB, KA and KZ, in the same manner and order of priority as described in step 1. above, without regard to their Aggregate Scheduled Principal Balance, until retired
- 33.4472231698% of the Group 2 Principal Distribution Amount and the ZB Accrual Amount in the following order of priority:
- 1. To CF, FC, KB and KG, until reduced to their Aggregate Scheduled Principal Distribution Amount for that Distribution Date, concurrently, as follows:
  - a. 28.5714278607% to FC, while outstanding
  - b. 71.4285721393% in the following order of priority:
    - i. Concurrently, to CF and KG, pro rata, while outstanding
    - ii. To KB, while outstanding
  - 2. To ZB, until retired
- 3. To CF, FC, KB and KG, in the same manner and order of priority as described in step 1. above, without regard to their Aggregate Scheduled Principal Balance, until retired
- 33.3897831438% of the Group 2 Principal Distribution Amount and the ZC Accrual Amount in the following order of priority:
- 1. Concurrently, to FD and KP, pro rata, until reduced to their Aggregate Scheduled Principal Distribution Amount for that Distribution Date
  - 2. To ZC, until retired
- 3. Concurrently, to FD and KP, pro rata, without regard to their Aggregate Scheduled Principal Distribution Amount, until retired

#### **SECURITY GROUP 3**

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

# **SECURITY GROUP 4**

The Group 4 Principal Distribution Amount, the MZ Accrual Amount and the ZM Accrual Amount will be allocated as follows:

• The MZ Accrual Amount in the following order of priority:

- 1. Sequentially, to MP and MB, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date, in the following order of priority:
  - 2. To MZ, until retired
- The Group 4 Principal Distribution Amount and the ZM Accrual Amount, in the following order of priority:
- 1. Sequentially, to MP, MB and MZ, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date, in the following order of priority:
  - a. Sequentially, to MP and MB, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
    - b. To MZ, until retired
  - c. Sequentially, to MP and MB, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired
    - 2. To ZM, until retired
- 3. To MP, MB and MZ, in the same manner and order of priority as described in step 1. above, without regard to their Aggregate Scheduled Principal Balance, until retired

#### **SECURITY GROUP 8**

The Group 8 Principal Distribution Amount, the EZ Accrual Amount and the ZE Accrual Amount will be allocated as follows:

- The ZE Accrual Amount, sequentially, to EJ, EK and ZE, in that order, until retired
- The Group 8 Principal Distribution Amount and the EZ Accrual Amount, concurrently, as follows:
- 1. To BE, EA, EB, EF, EJ, EK and ZE, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date, concurrently, as follows:
  - a. 24.9999996973% to EF, while outstanding
  - b. 75.0000003027% in the following order of priority:
  - i. Sequentially, to EA, EB and BE, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
    - ii. Sequentially, to EJ, EK and ZE, in that order, while outstanding
  - iii. Sequentially, to EA, EB and BE, in that order, without regard to their Aggregate Scheduled Principal Balance
  - 2. To EZ, until retired
- 3. To the Group 8 PAC Classes, in the same manner and order of priority as described in step 1. above, without regard to their Aggregate Scheduled Principal Balance, until retired

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

	Structuring Ranges or Rates
PAC Classes	
BE, EA, EB, EF, EJ, EK and ZE (in the aggregate)	150% PSA through 210% PSA
BF, FB, KA and KZ (in the aggregate)	175% PSA through 250% PSA
CF, FC, KB and KG (in the aggregate)	150% PSA through 235% PSA
FD and KP (in the aggregate)	150% PSA through 290% PSA
MB, MP and MZ (in the aggregate)	130% PSA through 250% PSA
Scheduled Classes	
PB and PE (in the aggregate)	150% PSA through 205% PSA
TAC Classes	
BE, EA, and EB (in the aggregate)	200% PSA
MB and MP (in the aggregate)	450% 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 notional balance of the related Trust Asset Group indicated:

Class	Original Class Notional Balance	Represents Approximately
<b>Security Group 1</b>		
PI	\$ 10,500,000	16.666666667% of PE (SCH/AD Class)
Security Group 2		
BS	\$ 7,142,857	100% of BF (PAC/AD Class)
CS	7,142,857	100% of CF (PAC/AD Class)
KS	85,510,150	100% of BF, CF, FB, FC and FD (in the aggregate) (PAC/AD Classes)
SB	23,252,434	100% of FB (PAC/AD Class)
SC	22,972,002	100% of FC (PAC/AD Class)
SD	25,000,000	100% of FD (PAC/AD Class)
Security Group 3		
SA	\$110,000,000	100% of FA (PT Class)
Security Group 4		
IM	\$ 42,485,653	25% of MB and MP (in the aggregate) (PAC/TAC/AD Classes)
MI	\$ 42,485,653	25% of MB and MP (in the aggregate) (PAC/TAC/AD Classes)
	3,605,409	25% MZ (PAC/AD Class)
	\$ 46,091,062	

Class	Original Class Notional Balance	Represents Approximately
Security Group 5		
AI	\$ 42,822,839	100% of the Group 5 Trust Assets
Security Group 6		
ВІ	\$ 76,359,407	100% of the Group 6 Trust Assets
Security Group 7		
CI	\$ 99,286,302	100% of the Group 7 Trust Assets
Security Group 8		-
ES	\$ 41,300,199	100% of EF (PAC/AD Class)

Tax Status: Single REMIC Series as to the Group 3 Trust Assets (the "Group 3 REMIC"), Single REMIC Series as to the Group 5 Trust Assets (the "Group 5 REMIC"), Single REMIC Series as to the Group 6 Trust Assets (the "Group 6 REMIC"), and Single REMIC Series as to the Group 7 Trust Assets (the "Group 7 REMIC"). Double REMIC Series as to the Group 1 Trust Assets, Double REMIC Series as to the Group 2 Trust Assets, Double REMIC Series as to the Group 8 Trust Assets. Separate REMIC elections will be made as to the Group 3 REMIC, as to the Group 5 REMIC, as to the Group 6 REMIC, as to the Group 7 REMIC, as to the Issuing REMIC and the Pooling REMIC with respect to the Group 1 Trust Assets (the "Group 1 Issuing REMIC" and the "Group 1 Pooling REMIC," respectively), as to the Issuing REMIC and the Pooling REMIC with respect to the Group 2 Trust Assets (the "Group 2 Issuing REMIC" and the "Group 4 Trust Assets (the "Group 4 Issuing REMIC" and the Pooling REMIC and the Pooling REMIC and the Pooling REMIC with respect to the Group 4 Issuing REMIC and the "Group 4 Pooling REMIC" and the "Group 8 Pooling REMIC" and the "Group 8 Trust Assets (the "Group 8 Issuing REMIC" and the "Group 8 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 RR1, RR2, R3, RR4, R5, R6, R7 and RR8 are Residual Classes. Class RR1 represents the Residual Interest of the Group 1 Issuing and Pooling REMICs. Class RR2 represents the Residual Interest of the Group 3 REMIC. Class RR4 represents the Residual Interest of the Group 4 Issuing and Pooling REMICs. Class R5 represents the Residual Interest of the Group 5 REMIC. Class R6 represents the Residual Interest of the Group 7 REMIC. Class RR8 represents the Residual Interest of the Group 7 REMIC. Class RR8 represents the Residual Interest of the Group 8 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, scheduled and TAC classes, the related support classes 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, scheduled and TAC classes for that distribution date, this excess will be distributed to the related support classes.

The rate of payments on the underlying certificates will directly affect the rate of payments on the group 5, 6 and 7 securities. The underlying certificates will be sensitive in varying degrees to:

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

As described in the related underlying certificate disclosure documents, the reductions in notional balances of certain of the underlying certificates included in trust asset group 6 and 7 on any payment date are calculated, directly or indirectly, on the basis of schedules; no assurance can be given that the underlying certificates will adhere to their schedules. Further, prepayments on the related mortgage loans may have

occurred at rates faster or slower than those initially assumed.

The trust assets underlying certain of the underlying certificates included in trust asset groups 5, 6 and 7 are also previously issued certificates that represent beneficial ownership interests in separate trusts. The rate of payments on the precertificates viously issued backing underlying certificates will directly affect the timing and rate of payments on the group 5, 6 and 7 securities. You should read the related underlying certificate disclosure documents, including the risk factors contained therein, to understand the payments on and related risks of the previously issued certificates backing these underlying certificates.

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

Up to 10% of the mortgage loans underlying the group 1, 2, 3, 4 and 8 trust assets and up to 100% of the mortgage loans underlying the group 5, 6 and 7 trust assets may be bigher 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 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 5, 6 and 7 securities and, in particular, the support, interest only, accrual and residual classes, are not suitable investments for all investors.

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

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

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

The residual securities may experience significant adverse tax timing consequences. Accordingly, you are urged to consult tax advisors and to consider the after-tax effect of ownership of a residual security and the suitability of the residual securities to your investment objectives. *See* 

"Certain United States Federal Income Tax Consequences" in this supplement and in the base offering circular.

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

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

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

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

#### THE TRUST ASSETS

#### General

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

# The Trust MBS (Groups 1, 2, 3, 4 and 8)

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 5, 6 and 7)

The Group 5, 6 and 7 Trust Assets are Underlying Certificates that represent beneficial ownership interests in one or more separate trusts, the assets of which evidence direct or indirect beneficial ownership interests in certain Ginnie Mae Certificates. Each Underlying Certificate constitutes all or a portion of a class of a separate Series of certificates described in the related Underlying Certificate Disclosure Document. Each Underlying Certificate Disclosure Document may be obtained from the Information Agent as described under "Available Information" in this Supplement. Investors are cautioned that material changes in facts and circumstances may have occurred since the date of each Underlying Certificate Disclosure Document, including changes in prepayment rates, prevailing interest rates and other economic factors, which may limit the usefulness of, and be directly contrary to the assumptions used in preparing the information included in, the offering document. See "Underlying Certificates" in the Base Offering Circular.

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

# The Mortgage Loans

The Mortgage Loans underlying the Group 1, 2, 3, 4 and 8 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, 4 and 8 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	From the 20th day of the month preceding the month of the related Distribution
Inverse Floating	Date through the 19th day of the month of that Distribution Date
Rate Classes	

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

#### Accrual Classes

Each of Classes EZ, MZ, KZ, ZA, ZB, ZC, ZE, and ZM 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 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 RR1 Securities will represent the beneficial ownership of the Residual Interest in the Group 1 Issuing REMIC and the beneficial ownership of the Residual Interest in the Group 1 Pooling REMIC, as described in "Certain United States Federal Income Tax Consequences" in the Base Offering Circular. The Class RR2 Securities will represent the beneficial ownership of the Residual Interest in the Group 2 Issuing REMIC and the beneficial ownership of the Residual Interest in the Group 2 Pooling REMIC, as described in "Certain United States Federal Income Tax Consequences" in the Base Offering Circular. The Class R3 Securities will represent the beneficial ownership of the Residual Interest in the Group 3 REMIC, as described in "Certain United States Federal Income Tax Consequences" in the Base Offering Circular. The Class RR4 Securities will represent the beneficial ownership of the Residual Interest in the Group 4 Issuing REMIC and the beneficial ownership of the Residual Interest in the Group 4 Pooling REMIC, as described in "Certain United States Federal Income Tax Consequences" in the Base Offering Circular. The Class R5 Securities will represent the beneficial ownership of the Residual Interest in the Group 5 REMIC, as described in "Certain United States Federal Income Tax Consequences" in the Base Offering Circular. The Class R6 Securities will represent the beneficial ownership of the Residual Interest in the Group 6 REMIC, as described in "Certain United States Federal Income Tax Consequences" in the Base Offering Circular. The Class R7 Securities will represent the beneficial ownership of the Residual Interest in the Group 7 REMIC, as described in "Certain United States Federal Income Tax Consequences" in the Base Offering Circular. The Class RR8 Securities will represent the beneficial ownership of the Residual Interest in the Group 8 Issuing REMIC and the beneficial ownership of the

Residual Interest in the Group 8 Pooling REMIC, as described in "Certain United States Federal Income Tax Consequences" in the Base Offering Circular. The Class RR1, RR2, R3, RR4, R5, R6, R7 and RR8 Securities have no Class Principal Balance and do not accrue interest. The RR1, RR2, R3, RR4, R5, R6, R7 and RR8 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 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:

Trust REMICs	Related Securities
Group 1 Issuing and Pooling REMICs	Group 1 Securities
Group 2 Issuing and Pooling REMICs	Group 2 Securities
Group 3 REMIC	Group 3 Securities
Group 4 Issuing and Pooling REMICs	Group 4 Securities
Group 5 REMIC	Group 5 Securities
Group 6 REMIC	Group 6 Securities
Group 7 REMIC	Group 7 Securities
Group 8 Issuing and Pooling REMICs	Group 8 Securities

Upon any termination of the Trust (or one or more related Trust REMICs), the Holder of any related outstanding Security (other than a Residual or Notional Class Security) will be entitled to receive that Holder's allocable share of the Class Principal Balance of that Class plus any accrued and unpaid interest thereon at the applicable Interest Rate, and any Holder of any related outstanding Notional Class Security will be entitled to receive that Holder's allocable share of any accrued and unpaid interest thereon at the applicable Interest Rate. The Residual Holders will be entitled to their pro rata share of any assets remaining in the related Trust REMICs after payment in full of the amounts described in the foregoing sentence. However, any remaining assets are not likely to be significant.

With respect to each of Security Groups 1, 2, 3, 4, 5, 6, 7 and 8, a Holder of all of the outstanding Regular Securities of any such Security Group and the related Class of Residual Securities shall have the right to purchase the related Trust Assets upon three Business Days' notice (the "Notice Period"). The purchase shall be for cash in an amount equal to (A)(i) the aggregate remaining principal balance of the assets of such Security Group, but in no event less than the aggregate outstanding principal amount of the Securities of such Security Group, plus (ii) accrued interest on the Securities of such Security Group, less (B) amounts on deposit in the related Trust REMIC or Trust REMICs, for distribution on the Securities of such Security Group, plus (C) a \$5,000 termination fee payable to the Trustee in connection with each Security Group to be terminated. After the Notice Period, and upon such purchase, the Trustee will terminate the related Trust REMIC or Trust REMICs. Upon such termination, the Trustee will distribute the cash proceeds of the sale of the related Trust Assets to the Holder of the related Securities (which distribution may be offset against amounts due on the sale of such assets), will cancel the Securities of the related Security Group and cause the removal from the Book-Entry Depository Account of all Classes of the related Security Group, will cancel the related Class of Residual Securities, and will credit the remaining Trust Assets in the related Security Group to the account of the surrendering Holder. Notwithstanding anything to the contrary contained herein, no such termination will be allowed unless the Trustee and Ginnie Mae are provided, at no cost to either the Trustee or Ginnie Mae, an Opinion of Counsel, acceptable to the Trustee and Ginnie Mae, to the effect that such termination constitutes a "qualified liquidation" under the REMIC Provisions, including Section 860F(a)(4) of the Code, and such termination will not result in a disqualification of any Trust REMIC that is not terminated at such time or the imposition of any "prohibited transactions" or "contributions" tax under the REMIC Provisions on any Trust REMIC that is not terminated at such time.

#### **Modification and Exchange**

All or a portion of the Classes of REMIC Securities specified on the front cover may be exchanged for a proportionate interest in the related MX Class shown on Schedule I to this Supplement. Similarly, all or a portion of the related MX Class may be exchanged for proportionate interests in the related Classes of REMIC Securities. 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.

A Beneficial Owner proposing to effect an exchange must notify the Trustee through the Beneficial Owner's Book-Entry Depository participant. This notice must be received by the Trustee not later than two Business Days before the proposed exchange date. The exchange date can be any Business Day other than the last Business Day of the month. The notice must contain the outstanding principal and notional balances of the Securities to be included in the exchange and the proposed exchange date. The notice is required to be delivered to the Trustee by email to USBGNMATeam@USBank.com or in writing at its Corporate Trust Office at U.S. Bank National Association, One Federal Street, 3rd Floor, Boston, MA 02110, Attention: Ginnie Mae REMIC Program Agency Group 2020-009. 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  $V_{32}$  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 5, 6 and 7 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 5, 6 and 7 securities*" in this Supplement.

#### **Accretion Directed Classes**

Classes BE, BF, CF, EF, EA, EB, EF, EJ, EK, FB, FC, FD, KA, KB, KG, KP, KZ, MB, MP, MZ, PB, PE and ZE are is an 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 BS, CS, ES, IM, MI, PI, SB, SC and SD is a Notional Class whose Class Notional Balance is determined by reference to the Class Principal Balance of the related Accretion Directed Class or Classes shown under "Terms Sheet — Notional Classes" in this Supplement.

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

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

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

Each PAC, Scheduled and TAC Class exhibits an Effective Range or Rate of constant prepayment rates for each related schedule at which such Class will receive Scheduled Payments. That range or rate may differ from the Structuring Range or Rate used to create the related principal balance schedule. Based on the Modeling Assumptions, the *initial* Effective Ranges or Rates for the PAC, Scheduled and TAC Classes are as follows:

	Initial Effective Ranges or Rates
PAC Classes	
BE, EA, EB, EF, EJ, EK and ZE (in the aggregate)	150% PSA through 210% PSA
BF, FB, KA and KZ (in the aggregate)	175% PSA through 250% PSA
CF, FC, KB and KG (in the aggregate)	150% PSA through 235% PSA
FD and KP (in the aggregate)	150% PSA through 290% PSA
MB, MP and MZ (in the aggregate)	130% PSA through 250% PSA
Scheduled Classes	
PB and PE (in the aggregate)	150% PSA through 205% PSA
TAC Classes	
BE, EA and EB (in the aggregate)	150% PSA through 210% PSA
MB and MP (in the aggregate)	450% PSA

- The principal payment stability of the PAC Classes will be supported by the related Support Class
- The principal payment stability of the Scheduled Classes will be supported by the related Support Class.
- The principal payment stability of the TAC Classes will be supported by the related Support Class and Classes MZ, EJ, EK and ZE, as applicable.

If all of the Classes supporting a given Class are retired before the Class being supported is retired, the outstanding Class will no longer have an Effective Range or Rate 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 or Rates. If the initial Effective Ranges or Rates were calculated using the actual characteristics of the related Mortgage Loans, the initial Effective Ranges or Rates could differ from those shown in the above table, or an initial Effective Rate might not exist. Therefore, even if the Mortgage Loans were to prepay at a constant rate within the initial Effective Range or at the initial Effective Rate 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, Scheduled or TAC Class not to receive Scheduled Payments, even if prepayment rates remain within the initial Effective Range (or, if prepayment rates average the Effective Rate) for that Class. Further, the Effective Range for any PAC, Scheduled or TAC Class can narrow, shift over time or cease to exist, and the Effective Rate for any TAC Class can change 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 or Rate for any PAC, Scheduled or TAC Class, the amount available to pay principal on the Securities may be insufficient to produce Scheduled Payments on such related PAC, Scheduled or TAC 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 or Rate for any PAC, Scheduled or TAC Class, its supporting Class or Classes may be retired earlier than that PAC, Scheduled or TAC 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, 4 and 8 Trust Assets have the assumed characteristics shown under "Assumed Characteristics of the Mortgage Loans Underlying the Group 1, 2, 3, 4 and 8 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, 4 or 8 Trust Asset is assumed to have an original and a remaining term to maturity of 360 months and a Mortgage Rate of 1.50% per annum higher than the related Certificate Rate.
- 2. The Mortgage Loans prepay at the constant percentages of PSA (described below) shown in the related table.
- 3. Distributions on the Securities are always received on the 20th day of the month whether or not a Business Day, commencing in February 2020.
  - 4. A termination of the Trust, any Trust REMIC or the Underlying Trusts does not occur.
  - 5. The Closing Date for the Securities is January 30, 2020.
- 6. No expenses or fees are paid by the Trust other than the Trustee Fee, which is paid as described under "The Trust Assets The Trustee Fee" in this Supplement.
- 7. Distributions on the Underlying Certificates are made as described in the related Underlying Certificate Disclosure Documents.
  - 8. Each Class is held from the Closing Date and is not exchanged in whole or in part.

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

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

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

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

#### **Decrement Tables**

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

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

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

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

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

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

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

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

Security Group 1 PSA Prepayment Assumption Rates

							y								
		Classe	s PA, PE	and PI				Class PB	3				Class Z		
Distribution Date	0%	150%	185%	205%	400%	0%	150%	185%	205%	400%	0%	150%	185%	205%	400%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
January 2021	98	95	95	95	95	100	100	100	100	100	103	103	96	92	54
January 2022	96	86	86	86	81	100	100	100	100	100	106	106	83	70	0
January 2023	93	74	74	74	58	100	100	100	100	100	109	109	66	42	0
January 2024	91	63	63	63	41	100	100	100	100	100	113	113	54	22	0
January 2025	88	54	54	54	28	100	100	100	100	100	116	116	47	9	0
January 2026	85	45	45	45	19	100	100	100	100	100	120	120	43	2	0
January 2027	83	37	37	37	11	100	100	100	100	100	123	123	42	0	0
January 2028	80	30	30	30	6	100	100	100	100	100	127	125	42	0	0
January 2029	77	25	25	25	2	100	100	100	100	100	131	124	42	0	0
January 2030	73	19	19	19	0	100	100	100	100	92	135	121	40	0	0
January 2031	70	15	15	15	0	100	100	100	100	68	139	116	38	0	0
January 2032	67	11	11	11	0	100	100	100	100	49	143	109	35	0	0
January 2033	63	8	8	8	0	100	100	100	100	36	148	102	32	0	0
January 2034	59	5	5	5	0	100	100	100	100	26	152	94	30	0	0
January 2035	55	3	3	3	0	100	100	100	100	19	157	86	27	0	0
January 2036	51	1	1	1	0	100	100	100	100	13	162	78	24	0	0
January 2037	47	0	0	0	0	100	91	91	91	10	166	70	21	0	0
January 2038	42	0	0	0	0	100	75	75	75	7	171	62	18	0	0
January 2039	38	0	0	0	0	100	60	60	60	5	177	54	16	0	0
January 2040	33	0	0	0	0	100	48	48	48	3	182	47	14	0	0
January 2041	27	0	0	0	0	100	38	38	38	2	188	40	11	0	0
January 2042	22	0	0	0	0	100	30	30	30	2	193	33	9	0	0
January 2043	16	0	0	0	0	100	23	23	23	1	199	27	8	0	0
January 2044	11	0	0	0	0	100	17	17	17	1	205	21	6	0	0
January 2045	4	0	0	0	0	100	12	12	12	0	212	16	4	0	0
January 2046	0	0	0	0	0	77	8	8	8	0	218	11	3	0	0
January 2047	0	0	0	0	0	5	5	5	5	0	220	7	2	0	0
January 2048	0	0	0	0	0	2	2	2	2	0	151	3	1	0	0
January 2049	0	0	0	0	0	0	0	0	0	0	78	0	0	0	0
January 2050 Weighted Average	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Life (years)	15.2	6.2	6.2	6.2	3.9	26.4	20.6	20.6	20.6	12.9	28.5	18.3	9.0	2.9	1.0

Security Group 2 PSA Prepayment Assumption Rates

		Classes	BF, BS	and KA		- (	Classes	CF, CS	and KG	ì		Classe	es FB ar	nd SB			Class	es FC aı	nd SC	
Distribution Date	0%	150%	205%	290%	500%	0%	150%	205%	290%	500%	0%	150%	205%	290%	500%	0%	150%	205%	290%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
January 2021	98	93	92	92	92	98	93	93	93	93	98	93	93	93	93	98	93	93	93	93
January 2022	96	83	81	81	68	96	83	83	83	70	96	83	81	81	68	96	83	83	83	70
January 2023	94	72	69	67	46	94	72	72	69	48	94	73	70	68	47	94	72	72	69	48
January 2024	91	62	58	54	31	91	62	62	56	33	92	63	59	55	32	91	62	62	56	33
January 2025	89	53	49	43	20	89	53	53	45	22	89	54	50	44	22	89	53	53	45	23
January 2026	86	45	40	34	13	86	44	44	36	15	87	46	41	36	15	86	45	45	36	15
January 2027	84	38	33	27	8	83	37	37	29	10	84	39	34	29	10	83	37	37	29	11
January 2028	81	31	27	21	5	80	31	31	23	7	82	33	28	23	7	81	31	31	24	7
January 2029	78	25	22	17	3	77	26	26	18	4	79	27	23	19	5	77	26	26	19	5
January 2030	75	19	17	13	1	74	21	21	15	3	76	21	19	15	3	74	22	22	15	3
January 2031	71	14	14	10	0	71	18	18	12	2	73	16	16	12	2	71	18	18	12	2
January 2032	68	11	11	7	0	67	14	14	9	1	69	13	13	9	1	67	15	15	10	2
January 2033	64	8	8	5	0	63	12	12	7	1	66	11	11	7	1	64	12	12	8	1
January 2034	60	6	6	3	0	59	10	10	6	0	62	9	9	6	1	60	10	10	6	1
January 2035	56	4	4	2	0	55	8	8	4	0	58	7	7	5	0	55	8	8	5	0
January 2036	52	3	3	1	0	51	6	6	3	0	54	6	6	4	0	51	7	7	4	0
January 2037	48	2	2	0	0	46	5	5	2	0	50	5	5	3	0	47	5	5	3	0
January 2038	43	1	1	0	0	41	4	4	2	0	45	4	4	2	0	42	4	4	2	0
January 2039	38	0	0	0	0	36	3	3	1	0	40	3	3	2	0	37	4	4	2	0
January 2040	33	0	0	0	0	31	2	2	1	0	35	2	2	1	0	31	3	3	1	0
January 2041	27	0	0	0	0	25	2	2	0	0	30	2	2	1	0	25	2	2	1	0
January 2042	21	0	0	0	0	19	1	1	0	0	24	1	1	1	0	20	2	2	1	0
January 2043	15	0	0	0	0	13	1	1	0	0	18	1	1	1	0	13	1	1	1	0
January 2044	8	0	0	0	0	6	0	0	0	0	12	1	1	0	0	7	1	1	0	0
January 2045	2	0	0	0	0	0	0	0	0	0	5	0	0	0	0	1	1	1	0	0
January 2046	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
January 2047	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
January 2048	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
January 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
January 2050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average																				
Life (years)	15.3	6.2	5.9	5.3	3.4	15.0	6.6	6.6	5.7	3.6	15.7	6.6	6.3	5.7	3.6	15.1	6.7	6.7	5.8	3.7

Security Group 2 PSA Prepayment Assumption Rates

,	(	Classes	FD, KP	and SE	)		(	Class K	В			Classe	es KF aı	nd KS			(	Class KZ	Z.	
Distribution Date	0%	150%	205%	290%	500%	0%	150%	205%	290%	500%	0%	150%	205%	290%	500%	0%	150%	205%	290%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
January 2021	98	92	92	92	92	100	100	100	100	100	98	93	93	93	93	103	103	103	103	103
January 2022	95	81	81	81	75	100	100	100	100	100	96	82	82	82	71	106	106	106	106	106
January 2023	92	69	69	69	51	100	100	100	100	100	93	71	70	68	49	109	109	109	109	109
January 2024	89	58	58	58	35	100	100	100	100	100	91	61	60	56	33	113	113	113	113	113
January 2025	86	48	48	48	24	100	100	100	100	100	88	52	50	46	23	116	116	116	116	116
January 2026	83	39	39	39	16	100	100	100	100	100	86	43	42	37	15	120	120	120	120	120
January 2027	80	31	31	31	11	100	100	100	100	100	83	36	34	30	10	123	123	123	123	123
January 2028	77	25	25	25	8	100	100	100	100	100	80	30	28	24	7	127	127	127	127	127
January 2029	73	20	20	20	5	100	100	100	100	100	77	24	23	19	5	131	131	131	131	131
January 2030	69	16	16	16	4	100	100	100	100	100	73	20	19	15	3	135	135	135	135	135
January 2031	65	13	13	13	2	100	100	100	100	100	70	16	16	12	2	139	139	139	139	129
January 2032	61	10	10	10	2	100	100	100	100	100	66	13	13	9	1	143	143	143	143	87
January 2033	56	8	8	8	1	100	100	100	100	100	62	10	10	7	1	148	148	148	148	58
January 2034	52	6	6	6	1	100	100	100	100	100	58	8	8	6	1	152	152	152	152	39
January 2035	47	5	5	5	0	100	100	100	100	90	54	7	7	5	0	157	157	157	157	26
January 2036	41	4	4	4	0	100	100	100	100	60	49	5	5	3	0	162	162	162	162	17
January 2037	36	3	3	3	0	100	100	100	100	40	44	4	4	3	0	166	166	166	166	11
January 2038	30	2	2	2	0	100	100	100	100	26	39	3	3	2	0	171	171	171	129	7
January 2039	24	2	2	2	0	100	100	100	100	17	34	3	3	2	0	177	167	167	99	5
January 2040	18	1	1	1	0	100	100	100	100	11	28	2	2	1	0	182	131	131	75	3
January 2041	11	1	1	1	0	100	100	100	100	7	23	1	1	1	0	188	101	101	57	2
January 2042	4	1	1	1	0	100	100	100	100	4	16	1	1	1	0	193	77	77	42	1
January 2043	1	1	1	1	0	100	100	100	100	3	11	1	1	0	0	199	57	57	30	1
January 2044	0	0	0	0	0	100	100	100	75	2	6	1	1	0	0	205	42	42	21	0
January 2045	0	0	0	0	0	100	100	100	51	1	2	0	0	0	0	212	29	29	15	0
January 2046	0	0	0	0	0	88	88	88	33	1	0	0	0	0	0	19	19	19	9	0
January 2047	0	0	0	0	0	53	53	53	19	0	0	0	0	0	0	11	11	11	5	0
January 2048	0	0	0	0	0	25	25	25	9	0	0	0	0	0	0	5	5	5	2	0
January 2049	0	0	0	0	0	3	3	3	1	0	0	0	0	0	0	1	1	1	0	0
January 2050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average																				
Life (years)	13.4	5.9	5.9	5.9	3.8	27.2	27.2	27.2	25.4	17.1	14.8	6.4	6.3	5.7	3.7	25.7	22.2	22.2	20.4	13.3

PSA	Prepayment	Assumption	Rates
- 0	- repuly mem	- LOOULING TO LO	******

						roa i	терауш	CIII ASSU	шриоп	Rates					
	Class ZA Class ZB									Class ZC	:				
Distribution Date	0%	150%	205%	290%	500%	0%	150%	205%	290%	500%	0%	150%	205%	290%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
January 2021	104	104	95	71	10	104	104	91	70	20	104	104	95	82	49
January 2022	108	108	85	22	0	108	108	73	20	0	108	108	85	51	0
January 2023	113	113	77	0	0	113	113	58	0	0	113	113	77	24	0
January 2024	117	117	73	0	0	117	117	48	0	0	117	117	72	9	0
January 2025	122	122	71	0	0	122	122	43	0	0	122	122	70	1	0
January 2026	127	127	73	0	0	127	127	41	0	0	127	127	71	0	0
January 2027	132	132	73	0	0	132	131	42	0	0	132	128	70	0	0
January 2028	138	138	71	0	0	138	131	41	0	0	138	126	67	0	0
January 2029	143	143	68	0	0	143	128	39	0	0	143	122	63	0	0
January 2030	149	149	64	0	0	149	123	37	0	0	149	115	59	0	0
January 2031	155	155	59	0	0	155	117	34	0	0	155	108	54	0	0
January 2032	161	148	54	0	0	161	109	31	0	0	161	100	49	0	0
January 2033	168	136	49	0	0	168	102	29	0	0	168	91	43	0	0
January 2034	175	125	44	0	0	175	93	26	0	0	175	83	38	0	0
January 2035	182	113	39	0	0	182	85	23	0	0	182	74	34	0	0
January 2036	189	101	34	0	0	189	76	20	0	0	189	66	29	0	0
January 2037	197	90	29	0	0	197	68	18	0	0	197	58	25	0	0
January 2038	205	79	25	0	0	205	60	15	0	0	205	51	21	0	0
January 2039	214	69	21	0	0	214	53	13	0	0	214	44	18	0	0
January 2040	222	59	18	0	0	222	45	11	0	0	222	37	15	0	0
January 2041	231	50	15	0	0	231	39	9	0	0	231	32	12	0	0
January 2042	241	42	12	0	0	241	32	7	0	0	241	26	10	0	0
January 2043	251	34	10	0	0	251	26	6	0	0	231	21	8	0	0
January 2044	261	27	7	0	0	261	21	5	0	0	204	17	6	0	0
January 2045	271	21	6	0	0	263	16	3	0	0	175	13	4	0	0
January 2046	262	15	4	0	0	217	12	2	0	0	144	9	3	0	0
January 2047	202	10	2	0	0	168	7	2	0	0	111	6	2	0	0
January 2048	139	5	1	0	0	115	4	1	0	0	76	3	1	0	0
January 2049	72	1	0	0	0	60	1	0	0	0	39	0	0	0	0
January 2050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average															
Life (years)	28.0	18.7	12.2	1.4	0.6	27.6	17.8	8.2	1.4	0.7	26.5	16.9	11.5	2.2	1.0

Security Group 3 PSA Prepayment Assumption Rates

		Cla	asses FA and	SA	
Distribution Date	0%	100%	200%	300%	400%
Initial Percent	100	100	100	100	100
January 2021	99	96	95	93	91
January 2022	97	91	85	79	74
January 2023	96	84	73	64	55
January 2024	94	77	63	51	41
January 2025	92	71	54	41	31
January 2026	91	65	47	33	23
January 2027	89	60	40	26	17
January 2028	87	55	34	21	12
January 2029	85	50	29	17	9
January 2030	83	45	25	13	7
January 2031	80	41	21	11	5
January 2032	78	37	18	8	4
January 2033	75	34	15	7	3 2
January 2034	72	30	13	5	2
January 2035	69	27	11	4	1
January 2036	66	24	9	3	1
January 2037	63	22	8	2	1
January 2038	60	19	6	2	1
January 2039	56	17	5	1	0
January 2040	52	15	4	1	0
January 2041	48	13	3	1	0
January 2042	44	11	3	1	0
January 2043	40	9	2	0	0
January 2044	35	7	2	0	0
January 2045	30	6	1	0	0
January 2046	24	4	1	0	0
January 2047	19	3	1	0	0
January 2048	13	2	0	0	0
January 2049	7	1	0	0	0
January 2050	0	0	0	0	0
Weighted Average					
Life (years)	19.0	10.7	7.2	5.4	4.3

Security Group 4
PSA Prepayment Assumption Rates

			Class IM	[				Class MI	3				Class M	[	
Distribution Date	0%	130%	205%	250%	500%	0%	130%	205%	250%	500%	0%	130%	205%	250%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
January 2021	97	92	92	92	92	100	100	100	100	100	98	93	93	93	93
January 2022	94	81	81	81	75	100	100	100	100	100	95	83	83	83	74
January 2023	91	69	69	69	51	100	100	100	100	100	93	72	72	72	51
January 2024	88	58	58	58	34	100	100	100	100	100	90	62	62	62	35
January 2025	84	48	48	48	22	100	100	100	100	100	87	53	53	53	24
January 2026	81	38	38	38	13	100	100	100	100	100	84	45	45	45	16
January 2027	77	30	30	30	8	100	100	100	100	100	81	37	37	37	11
January 2028	73	22	22	22	4	100	100	100	100	100	77	31	31	31	8
January 2029	69	16	16	16	1	100	100	100	100	84	74	25	25	25	5
January 2030	65	11	11	11	0	100	100	100	100	0	70	21	21	21	3
January 2031	60	7	7	7	0	100	100	100	100	0	66	17	17	17	2
January 2032	55	3	3	3	0	100	100	100	100	0	62	14	14	14	2
January 2033	50	0	0	0	0	100	0	0	0	0	58	11	11	11	1
January 2034	45	0	0	0	0	100	0	0	0	0	53	9	9	9	1
January 2035	39	0	0	0	0	100	0	0	0	0	48	8	8	8	0
January 2036	33	0	0	0	0	100	0	0	0	0	43	6	6	6	0
January 2037	27	0	0	0	0	100	0	0	0	0	38	5	5	5	0
January 2038	21	0	0	0	0	100	0	0	0	0	32	4	4	4	0
January 2039	14	0	0	0	0	100	0	0	0	0	27	3	3	3	0
January 2040	7	Õ	Õ	Õ	Õ	100	Õ	Õ	Ŏ	Ŏ	20	2	2	2	Ŏ
January 2041	0	0	0	0	0	0	0	0	0	0	14	2	2	2	0
January 2042	0	0	0	0	0	0	0	0	0	0	7	1	1	1	0
January 2043	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0
January 2044	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0
January 2045	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0
January 2046	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
January 2047	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
January 2048	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
January 2049	Õ	Ő	Õ	Ő	Ö	Ö	Õ	Õ	Ö	Ŏ	Õ	Ŏ	Õ	Ŏ	Õ
January 2050	Õ	Ő	Õ	Ő	Õ	Õ	Õ	Õ	0	0	Õ	0	0	Õ	Õ
Weighted Average		V	~	V	~	~	~	~			~			V	V
Life (years)	12.2	5.3	5.3	5.3	3.5	20.8	12.8	12.8	12.8	9.2	13.7	6.6	6.6	6.6	3.8

Security Group 4
PSA Prepayment Assumption Rates

			Class MF	•				(	Class MZ	Z.				(	Class ZM	į.	
Distribution Date	0%	130%	205%	250%	500%	0%	6	130%	205%	250%	500%	0%	b :	130%	205%	250%	500%
Initial Percent	100	100	100	100	100	10	00	100	100	100	100	10	00	100	100	100	100
January 2021	97	92	92	92	92	10	)3	103	103	103	103	10	)4	104	91	84	41
January 2022	94	81	81	81	75	10	06	106	106	106	58	10	8	108	75	55	0
January 2023	91	69	69	69	50	10	)9	109	109	109	47	11	.3	113	59	29	0
January 2024	88	58	58	58	33	11	13	113	113	113	48	11	7	117	50	13	0
January 2025	84	47	47	47	21	11	16	116	116	116	49	12	2	122	44	3	0
January 2026	81	38	38	38	12	12	20	120	120	120	51	12	7	127	43	0	0
January 2027	77	29	29	29	7	12		123	123	123	52	13	2	131	43	0	0
January 2028	73	22	22	22	3	12	27	127	127	127	54	13	8	131	42	0	0
January 2029	69	15	15	15	0	13	31	131	131	131	56	14	3	129	40	0	0
January 2030	64	10	10	10	0	13	35	135	135	135	45	14	9	125	37	0	0
January 2031	60	6	6	6	0	13		139	139	139	30	15		119	34	0	0
January 2032	55	2	2	2	0	14		143	143	143	20	16	-	112	31	0	0
January 2033	50	0	0	0	0	14		146	146	146	14	16	8	104	28	0	0
January 2034	44	0	0	0	0	15		119	119	119	9	17		96	25	0	0
January 2035	39	0	0	0	0	15		96	96	96	6	18	32	88	23	0	0
January 2036	33	0	0	0	0	16		78	78	78	4	18		79	20	0	0
January 2037	26	0	0	0	0	16		62	62	62	3	19		71	17	0	0
January 2038	20	0	0	0	0	17		49	49	49	2	20		63	15	0	0
January 2039	13	0	0	0	0	17		39	39	39	1	21		56	13	0	0
January 2040	6	0	0	0	0	18	-	31	31	31	1	22	_	48	11	0	0
January 2041	0	0	0	0	0	17		24	24	24	0	23		41	9	0	0
January 2042	0	0	0	0	0		91	18	18	18	0	24		35	7	0	0
January 2043	0	0	0	0	0		13	13	13	13	0	24	· .	29	6	0	0
January 2044	0	0	0	0	0	1	10	10	10	10	0	21		23	4	0	0
January 2045	0	0	0	0	0		7	7	7	7	0	18		18	3	0	0
January 2046	0	0	0	0	0		5	5	5	5	0	15		13	2	0	0
January 2047	0	0	0	0	0		3	3	3	3	0	11		8	1	0	0
January 2048	0	0	0	0	0		1	1	1	1	0		31	4	1	0	0
January 2049	0	0	0	0	0		0	0	0	0	0	4	2	1	0	0	0
January 2050	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0
Weighted Average					- /		_						_			_ /	
Life (years)	12.1	5.2	5.2	5.2	3.4	22	.2	17.3	17.3	17.3	6.8	26	./	18.1	8.2	2.4	0.9

Security Groups 2 and 4 PSA Prepayment Assumption Rates

			F,		P		
				Class ZK			
Distribution Date	0%	130%	150%	205%	250%	290%	500%
Initial Percent	100	100	100	100	100	100	100
January 2021	104	104	102	93	84	76	36
January 2022	108	108	104	78	56	36	0
January 2023	113	113	105	65	31	7	0
January 2024	117	117	108	57	16	2	0
January 2025	122	122	111	53	9	0	0
January 2026	127	127	115	52	7	0	0
January 2027	132	132	117	52	7	0	0
January 2028	138	134	117	51	6	0	0
January 2029	143	136	115	48	6	0	0
January 2030	149	135	112	45	5	0	0
January 2031	155	131	107	42	5	0	0
January 2032	161	125	100	38	4	0	0
January 2033	168	119	92	34	4	0	0
January 2034	175	111	84	31	3	0	0
January 2035	182	101	76	27	3	0	0
January 2036	189	91	68	24	2	0	0
January 2037	197	82	61	20	2	0	0
January 2038	205	73	53	18	2	0	0
January 2039	214	64	46	15	1	0	0
January 2040	222	55	40	12	1	0	0
January 2041	231	47	34	10	1	0	0
January 2042	241	40	28	8	1	0	0
January 2043	243	33	23	7	1	Ö	Ö
January 2044	225	26	18	5	0	0	0
January 2045	205	20	14	4	0	0	0
January 2046	173	15	10	3	Õ	Ö	Ö
January 2047	134	10	6	2	0	0	0
January 2048	92	5	3	1	Õ	0	0
January 2049	47	í	ő	0	ŏ	ŏ	Ő
January 2050	0	0	ŏ	ŏ	ŏ	ŏ	Ő
Weighted Average	~	~	~	~	~	~	· ·
Life (years)	27.1	18.9	17.8	9.5	3.1	1.7	0.8
Line (jeuro)	-/.1	10.7	17.0	7.7	5.1	1.7	0.0

Security Group 5 PSA Prepayment Assumption Rates

			Clas	s AI		
Distribution Date	0%	100%	250%	400%	600%	800%
Initial Percent	100	100	100	100	100	100
January 2021	98	92	83	75	63	52
January 2022	96	85	69	55	39	26
January 2023	93	77	57	41	24	12
January 2024	91	71	47	30	14	5
January 2025	89	65	39	21	8	5 2
January 2026	86	59	32	15	4	1
January 2027	83	53	26	11	3	1
January 2028	80	48	21	7	2	0
January 2029	78	44	17	5	1	0
January 2030	75	39	13	3	1	0
January 2031	71	35	10	3 2	0	0
January 2032	68	31	8	2	0	0
anuary 2033	65	28	6	1	0	0
January 2034	61	25	5	1	0	0
anuary 2035	58	21	4	1	0	0
anuary 2036	54	19	3	0	0	0
January 2037	50	16	2	0	0	0
January 2038	46	13	2	0	0	0
January 2039	41	11	1	0	0	0
January 2040	37	9	1	Õ	Õ	Ŏ
anuary 2041	32	7	1	0	0	0
January 2042	28		1	Õ	Õ	0
January 2043	23	5 4	0	Õ	Õ	Õ
January 2044	17	3	Õ	Õ	Õ	0
anuary 2045	12	2	Õ	Õ	Õ	0
January 2046	7	ī	ŏ	ŏ	ŏ	Ő
January 2047	3	ī	Õ	Õ	Õ	0
January 2048	ő	0	ŏ	ŏ	ŏ	Ő
January 2049	ŏ	ŏ	ŏ	ŏ	ŏ	0
Weighted Average	~	V	~	V	~	~
Life (years)	15.9	9.2	5.0	3.2	2.1	1.5

Security Group 6 PSA Prepayment Assumption Rates

			Cla	ss BI		
Distribution Date	0%	100%	300%	500%	750%	1,000%
Initial Percent	100	100	100	100	100	100
January 2021	98	92	80	68	53	39
January 2022	96	84	64	46	28	15
January 2023	93	77	51	31	15	5
January 2024	91	71	41	21	7	2
January 2025	89	65	32	14	4	0
January 2026	86	59	25	9	2	0
January 2027	83	54	20	6	1	0
January 2028	80	49	16	4	0	0
January 2029	77	44	12	2	0	0
January 2030	74	40	9	1	0	0
January 2031	71	36	7	1	0	0
January 2032	68	32	5	0	0	0
January 2033	64	28	4	0	0	0
January 2034	61	25	3	0	0	0
January 2035	57	22	2	0	0	0
January 2036	53	19	1	0	0	0
January 2037	49	16	1	0	0	0
January 2038	44	14	1	0	0	0
January 2039	40	12	0	0	0	0
January 2040	35	9	0	0	0	0
January 2041	30	7	0	0	0	0
January 2042	25	6	0	0	0	0
January 2043	20	4	0	0	0	0
January 2044	15	3	0	0	0	0
January 2045	10	2	0	0	0	0
January 2046	5	1	0	0	0	0
January 2047	0	0	0	0	0	0
January 2048	0	0	0	0	0	0
Weighted Average						
Life (years)	15.6	9.2	4.3	2.5	1.6	1.0

Security Group 7
PSA Prepayment Assumption Rates

			Cl	ass CI		
Distribution Date	0%	100%	400%	700%	1,050%	1,400%
Initial Percent	100	100	100	100	100	100
January 2021	97	94	90	89	86	77
January 2022	94	85	73	64	42	23
January 2023	91	76	56	36	15	3
January 2024	87	66	41	21	5	0
January 2025	84	58	29	11	2	0
January 2026	80	50	21	6	1	0
January 2027	76	42	15	3	0	0
January 2028	72	34	10	2	0	0
January 2029	68	27	7	1	0	0
January 2030	63	21	5	1	0	0
January 2031	59	14	3	0	0	0
January 2032	54	8	2	0	0	0
January 2033	49	4	2	0	0	0
January 2034	43	2	1	0	0	0
January 2035	38	1	1	0	0	0
January 2036	32	1	1	0	0	0
January 2037	26	1	0	0	0	0
January 2038	20	1	0	0	0	0
January 2039	13	1	0	0	0	0
January 2040	7	0	0	0	0	0
January 2041	3	0	0	0	0	0
January 2042	1	0	0	0	0	0
January 2043	1	0	0	0	0	0
January 2044	1	0	0	0	0	0
January 2045	1	0	0	0	0	0
January 2046	0	Ö	Õ	Ŏ	Ö	Õ
January 2047	0	0	0	0	0	0
January 2048	0	0	0	0	0	0
January 2049	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ
January 2050	Õ	Õ	Õ	Õ	Õ	Õ
Weighted Average	V	V		~	•	V
Life (years)	12.1	6.4	4.1	2.9	2.0	1.6

Security Group 8 PSA Prepayment Assumption Rates

		-	Class BI	3		Class EA					Class EB				Class EC					
Distribution Date	0%	150%	180%	210%	400%	0%	150%	180%	210%	400%	0%	150%	180%	210%	400%	0%	150%	180%	210%	400%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
January 2021	100	100	100	100	100	98	94	94	94	94	100	100	100	100	100	98	94	94	94	94
January 2022	100	100	100	100	100	95	84	84	84	84	100	100	100	100	100	96	85	85	85	85
January 2023	100	100	100	100	100	93	72	72	72	65	100	100	100	100	100	93	73	73	73	67
January 2024	100	100	100	100	100	90	60	60	60	46	100	100	100	100	100	91	63	63	63	50
January 2025	100	100	100	100	100	88	50	50	50	33	100	100	100	100	100	88	53	53	53	37
January 2026	100	100	100	100	100	85	41	41	41	23	100	100	100	100	100	86	44	44	44	27
January 2027	100	100	100	100	100	82	32	32	32	15	100	100	100	100	100	83	36	36	36	20
January 2028	100	100	100	100	100	79	25	25	25	10	100	100	100	100	100	80	29	29	29	15
January 2029	100	100	100	100	100	76	19	19	19	5	100	100	100	100	100	77	23	23	23	11
January 2030	100	100	100	100	100	72	13	13	13	2	100	100	100	100	100	74	18	18	18	8
January 2031	100	100	100	100	100	69	9	9	9	0	100	100	100	100	100	70	14	14	14	6
January 2032	100	100	100	100	100	65	5	5	5	0	100	100	100	100	74	67	10	10	10	4
January 2033	100	100	100	100	100	61	1	1	1	0	100	100	100	100	53	63	7	7	7	3
January 2034	100	100	100	100	100	57	0	0	0	0	100	75	75	75	38	59	4	4	4	2
January 2035	100	100	100	100	100	52	0	0	0	0	100	35	35	35	27	55	2	2	2	2
January 2036	100	100	100	100	100	48	0	0	0	0	100	1	1	1	19	51	0	0	0	1
January 2037	100	0	0	0	100	43	0	0	0	0	100	0	0	0	13	46	0	0	0	1
January 2038	100	0	0	0	100	38	0	0	0	0	100	0	0	0	9	42	0	0	0	1
January 2039	100	0	0	0	100	33	0	0	0	0	100	0	0	0	6	37	0	0	0	0
January 2040	100	0	0	0	100	27	0	0	0	0	100	0	0	0	4	31	0	0	0	0
January 2041	100	0	0	0	100	21	0	0	0	0	100	0	0	0	2	26	0	0	0	0
January 2042	100	0	0	0	100	15	0	0	0	0	100	0	0	0	1	20	0	0	0	0
January 2043	100	0	0	0	100	9	0	0	0	0	100	0	0	0	0	14	0	0	0	0
January 2044	100	0	0	0	69	2	0	0	0	0	100	0	0	0	0	8	0	0	0	0
January 2045	100	0	0	0	43	0	0	0	0	0	22	0	0	0	0	1	0	0	0	0
January 2046	0	0	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
January 2047	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
January 2048	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
January 2049	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
January 2050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average	25.0	16.	16.	16.	25.5	1/-	- /	- /	- /	/ 2	2/2	1/-	1/-	1/-	1/0	15.				/ 0
Life (years)	25.2	16.1	16.1	16.1	25.1	14.5	5.6	5.6	5.6	4.3	24.8	14.7	14.7	14.7	14.0	15.1	6.1	6.1	6.1	4.8

Security Group 8 PSA Prepayment Assumption Rates

		(	Class EI	)		Classes EF and ES					Class EJ				Class EK					
Distribution Date	0%	150%	180%	210%	400%	0%	150%	180%	210%	400%	0%	150%	180%	210%	400%	0%	150%	180%	210%	400%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
January 2021	98	95	95	95	95	98	95	95	95	95	100	100	100	100	100	100	100	100	100	100
January 2022	96	86	86	86	81	96	86	86	86	82	100	100	100	100	7	100	100	100	100	100
January 2023	94	76	76	76	61	94	76	76	76	61	100	100	100	100	0	100	100	100	100	0
January 2024	92	66	66	66	45	92	66	66	66	45	100	100	100	100	0	100	100	100	100	0
January 2025	89	57	57	57	34	89	57	57	57	34	100	100	100	100	0	100	100	100	100	0
January 2026	87	49	49	49	25	87	49	49	49	25	100	100	100	100	0	100	100	100	100	0
January 2027	84	42	42	42	18	84	42	42	42	18	100	100	100	100	0	100	100	100	100	0
January 2028	82	35	35	35	14	82	36	36	36	14	100	100	100	100	0	100	100	100	100	0
January 2029	79	30	30	30	10	79	30	30	30	10	100	100	100	100	0	100	100	100	100	0
January 2030	76	25	25	25	7	76	25	25	25	7	100	100	100	100	0	100	100	100	100	0
January 2031	73	21	21	21	5	73	21	21	21	5	100	100	100	100	0	100	100	100	100	0
January 2032	70	18	18	18	4	70	18	18	18	4	99	99	99	99	0	100	100	100	100	0
January 2033	66	15	15	15	3	66	15	15	15	3	99	99	99	99	0	100	100	100	100	0
January 2034	63	12	12	12	2	63	13	13	13	2	99	99	99	99	0	100	100	100	100	0
January 2035	59	10	10	10	1	59	10	10	10	2	99	99	99	99	0	100	100	100	100	0
January 2036	55	8	8	8	1	55	9	9	9	1	99	99	99	99	0	100	100	100	100	0
January 2037	51	7	7	7	1	51	7	7	7	1	99	71	71	71	0	100	100	100	100	0
January 2038	46	6	6	6	0	47	6	6	6	1	99	46	46	46	0	100	100	100	100	0
January 2039	42	5	5	5	0	42	5	5	5	0	99	24	24	24	0	100	100	100	100	0
January 2040	37	4	4	4	0	37	4	4	4	0	99	6	6	6	0	100	100	100	100	0
January 2041	32	3	3	3	0	32	3	3	3	0	99	0	0	0	0	100	86	86	86	0
January 2042	27	2	2	2	0	27	2	2	2	0	99	0	0	0	0	100	66	66	66	0
January 2043	21	2	2	2	0	22	2	2	2	0	99	0	0	0	0	100	50	50	50	0
January 2044	16	1	1	1	0	16	1	1	1	0	99	0	0	0	0	100	36	36	36	0
January 2045	10	1	1	1	0	10	1	1	1	0	99	0	0	0	0	100	25	25	25	0
January 2046	3	1	1	1	0	3	1	1	1	0	0	0	0	0	0	99	15	15	15	0
January 2047	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	8	8	8	0
January 2048	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0
January 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
January 2050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average																				
	16.0	7.3	7.3	7.3	4.6	16.0	7.3	7.3	7.3	4.6	25.5	17.9	17.9	17.9	1.8	26.4	23.4	23.4	23.4	2.2

			Class EW	7				Class EZ					Class ZE		
Distribution Date	0%	150%	180%	210%	400%	0%	150%	180%	210%	400%	0%	150%	180%	210%	400%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
January 2021	100	100	100	100	100	104	104	97	91	52	103	103	103	103	103
January 2022	100	100	100	100	44	107	107	87	68	0	105	105	105	105	105
January 2023	100	100	100	100	0	111	111	75	39	0	108	108	108	108	0
January 2024	100	100	100	100	0	115	115	66	20	0	111	111	111	111	0
January 2025	100	100	100	100	0	119	119	62	7	0	113	113	113	113	0
January 2026	100	100	100	100	0	123	123	60	1	0	116	116	116	116	0
January 2027	100	100	100	100	0	128	128	61	0	0	119	119	119	119	0
January 2028	100	100	100	100	0	132	129	61	0	0	122	122	122	122	0
January 2029	100	100	100	100	0	137	128	60	0	0	125	125	125	125	0
January 2030	100	100	100	100	0	142	125	57	0	0	128	128	128	128	0
January 2031	100	100	100	100	0	147	119	54	0	0	132	132	132	132	0
January 2032	100	100	100	100	0	152	113	51	0	0	135	135	135	135	0
January 2033	100	100	100	100	0	158	106	47	0	0	138	138	138	138	0
January 2034	100	100	100	100	0	163	98	43	0	0	142	142	142	142	0
January 2035	100	100	100	100	0	169	89	39	0	0	145	145	145	145	0
January 2036	100	100	100	100	0	175	81	35	0	0	149	149	149	149	0
January 2037	99	83	83	83	0	181	73	31	0	0	153	153	153	153	0
January 2038	99	67	67	67	0	188	65	27	0	0	157	157	157	157	0
January 2039	99	54	54	54	0	194	57	24	0	0	161	161	161	161	0
January 2040	99	43	43	43	0	201	49	20	0	0	165	165	165	165	0
January 2041	99	34	34	34	0	208	42	17	0	0	169	169	169	169	0
January 2042	99	26	26	26	0	216	36	14	0	0	173	173	173	173	0
January 2043	99	20	20	20	0	223	29	12	0	0	178	178	178	178	0
January 2044	99	14	14	14	0	231	23	9	0	0	182	182	182	182	0
January 2045	99	10	10	10	0	240	18	7	0	0	187	187	187	187	0
January 2046	39	6	6	6	0	248	13	5	0	0	191	191	191	191	0
January 2047	3	3	3	3	0	216	9	3	0	0	196	196	196	196	0
January 2048	Ő	0	Ő	Ő	0	149	5	2	Õ	0	201	201	201	201	0
January 2049	ŏ	Ő	ŏ	ŏ	Ŏ	77	í	0	ő	ŏ	45	45	45	45	Ŏ
January 2050	ő	ő	ő	ő	Ŏ	0	0	Ő	ő	Ő	0	0	0	0	Ő
Weighted Average Life (years)	25.8	20.1	20.1	20.1	2.0	28.3	18.4	11.7	2.8	1.0	28.7	28.7	28.7	28.7	2.4
zac (years)	27.0	20.1	20.1	20.1	2.0	20.5	10.1	11./	2.0	1.0	20.7	20.7	20.7	20.7	<b>∠</b> . 1

PSA Prepayment Assumption Rates

#### **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 5, 6 and 7 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

- 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 PI to Prepayments Assumed Price 8.8125%\*

#### **PSA Prepayment Assumption Rates**

150%	185%	205%	400%	582%
22.4%	22.4%	22.4%	11.6%	0.0%

#### **SECURITY GROUP 2**

# Sensitivity of Class BS to Prepayments Assumed Price 12.8438%\*

	PSA Prepayment Assumption Rates								
LIBOR	150%	205%	290%	500%					
1.000%	28.8%	27.2%	25.5%	13.1%					
1.676%	22.5%	20.9%	19.1%	6.1%					
3.863%	1.5%	0.2%	(2.3)%	(18.0)%					
6.050% and above		**	**	**					

# Sensitivity of Class CS to Prepayments Assumed Price 13.6563%\*

	PSA Prepayment Assumption Rates								
LIBOR	150%	205%	290%	500%					
1.000%	26.0%	26.0%	23.8%	11.9%					
1.676%	20.2%	20.2%	17.8%	5.5%					
3.863%	1.2%	1.2%	(1.9)%	(16.1)%					
6.050% and above	**	**	**	**					

# Sensitivity of Class KS to Prepayments Assumed Price 13.625%\*

	PSA Prepayment Assumption Rates								
LIBOR	150%	205%	290%	500%					
1.000%	25.7%	25.2%	23.8%	12.5%					
1.676%	19.9%	19.4%	17.9%	6.2%					
3.863%	0.7%	0.3%	(1.6)%	(14.6)%					
6.050% and above	**	**	**	**					

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

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

# Sensitivity of Class SB to Prepayments Assumed Price 13.5938%\*

	PSA Prepayment Assumption Rates								
LIBOR	150%	205%	290%	500%					
1.000%	26.7%	25.2%	23.5%	11.8%					
1.676%	20.8%	19.3%	17.6%	5.6%					
3.863%	1.5%	0.4%	(1.8)%	(14.7)%					
6.050% and above	**	**	**	**					

# Sensitivity of Class SC to Prepayments Assumed Price 13.8438%\*

	PSA Prepayment Assumption Rates								
LIBOR	150%	205%	290%	500%					
1.000%	25.5%	25.5%	23.3%	11.6%					
1.676%	19.8%	19.8%	17.4%	5.4%					
3.863%	1.2%	1.2%	(1.8)%	(14.8)%					
6.050% and above	**	***	***	**					

# Sensitivity of Class SD to Prepayments Assumed Price 14.5313%\*

	PSA Prepayment Assumption Rates								
LIBOR	150%	205%	290%	500%					
1.000%	21.5%	21.5%	21.5%	11.0%					
1.676%	16.0%	16.0%	16.0%	5.0%					
3.863%	(2.2)%	(2.2)%	(2.2)%	(14.7)%					
6.050% and above	**	**	**	3/43/4					

# **SECURITY GROUP 3**

# Sensitivity of Class SA to Prepayments Assumed Price 7.9219%\*

	PSA	t Assumption	ion Rates		
LIBOR	100%	200%	300%	400%	
1.00000%	23.8%	18.5%	13.1%	7.6%	
1.67770%	14.1%	8.6%	3.0%	(2.7)%	
2.51385%	1.6%	(4.1)%	(9.9)%	(15.9)%	
3.35000% and above	**	**	**	神神	

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

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

# **SECURITY GROUP 4**

# Sensitivity of Class IM to Prepayments Assumed Price 13.625%\*

#### **PSA Prepayment Assumption Rates**

130%	205%	250%	500%	582%
13.3%	13.3%	13.3%	0.5%	0.1%

# Sensitivity of Class MI to Prepayments Assumed Price 13.1875%\*

#### **PSA Prepayment Assumption Rates**

130%	205%	250%	500%	574%
17.7%	17.7%	17.7%	4.5%	0.0%

# **SECURITY GROUP 5**

# Sensitivity of Class AI to Prepayments Assumed Price 7.6133%\*

#### **PSA Prepayment Assumption Rates**

100%	250%	400%	564%	600%	800%
39.0%	27.3%	14.8%	0.0%	(3.4)%	(23.4)%

#### **SECURITY GROUP 6**

# Sensitivity of Class BI to Prepayments Assumed Price 9.207%\*

#### **PSA Prepayment Assumption Rates**

100%	300%	500%	535%	750%	1,000%
36.1%	20.5%	3.3%	0.0%	(21.2)%	(49.4)%

# **SECURITY GROUP 7**

# Sensitivity of Class CI to Prepayments Assumed Price 7.5156%\*

# **PSA Prepayment Assumption Rates**

100%	400%	700%	1,050%	1,100%	1,400%
46.0%	34.8%	23.4%	3.1%	0.0%	(19.9)%

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

#### **SECURITY GROUP 8**

# Sensitivity of Class ES to Prepayments Assumed Price 20.875%\*

	PSA Prepayment Assumption Rates					
LIBOR	150%	180%	210%	400%		
1.000%	12.7%	12.7%	12.7%	3.2%		
1.734%	8.6%	8.6%	8.6%	(1.3)%		
3.892%	(4.2)%	(4.2)%	(4.2)%	(15.1)%		
6.050% and above	**	**	**	alcalc		

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

#### CERTAIN UNITED STATES FEDERAL INCOME TAX CONSEQUENCES

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

#### **REMIC Elections**

In the opinion of Cleary Gottlieb Steen & Hamilton LLP, the Trust will constitute a Single REMIC Series as to the Group 3 Trust Assets, a Single REMIC Series as to the Group 5 Trust Assets, a Single REMIC Series as to the Group 7 Trust Assets, a Double REMIC Series as to the Group 1 Trust Assets, a Double REMIC Series as to the Group 2 Trust Assets, a Double REMIC Series as to the Group 2 Trust Assets, a Double REMIC Series as to the Group 4 Trust Assets and a Double REMIC Series as to the Group 8 Trust Assets, each for United States federal income tax purposes. Separate REMIC elections will be made for the Group 3 REMIC, the Group 5 REMIC, the Group 6 REMIC, the Group 7 REMIC, the Group 1 Pooling REMIC, the Group 1 Issuing REMIC, the Group 2 Pooling REMIC, the Group 2 Issuing REMIC, the Group 4 Pooling REMIC, the Group 4 Issuing REMIC, the Group 8 Pooling REMIC and the Group 8 Issuing REMIC.

# **Regular Securities**

The Regular Securities will be treated as debt instruments issued by the Group 1 Issuing REMIC, the Group 2 Issuing REMIC, the Group 3 REMIC, the Group 4 Issuing REMIC, the Group 5 REMIC, the Group 6 REMIC, the Group 7 REMIC or the Group 8 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.

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

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

Group(s)	<u>PSA</u>
1	185%
2 and 4	205%
3	200%
5	400%
6	500%
7	700%
8	180%

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.

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

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

#### **Residual Securities**

The Class R3 Securities will represent the beneficial ownership of the Residual Interest in the Group 3 REMIC. The Class R5 Securities will represent the beneficial ownership of the Residual Interest in the Group 5 REMIC. The Class R6 Securities will represent the beneficial ownership of the Residual

Interest in the Group 6 REMIC. The Class R7 Securities will represent the beneficial ownership of the Residual Interest in the Group 7 REMIC. The Class RR1 Securities will represent the beneficial ownership of the Residual Interest in the Group 1 Pooling REMIC and the beneficial ownership of the Residual Interest in the Group 1 Issuing REMIC. The Class RR2 Securities will represent the beneficial ownership of the Residual Interest in the Group 2 Pooling REMIC and the beneficial ownership of the Residual Interest in the Group 2 Issuing REMIC. The Class RR4 Securities will represent the beneficial ownership of the Residual Interest in the Group 4 Pooling REMIC and the beneficial ownership of the Residual Interest in the Group 4 Issuing REMIC. The Class RR8 Securities will represent the beneficial ownership of the Residual Interest in the Group 8 Pooling REMIC and the beneficial ownership of the Residual Interest in the Group 8 Issuing REMIC. The Residual Securities, i.e., the Class RR1, RR2, R3, RR4, R5, R6, R7 and RR8 Securities, generally will be treated as "residual interests" in a REMIC for domestic building and loan associations and as "real estate assets" for REITs, as described in "Certain United States Federal Income Tax Consequences" in the Base Offering Circular, but will not be treated as debt for United States federal income tax purposes. Instead, the Holders of the Residual Securities will be required to report, and will be taxed on, their pro rata shares of the taxable income or loss of the related Trust REMICs, and these requirements will continue until there are no outstanding regular interests in the respective Trust REMICs. Thus, Residual Holders will have taxable income attributable to the Residual Securities even though they will not receive principal or interest distributions with respect to the Residual Securities, which could result in a negative after-tax return for the Residual Holders. Even though the Holders of the Residual Securities are not entitled to any stated principal or interest payments on the Residual Securities, the related Trust REMICs may have substantial taxable income in certain periods, and offsetting tax losses may not occur until much later periods. Accordingly, the Holders of the Residual Securities may experience substantial adverse tax timing consequences. Prospective investors are urged to consult their own tax advisors and consider the after-tax effect of ownership of the Residual Securities and the suitability of the Residual Securities to their investment objectives.

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

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

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

#### **MX Securities**

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

In the case of certain Holders of MX Securities that use an accrual method of accounting, these tax consequences are modified by newly enacted legislation as described above for a Holder of Regular

Securities. Prospective investors in MX Securities that use an accrual method of accounting for tax purposes are urged to consult with their tax advisors regarding the potential applicability of this legislation to their particular situation.

#### Foreign Account Tax Compliance Act

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

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

#### **ERISA MATTERS**

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

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

Fiduciaries of any such plans should consult with their counsel before purchasing any of the Securities. In addition, because the Sponsor or the Co-Sponsor or any of their respective affiliates may receive certain benefits in connection with the sale or holding of the Regular or MX Securities, the purchase of the Regular or MX Securities using Plan assets over which any of these parties or their affiliates has discretionary authority or control, or renders "investment advice" (within the meaning of a 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) January 1, 2020 on the Fixed Rate Classes and (2) and January 20, 2020 on the Floating Rate and Inverse Floating Rate Classes. The Sponsor may effect these transactions by sales to or through certain securities dealers. These dealers may receive compensation in the form of discounts, concessions or commissions from the Sponsor and/or commissions from any purchasers for which they act as agents. Some of the Securities may be sold through dealers in relatively small sales. In the usual case, the commission charged on a relatively small sale of securities will be a higher percentage of the sales price than that charged on a large sale of securities.

#### **INCREASE IN SIZE**

Before the Closing Date, Ginnie Mae, the Trustee and the Sponsor may agree to increase the size of this offering. In that event, the Securities will have the same characteristics as described in this Supplement, except that (1) the Original Class Principal Balance (or original Class Notional Balance) and (2) the 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)

	Final Distribution Date(4)	November 2048	January 2050	January 2050	January 2050	January 2050
	CUSIP	38382CCC3	38382CCD1	38382CCE9	38382CCF6	38382CCG4
s	Interest Type(3)	FIX	FLT	OI/ANI	FIX/Z	FIX
MX Securities	Interest Rate	3.00%	3	$\mathfrak{S}$	4.00%	2.50%
Zi .	Principal Type(3)	SCH/AD	PAC/AD	\$ 85,510,150 NTL(PAC/AD)	SUP	PAC/TAC/AD
	Maximum Original Class Principal Balance or Class Notional Balance(2)	\$ 63,000,000	\$ 85,510,150	\$ 85,510,150	\$ 68,077,356	\$113,184,644 PAC/TAC/AD
	Related MX Class	PA	ŢŢ	KS	ZK	EC
S	Original Class Principal Balance or Class Notional Balance	\$ 63,000,000 10,500,000	\$ 7,142,857 7,142,857 23,252,434 22,972,002 25,000,000	\$ 7,142,857 7,142,857 23,252,434 22,972,002 25,000,000	\$ 8,259,869 10,009,684 15,256,426 34,551,377	\$106,675,081
REMIC Securities	Class	Security Group 1 Combination 1 PE PI Security Group 2 Combination 2	BF CF FB FC FD Combination 3	BS CS SB SC SD SC Combination 4 (6)	ZA ZB ZC ZM Security Group 8 Combination 5	EA

	Final Distribution Date(4)		January 2050					January 2050	
	CUSIP		38382CCH2					38382CCJ8	
	Interest Type(3)		FIX					FIX	
<b>MX</b> Securities	Interest Rate		2.50%					2.50%	
M	Principal Type(3)		PAC/TAC/AD					PAC/AD	
	Maximum Original Class Principal Balance or Class Notional Balance(2)		\$123,700,599 PAC/TAC/AD					\$ 10,515,955	
	Related MX Class		ED					EW	
	Original Class Principal Balance or Class Notional Balance		\$106,675,081	6,509,563	6,369,573	4,146,382		\$ 6,369,573	4,146,382
REMIC Securities	Class	Combination 6	EA	EB	EJ	EK	Combination 7	Ē	EK

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

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

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

See "Yield, Maturity and Prepayment Considerations — Final Distribution Date" in this Supplement. 4 The Interest Rate will be calculated as described under "Terms Sheet — Interest Rates" in this Supplement. (5)

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

# Schedule II

# SCHEDULED PRINCIPAL BALANCES

Distribution Date	Classes PB and PE (in the aggregate)	Classes BF, FB, KA and KZ (in the aggregate)	Classes CF, FC, KB and KG (in the aggregate)	Classes FD and KP (in the aggregate)
Initial Balance	\$68,421,234.00	\$81,383,519.00	\$80,402,009.00	\$75,000,000.00
February 2020	68,246,929.27	81,019,729.37	80,060,335.68	74,641,367.01
March 2020	68,053,796.80	80,629,731.90	79,695,927.56	74,259,979.77
April 2020	67,841,915.11	80,213,754.28	79,308,966.53	73,856,019.67
May 2020	67,611,377.21	79,772,047.72	78,899,651.93	73,429,685.51
June 2020	67,362,290.56	79,304,886.74	78,468,200.40	72,981,193.37
July 2020	67,094,777.00	78,812,568.83	78,014,845.71	72,510,776.41
August 2020	66,808,972.65	78,295,414.24	77,539,838.52	72,018,684.65
September 2020	66,505,027.84	77,753,765.55	77,043,446.15	71,505,184.79
October 2020	66,183,106.99	77,187,987.37	76,525,952.36	70,970,559.87
November 2020	65,843,388.43	76,598,465.90	75,987,657.04	70,415,109.07
December 2020	65,486,064.31	75,985,608.47	75,428,875.93	69,839,147.40
January 2021	65,111,340.38	75,349,843.10	74,849,940.28	69,243,005.34
February 2021	64,719,435.81	74,691,618.00	74,251,196.55	68,627,028.54
March 2021	64,310,583.00	74,011,400.98	73,633,006.01	67,991,577.46
April 2021	63,885,027.33	73,309,678.93	72,995,744.39	67,337,026.98
May 2021	63,443,026.91	72,586,957.20	72,339,801.46	66,663,765.99
June 2021	62,984,852.35	71,843,758.98	71,665,580.63	65,972,197.01
July 2021	62,510,786.46	71,080,624.64	70,973,498.50	65,262,735.72
August 2021	62,021,123.97	70,298,111.04	70,263,984.42	64,535,810.52
September 2021	61,516,171.18	69,496,790.85	69,537,480.01	63,791,862.08
October 2021	60,996,245.70	68,677,251.79	68,794,438.70	63,031,342.82
November 2021	60,461,676.06	67,840,095.87	68,035,325.18	62,254,716.44
December 2021	59,912,801.39	66,985,938.65	67,260,614.92	61,462,457.39
January 2022	59,349,971.00	66,139,921.91	66,492,071.42	60,676,291.58
February 2022	58,773,544.06	65,301,965.94	65,729,643.00	59,896,167.20
March 2022	58,183,889.16	64,471,991.73	64,973,278.38	59,122,032.85
April 2022	57,581,383.93	63,649,921.06	64,222,926.68	58,353,837.54
May 2022	56,966,414.60	62,835,676.41	63,478,537.44	57,591,530.68
June 2022	56,339,375.59	62,029,181.02	62,740,060.60	56,835,062.07
July 2022	55,717,670.01	61,230,358.81	62,007,446.46	56,084,381.90
August 2022	55,101,252.88	60,439,134.46	61,280,645.76	55,339,440.77
September 2022	54,490,079.58	59,655,433.33	60,559,609.60	54,600,189.66
October 2022	53,884,105.85	58,879,181.48	59,844,289.49	53,866,579.92
November 2022	53,283,287.80	58,110,305.69	59,134,637.28	53,138,563.30
December 2022	52,687,581.88	57,348,733.41	58,430,605.26	52,416,091.94
January 2023	52,096,944.91	56,594,392.76	57,732,146.04	51,699,118.31
February 2023	51,511,334.04	55,847,212.56	57,039,212.65	50,987,595.31
March 2023	50,930,706.80	55,107,122.29	56,351,758.46	50,281,476.17
April 2023	50,355,021.03	54,374,052.09	55,669,737.23	49,580,714.51
May 2023	49,784,234.94	53,647,932.76	54,993,103.06	48,885,264.29
June 2023	49,218,307.06	52,928,695.75	54,321,810.45	48,195,079.85
July 2023	48,657,196.26	52,216,273.14	53,655,814.22	47,510,115.88
August 2023	48,100,861.76	51,510,597.69	52,995,069.57	46,830,327.45

Distribution Date	Classes PB and PE (in the aggregate)	Classes BF, FB, KA and KZ (in the aggregate)	Classes CF, FC, KB and KG (in the aggregate)	Classes FD and KP (in the aggregate)
September 2023	\$47,549,263.10	\$50,811,602.74	\$52,339,532.06	\$46,155,669.93
October 2023	47,002,360.15	50,119,222.29	51,689,157.57	45,486,099.10
November 2023	46,460,113.09	49,433,390.96	51,043,902.36	44,821,571.04
December 2023	45,922,482.45	48,754,043.96	50,403,723.03	44,162,042.20
January 2024	45,389,429.07	48,081,117.14	49,768,576.50	43,507,469.37
February 2024	44,860,914.11	47,414,546.94	49,138,420.06	42,857,809.66
March 2024	44,336,899.03	46,754,270.39	48,513,211.32	42,213,020.53
April 2024	43,817,345.63	46,100,225.12	47,892,908.23	41,573,059.78
May 2024	43,302,216.01	45,452,349.35	47,277,469.07	40,937,885.53
June 2024	42,791,472.57	44,810,581.87	46,666,852.44	40,307,456.24
July 2024	42,285,078.02	44,174,862.05	46,061,017.30	39,681,730.67
August 2024	41,782,995.37	43,545,129.85	45,459,922.89	39,060,667.93
September 2024	41,285,187.95	42,921,325.76	44,863,528.80	38,444,227.43
October 2024	40,791,619.37	42,303,390.85	44,271,794.94	37,832,368.92
November 2024	40,302,253.53	41,691,266.75	43,684,681.52	37,225,052.44
December 2024	39,817,054.64	41,084,895.62	43,102,149.06	36,622,238.37
January 2025	39,335,987.20	40,484,220.17	42,524,158.43	36,023,887.37
February 2025	38,859,015.99	39,889,183.67	41,950,670.76	35,429,960.43
March 2025	38,386,106.08	39,299,729.89	41,381,647.52	34,840,418.84
April 2025	37,917,222.83	38,715,803.16	40,817,050.47	34,255,224.18
May 2025	37,452,331.87	38,137,348.30	40,256,841.67	33,674,338.35
June 2025	36,991,399.12	37,564,310.68	39,700,983.49	33,097,723.54
July 2025	36,534,390.78	36,996,636.17	39,149,438.59	32,525,342.22
August 2025	36,081,273.31	36,434,271.15	38,602,169.92	31,957,157.19
September 2025	35,632,013.46	35,877,162.51	38,059,140.74	31,393,131.50
October 2025	35,186,578.24	35,325,257.62	37,520,314.57	30,834,986.00
November 2025	34,744,934.93	34,779,713.78	36,985,655.24	30,286,413.54
December 2025	34,307,051.09	34,242,195.80	36,455,126.86	29,747,253.70
January 2026	33,872,894.53	33,712,589.01	35,928,693.82	29,217,348.71
February 2026	33,442,433.31	33,190,780.35	35,406,320.80	28,696,543.40
March 2026	33,015,635.78	32,676,658.32	34,888,488.95	28,184,685.17
April 2026	32,592,470.54	32,170,113.02	34,377,817.07	27,681,623.93
May 2026	32,172,906.42	31,671,036.05	33,874,209.31	27,187,212.07
June 2026	31,756,912.54	31,179,320.58	33,377,571.11	26,701,304.42
July 2026	31,344,458.25	30,694,861.24	32,887,809.14	26,223,758.20
August 2026	30,935,513.16	30,217,554.15	32,404,831.27	25,754,432.99
September 2026	30,530,047.12	29,747,296.89	31,928,546.61	25,293,190.71
October 2026	30,128,030.22	29,283,988.50	31,458,865.46	24,839,895.52
November 2026	29,729,432.82	28,827,529.40	30,995,699.27	24,394,413.86
December 2026	29,334,225.49	28,377,821.43	30,538,960.68	23,956,614.36
January 2027	28,942,379.06	27,934,767.82	30,088,563.48	23,526,367.83
February 2027	28,555,060.37	27,498,273.12	29,644,422.58	23,103,547.22
March 2027	28,172,531.25	27,068,243.28	29,206,453.99	22,688,027.56
April 2027	27,794,735.02	26,644,585.52	28,774,574.87	22,279,685.97
May 2027	27,421,615.66	26,227,208.38	28,348,703.42	21,878,401.60
June 2027	27,053,117.77	25,816,021.72	27,928,758.95	21,484,055.59
July 2027	26,689,186.62	25,410,936.61	27,514,661.81	21,096,531.04

Distribution Date	Classes PB and PE (in the aggregate)	Classes BF, FB, KA and KZ (in the aggregate)	Classes CF, FC, KB and KG (in the aggregate)	Classes FD and KP (in the aggregate)
August 2027	\$26,329,768.08	\$25,011,865.42	\$27,106,333.42	\$20,715,713.02
September 2027	25,974,808.66	24,618,721.72	26,703,696.20	20,341,488.46
October 2027	25,624,255.50	24,231,420.32	26,306,673.63	19,973,746.19
November 2027	25,278,056.32	23,849,877.23	25,915,190.16	19,612,376.87
December 2027	24,936,159.46	23,474,009.61	25,529,171.25	19,257,272.99
January 2028	24,598,513.87	23,103,735.82	25,148,543.36	18,908,328.79
February 2028	24,265,069.06	22,738,975.37	24,773,233.88	18,565,440.29
March 2028	23,935,775.14	22,379,648.88	24,403,171.18	18,228,505.22
April 2028	23,610,582.79	22,025,678.11	24,038,284.58	17,897,423.01
May 2028	23,289,443.26	21,676,985.90	23,678,504.31	17,572,094.76
June 2028	22,972,308.38	21,333,496.22	23,323,761.53	17,252,423.21
July 2028	22,659,130.51	20,995,134.06	22,973,988.31	16,938,312.71
August 2028	22,349,862.58	20,661,825.50	22,629,117.61	16,629,669.20
September 2028	22,044,458.05	20,333,497.67	22,289,083.27	16,326,400.19
October 2028	21,742,870.93	20,010,078.69	21,953,820.02	16,028,414.70
November 2028	21,445,055.75	19,691,497.74	21,623,263.43	15,735,623.29
December 2028	21,150,967.58	19,377,684.96	21,297,349.93	15,447,937.99
January 2029	20,860,562.00	19,068,571.50	20,976,016.78	15,165,272.30
February 2029	20,573,795.11	18,764,089.48	20,659,202.09	14,887,541.15
March 2029	20,290,623.51	18,464,171.97	20,346,844.76	14,614,660.88
April 2029	20,011,004.30	18,168,753.00	20,038,884.51	14,346,549.24
May 2029	19,734,895.10	17,877,767.51	19,735,261.85	14,083,125.32
June 2029	19,462,253.99	17,591,151.38	19,435,918.09	13,824,309.59
July 2029	19,193,039.56	17,308,841.38	19,140,795.30	13,570,023.81
August 2029	18,927,210.87	17,030,775.19	18,849,836.32	13,320,191.06
September 2029	18,664,727.45	16,756,891.37	18,562,984.75	13,074,735.70
October 2029	18,405,549.30	16,487,129.33	18,280,184.92	12,833,583.35
November 2029	18,149,636.90	16,221,429.35	18,001,381.91	12,596,660.85
December 2029	17,896,951.16	15,959,732.57	17,726,521.53	12,363,896.28
January 2030	17,647,453.48	15,701,980.93	17,455,550.30	12,135,218.92
February 2030	17,401,105.66	15,448,117.22	17,188,415.44	11,910,559.21
March 2030	17,157,870.00	15,198,085.03	16,925,064.88	11,689,848.76
April 2030	16,917,709.18	14,951,828.75	16,665,447.23	11,473,020.33
May 2030	16,680,586.36	14,709,293.55	16,409,511.78	11,260,007.77
June 2030	16,446,465.11	14,470,425.40	16,157,208.52	11,050,746.08
July 2030	16,215,309.41	14,235,171.00	15,908,488.05	10,845,171.30
August 2030	15,987,083.68	14,003,477.84	15,663,301.67	10,643,220.56
September 2030	15,761,752.74	13,775,294.13	15,421,601.30	10,444,832.04
October 2030	15,539,281.83	13,550,568.83	15,183,339.51	10,249,944.95
November 2030	15,319,636.58	13,329,251.62	14,948,469.49	10,058,499.51
December 2030	15,102,783.03	13,111,292.89	14,716,945.06	9,870,436.93
January 2031	14,888,687.62	12,896,643.73	14,488,720.63	9,685,699.43
February 2031	14,677,317.16	12,685,255.95	14,263,751.26	9,504,230.18
March 2031	14,468,638.86	12,477,082.00	14,041,992.55	9,325,973.28
April 2031	14,262,620.33	12,272,075.06	13,823,400.72	9,150,873.81
May 2031	14,059,229.51	12,070,188.92	13,607,932.58	8,978,877.73
June 2031	13,858,434.76	11,871,378.06	13,395,545.50	8,809,931.92
Jane 2001	10,000,101.70	11,0/1,0/0.00	10,0/0,010,00	0,007,731.74

Distribution Date	Classes PB and PE (in the aggregate)	Classes BF, FB, KA and KZ (in the aggregate)	Classes CF, FC, KB and KG (in the aggregate)	Classes FD and KP (in the aggregate)
July 2031	\$13,660,204.79	\$11,675,597.61	\$13,186,197.41	\$ 8,643,984.14
August 2031	13,464,508.67	11,482,803.31	12,979,846.80	8,480,983.03
September 2031	13,271,315.83	11,292,951.57	12,776,452.73	8,320,878.11
October 2031	13,080,596.07	11,105,999.37	12,575,974.78	8,163,619.70
November 2031	12,892,319.53	10,921,904.34	12,378,373.09	8,009,159.00
December 2031	12,706,456.71	10,740,624.71	12,183,608.30	7,857,447.99
January 2032	12,522,978.43	10,562,119.29	11,991,641.61	7,708,439.48
February 2032	12,341,855.88	10,386,347.48	11,802,434.71	7,562,087.06
March 2032	12,163,060.58	10,213,269.26	11,615,949.80	7,418,345.10
April 2032	11,986,564.35	10,042,845.18	11,432,149.61	7,277,168.73
May 2032	11,812,339.39	9,875,036.36	11,250,997.32	7,138,513.85
June 2032	11,640,358.19	9,709,804.46	11,072,456.64	7,002,337.08
July 2032	11,470,593.56	9,547,111.70	10,896,491.75	6,868,595.78
August 2032	11,303,018.66	9,386,920.83	10,723,067.31	6,737,248.03
September 2032	11,137,606.93	9,229,195.14	10,552,148.43	6,608,252.60
October 2032	10,974,332.14	9,073,898.42	10,383,700.72	6,481,568.96
November 2032	10,813,168.35	8,920,995.00	10,217,690.23	6,357,157.26
December 2032	10,654,089.95	8,770,449.73	10,054,083.45	6,234,978.32
January 2033	10,497,071.59	8,622,227.92	9,892,847.34	6,114,993.63
February 2033	10,342,088.26	8,476,295.42	9,733,949.29	5,997,165.32
March 2033	10,189,115.22	8,332,618.54	9,577,357.12	5,881,456.14
April 2033	10,038,128.02	8,191,164.08	9,423,039.09	5,767,829.49
May 2033	9,889,102.49	8,051,899.32	9,270,963.88	5,656,249.38
June 2033	9,742,014.77	7,914,791.99	9,121,100.59	5,546,680.43
July 2033	9,596,841.25	7,779,810.30	8,973,418.73	5,439,087.84
August 2033	9,453,558.62	7,646,922.91	8,827,888.20	5,333,437.41
September 2033	9,312,143.82	7,516,098.93	8,684,479.34	5,229,695.52
October 2033	9,172,574.09	7,387,307.90	8,543,162.86	5,127,829.10
November 2033	9,034,826.90	7,260,519.81	8,403,909.87	5,027,805.66
December 2033	8,898,880.01	7,135,705.07	8,266,691.86	4,929,593.24
January 2034	8,764,711.45	7,012,834.53	8,131,480.70	4,833,160.42
February 2034	8,632,299.48	6,891,879.43	7,998,248.65	4,738,476.33
March 2034	8,501,622.64	6,772,811.45	7,866,968.33	4,645,510.60
April 2034	8,372,659.70	6,655,602.66	7,737,612.73	4,554,233.38
May 2034	8,245,389.70	6,540,225.54	7,610,155.21	4,464,615.33
June 2034	8,119,791.91	6,426,652.95	7,484,569.46	4,376,627.60
July 2034	7,995,845.86	6,314,858.16	7,360,829.55	4,290,241.82
August 2034	7,873,531.31	6,204,814.80	7,238,909.90	4,205,430.12
September 2034	7,752,828.26	6,096,496.90	7,118,785.24	4,122,165.08
October 2034	7,633,716.94	5,989,878.85	7,000,430.67	4,040,419.76
November 2034	7,516,177.83	5,884,935.42	6,883,821.62	3,960,167.68
December 2034	7,400,191.62	5,781,641.73	6,768,933.83	3,881,382.78
January 2035	7,285,739.24	5,679,973.26	6,655,743.39	3,804,039.47
February 2035	7,172,801.85	5,579,905.84	6,544,226.70	3,728,112.59
March 2035	7,061,360.81	5,481,415.67	6,434,360.48	3,653,577.39
April 2035	6,951,397.71	5,384,479.26	6,326,121.75	3,580,409.56
May 2035	6,842,894.38	5,289,073.47	6,219,487.85	3,508,585.18

Distribution Date	Classes PB and PE (in the aggregate)	Classes BF, FB, KA and KZ (in the aggregate)	Classes CF, FC, KB and KG (in the aggregate)	Classes FD and KP (in the aggregate)
June 2035	\$ 6,735,832.83	\$ 5,195,175.51	\$ 6,114,436.43	\$ 3,438,080.76
July 2035	6,630,195.30	5,102,762.90	6,010,945.43	3,368,873.19
August 2035	6,525,964.24	5,011,813.49	5,908,993.10	3,300,939.77
September 2035	6,423,122.29	4,922,305.43	5,808,557.95	3,234,258.16
October 2035	6,321,652.33	4,834,217.22	5,709,618.83	3,168,806.43
November 2035	6,221,537.42	4,747,527.65	5,612,154.83	3,104,563.00
December 2035	6,122,760.81	4,662,215.82	5,516,145.34	3,041,506.67
January 2036	6,025,305.96	4,578,261.12	5,421,570.03	2,979,616.58
February 2036	5,929,156.53	4,495,643.26	5,328,408.84	2,918,872.26
March 2036	5,834,296.38	4,414,342.21	5,236,641.98	2,859,253.56
April 2036	5,740,709.53	4,334,338.27	5,146,249.93	2,800,740.68
May 2036	5,648,380.23	4,255,611.99	5,057,213.42	2,743,314.17
June 2036	5,557,292.88	4,178,144.23	4,969,513.46	2,686,954.89
July 2036	5,467,432.08	4,101,916.10	4,883,131.31	2,631,644.03
August 2036	5,378,782.63	4,026,908.99	4,798,048.47	2,577,363.12
September 2036	5,291,329.48	3,953,104.58	4,714,246.70	2,524,094.00
October 2036	5,205,057.78	3,880,484.79	4,631,708.01	2,471,818.79
November 2036	5,119,952.84	3,809,031.81	4,550,414.65	2,420,519.96
December 2036	5,036,000.16	3,738,728.09	4,470,349.11	2,370,180.24
January 2037	4,953,185.40	3,669,556.33	4,391,494.11	2,320,782.68
February 2037	4,871,494.40	3,601,499.49	4,313,832.61	2,272,310.62
March 2037	4,790,913.16	3,534,540.77	4,237,347.81	2,224,747.67
April 2037	4,711,427.85	3,468,663.60	4,162,023.11	2,178,077.72
May 2037	4,633,024.81	3,403,851.69	4,087,842.16	2,132,284.95
June 2037	4,555,690.52	3,340,088.94	4,014,788.83	2,087,353.80
July 2037	4,479,411.66	3,277,359.51	3,942,847.19	2,043,268.99
August 2037	4,404,175.03	3,215,647.79	3,872,001.54	2,000,015.48
September 2037	4,329,967.61	3,154,938.38	3,802,236.40	1,957,578.51
October 2037	4,256,776.53	3,095,216.13	3,733,536.48	1,915,943.55
November 2037	4,184,589.06	3,036,466.08	3,665,886.71	1,875,096.35
December 2037	4,113,392.65	2,978,673.51	3,599,272.23	1,835,022.87
January 2038	4,043,174.87	2,921,823.92	3,533,678.36	1,795,709.33
February 2038	3,973,923.46	2,865,902.98	3,469,090.64	1,757,142.20
March 2038	3,905,626.29	2,810,896.62	3,405,494.81	1,719,308.14
April 2038	3,838,271.38	2,756,790.94	3,342,876.77	1,682,194.09
May 2038	3,771,846.91	2,703,572.26	3,281,222.66	1,645,787.17
June 2038	3,706,341.17	2,651,227.08	3,220,518.77	1,610,074.76
July 2038	3,641,742.62	2,599,742.13	3,160,751.59	1,575,044.43
August 2038	3,578,039.83	2,549,104.30	3,101,907.79	1,540,683.98
September 2038	3,515,221.53	2,499,300.69	3,043,974.24	1,506,981.40
October 2038	3,453,276.58	2,450,318.58	2,986,937.97	1,473,924.91
November 2038	3,392,193.96	2,402,145.44	2,930,786.17	1,441,502.92
December 2038	3,331,962.79	2,354,768.92	2,875,506.26	1,409,704.04
January 2039	3,272,572.33	2,308,176.86	2,821,085.76	1,378,517.09
February 2039	3,214,011.95	2,262,357.26	2,767,512.43	1,347,931.06
March 2039	3,156,271.16	2,217,298.31	2,714,774.14	1,317,935.15
April 2039	3,099,339.60	2,172,988.37	2,662,858.97	1,288,518.74

Distribution Date	Classes PB and PE (in the aggregate)	Classes BF, FB, KA and KZ (in the aggregate)	Classes CF, FC, KB and KG (in the aggregate)	Classes FD and KP (in the aggregate)
May 2039	\$ 3,043,207.02	\$ 2,129,415.96	\$ 2,611,755.12	\$ 1,259,671.38
June 2039	2,987,863.30	2,086,569.79	2,561,450.99	1,231,382.83
July 2039	2,933,298.44	2,044,438.71	2,511,935.12	1,203,643.01
August 2039	2,879,502.57	2,003,011.76	2,463,196.20	1,176,442.00
September 2039	2,826,465.93	1,962,278.11	2,415,223.08	1,149,770.08
October 2039	2,774,178.86	1,922,227.11	2,368,004.79	1,123,617.67
November 2039	2,722,631.85	1,882,848.27	2,321,530.46	1,097,975.39
December 2039	2,671,815.49	1,844,131.23	2,275,789.41	1,072,834.00
January 2040	2,621,720.46	1,806,065.81	2,230,771.08	1,048,184.41
February 2040	2,572,337.60	1,768,641.96	2,186,465.07	1,024,017.71
March 2040	2,523,657.81	1,731,849.79	2,142,861.12	1,000,325.14
April 2040	2,475,672.14	1,695,679.54	2,099,949.11	977,098.09
May 2040	2,428,371.73	1,660,121.61	2,057,719.05	954,328.09
June 2040	2,381,747.81	1,625,166.54	2,016,161.11	932,006.83
July 2040	2,335,791.75	1,590,804.99	1,975,265.56	910,126.14
August 2040	2,290,495.01	1,557,027.78	1,935,022.83	888,677.99
September 2040	2,245,849.13	1,523,825.86	1,895,423.48	867,654.49
October 2040	2,201,845.80	1,491,190.30	1,856,458.19	847,047.90
November 2040	2,158,476.76	1,459,112.33	1,818,117.78	826,850.59
December 2040	2,115,733.88	1,427,583.27	1,780,393.18	807,055.09
January 2041	2,073,609.13	1,396,594.59	1,743,275.45	787,654.05
February 2041	2,032,094.55	1,366,137.91	1,706,755.79	768,640.23
March 2041	1,991,182.31	1,336,204.92	1,670,825.50	750,006.54
April 2041	1,950,864.66	1,306,787.47	1,635,476.00	731,746.01
May 2041	1,911,133.93	1,277,877.53	1,600,698.85	713,851.79
June 2041	1,871,982.57	1,249,467.18	1,566,485.71	696,317.15
July 2041	1,833,403.09	1,221,548.62	1,532,828.35	679,135.46
August 2041	1,795,388.13	1,194,114.15	1,499,718.66	662,300.24
September 2041	1,757,930.38	1,167,156.21	1,467,148.66	645,805.09
October 2041	1,721,022.64	1,140,667.33	1,435,110.44	629,643.75
November 2041	1,684,657.80	1,114,640.17	1,403,596.24	613,810.06
December 2041	1,648,828.83	1,089,067.49	1,372,598.39	598,297.95
January 2042	1,613,528.78	1,063,942.15	1,342,109.31	583,101.49
February 2042	1,578,750.78	1,039,257.12	1,312,121.55	568,214.83
March 2042	1,544,488.08	1,015,005.49	1,282,627.76	553,632.22
April 2042	1,510,733.96	991,180.43	1,253,620.68	539,348.03
May 2042	1,477,481.82	967,775.23	1,225,093.16	525,356.72
June 2042	1,444,725.12	944,783.26	1,197,038.14	511,652.84
July 2042	1,412,457.42	922,198.01	1,169,448.67	498,231.05
August 2042	1,380,672.34	900,013.05	1,142,317.88	485,086.10
September 2042	1,349,363.57	878,222.06	1,115,639.01	472,212.82
October 2042	1,318,524.91	856,818.80	1,089,405.40	459,606.15
November 2042	1,288,150.21	835,797.14	1,063,610.46	447,261.10
December 2042	1,258,233.39	815,151.02	1,038,247.70	435,172.79
January 2043	1,228,768.48	794,874.49	1,013,310.73	423,336.41
February 2043	1,199,749.53	774,961.67	988,793.25	411,747.24
March 2043	1,171,170.71	755,406.79	964,689.03	400,400.64
	, . , - , - , - , - , -	, , ,	, -, -, -, -, -, -, -, -, -, -, -, -, -,	,

Distribution Date	Classes PB and PE (in the aggregate)	Classes BF, FB, KA and KZ (in the aggregate)	Classes CF, FC, KB and KG (in the aggregate)	Classes FD and KP (in the aggregate)
April 2043	\$ 1,143,026.24	\$ 736,204.16	\$ 940,991.94	\$ 389,292.06
May 2043	1,115,310.41	717,348.15	917,695.93	378,417.03
June 2043	1,088,017.59	698,833.26	894,795.04	367,771.15
July 2043	1,061,142.20	680,654.02	872,283.39	357,350.10
August 2043	1,034,678.75	662,805.09	850,155.18	347,149.65
September 2043	1,008,621.81	645,281.18	828,404.70	337,165.63
October 2043	982,966.01	628,077.09	807,026.30	327,393.95
November 2043	957,706.04	611,187.70	786,014.44	317,830.60
December 2043	932,836.69	594,607.96	765,363.62	308,471.62
January 2044	908,352.77	578,332.89	745,068.45	299,313.14
February 2044	884,249.18	562,357.61	725,123.60	290,351.36
March 2044	860,520.88	546,677.28	705,523.81	281,582.53
April 2044	837,162.88	531,287.17	686,263.91	273,002.99
May 2044	814,170.27	516,182.59	667,338.78	264,609.13
June 2044	791,538.19	501,358.93	648,743.39	256,397.40
July 2044	769,261.83	486,811.66	630,472.78	248,364.33
August 2044	747,336.45	472,536.30	612,522.06	240,506.50
September 2044	725,757.38	458,528.46	594,886.39	232,820.55
October 2044	704,519.99	444,783.79	577,561.01	225,303.20
November 2044	683,619.71	431,298.03	560,541.24	217,951.20
December 2044	663,052.03	418,066.97	543,822.46	210,761.38
January 2045	642,812.49	405,086.47	527,400.09	203,730.61
February 2045	622,896.71	392,352.45	511,269.64	196,855.83
March 2045	603,300.32	379,860.89	495,426.69	190,134.04
April 2045	584,019.04	367,607.84	479,866.86	183,562.27
May 2045	565,048.64	355,589.39	464,585.84	177,137.63
June 2045	546,384.92	343,801.72	449,579.39	170,857.26
July 2045	528,023.75	332,241.03	434,843.31	164,718.36
August 2045	509,961.05	320,903.62	420,373.49	158,718.20
September 2045	492,192.79	309,785.80	406,165.84	152,854.06
October 2045	474,714.99	298,883.99	392,216.36	147,123.30
November 2045	457,523.71	288,194.61	378,521.09	141,523.32
December 2045	440,615.07	277,714.17	365,076.14	136,051.57
January 2046	423,985.23	267,439.22	351,877.65	130,705.52
February 2046	407,630.41	257,366.38	338,921.85	125,482.74
March 2046	391,546.87	247,492.28	326,204.99	120,380.78
April 2046	375,730.92	237,813.65	313,723.38	115,397.29
May 2046	360,178.90	228,327.25	301,473.41	110,529.92
June 2046	344,887.22	219,029.87	289,451.49	105,776.40
July 2046	329,852.31	209,918.38	277,654.10	101,134.47
August 2046	315,070.67	200,989.69	266,077.75	96,601.93
September 2046	300,538.84	192,240.74	254,719.02	92,176.61
October 2046	286,253.37	183,668.54	243,574.53	87,856.38
November 2046	272,210.89	175,270.12	232,640.96	83,639.17
December 2046	258,408.07	167,042.59	221,915.00	79,522.91
January 2047	244,841.60	158,983.08	211,393.44	75,505.60
February 2047	231,508.23	151,088.76	201,073.08	71,585.27

Distribution Date	Classes PB and PE (in the aggregate)	Classes BF, FB, KA and KZ (in the aggregate)	Classes CF, FC, KB and KG (in the aggregate)	Classes FD and KP (in the aggregate)
March 2047	\$ 218,404.73	\$ 143,356.87	\$ 190,950.77	\$ 67,759.97
April 2047	205,527.95	135,784.66	181,023.42	64,027.79
May 2047	192,874.73	128,369.44	171,287.97	60,386.89
June 2047	180,441.99	121,108.57	161,741.42	56,835.41
July 2047	168,226.67	113,999.43	152,380.78	53,371.56
August 2047	156,225.75	107,039.46	143,203.14	49,993.57
September 2047	144,436.24	100,226.12	134,205.62	46,699.71
October 2047	132,855.21	93,556.93	125,385.37	43,488.27
November 2047	121,479.75	87,029.43	116,739.59	40,357.59
December 2047	110,307.00	80,641.21	108,265.52	37,306.02
January 2048	99,334.11	74,389.89	99,960.44	34,331.96
February 2048	88,558.29	68,273.14	91,821.67	31,433.81
March 2048	77,976.79	62,288.64	83,846.56	28,610.05
April 2048	67,586.86	56,434.14	76,032.51	25,859.13
May 2048	57,385.83	50,707.40	68,376.96	23,179.57
June 2048	47,371.03	45,106.23	60,877.37	20,569.91
July 2048	37,539.84	39,628.45	53,531.25	18,028.70
August 2048	27,889.67	34,271.94	46,336.15	15,554.52
September 2048	18,417.95	29,034.61	39,289.63	13,146.01
October 2048	9,122.17	23,914.39	32,389.32	10,801.79
November 2048	0.00	18,909.25	25,632.86	8,520.53
December 2048	0.00	14,017.20	19,017.94	6,300.93
January 2049	0.00	9,236.25	12,542.27	4,141.69
February 2049	0.00	4,564.48	6,203.59	2,041.56
March 2049 and thereafter	0.00	0.00	0.00	0.00

Distribution Date	Classes MB and MP (in the aggregate)	Classes MB, MP and MZ (in the aggregate)	Classes BE, EA and EB (in the aggregate)	Classes BE, EA, EB, EF, EJ, EK and ZE (in the aggregate)
Initial Balance	\$169,942,613.00	\$184,364,250.00	\$113,284,644.00	\$165,200,798.00
February 2020	169,104,395.74	183,562,086.83	112,947,126.48	164,750,774.64
March 2020	168,218,112.01	182,711,947.33	112,575,320.14	164,255,032.86
April 2020	167,284,117.78	181,814,187.69	112,169,378.52	163,713,777.37
May 2020	166,302,800.89	180,869,195.97	111,729,481.50	163,127,248.01
June 2020	165,274,580.75	179,877,391.82	111,255,835.26	162,495,719.69
July 2020	164,199,908.03	178,839,226.13	110,748,672.13	161,819,502.19
August 2020	163,079,264.30	177,755,180.69	110,208,250.44	161,098,939.94
September 2020	161,913,161.65	176,625,767.83	109,634,854.31	160,334,411.77
October 2020	160,702,142.20	175,451,529.90	109,028,793.45	159,526,330.62
November 2020	159,446,777.75	174,233,038.92	108,390,402.84	158,675,143.14
December 2020	158,147,669.18	172,970,896.00	107,720,042.50	157,781,329.36
January 2021	156,805,445.94	171,665,730.83	107,018,097.13	156,845,402.21
February 2021	155,420,765.53	170,318,201.13	106,284,975.75	155,867,907.04
March 2021	153,994,312.86	168,928,992.05	105,521,111.30	154,849,421.11
April 2021	152,526,799.63	167,498,815.52	104,726,960.23	153,790,553.02
May 2021	151,018,963.71	166,028,409.64	103,903,002.02	152,691,942.08
June 2021	149,471,568.39	164,518,537.93	103,049,738.74	151,554,257.71
July 2021	147,885,401.67	162,969,988.64	102,167,694.45	150,378,198.66
August 2021	146,261,275.61	161,383,574.04	101,257,414.74	149,164,492.39
September 2021	144,115,356.09	159,760,129.58	100,319,466.11	147,913,894.21
October 2021	140,030,054.67	158,100,513.14	99,354,435.34	146,627,186.53
November 2021	135,893,743.57	156,405,604.17	98,362,928.92	145,305,177.98
December 2021	131,714,162.76	154,676,302.87	97,345,572.38	143,948,702.59
January 2022	127,646,795.13	152,958,326.43	96,303,009.55	142,558,618.82
February 2022	123,688,619.73	151,251,591.53	95,235,901.91	141,135,808.64
March 2022	119,836,696.36	149,556,015.42	94,144,927.87	139,681,176.59
April 2022	116,088,163.35	147,871,515.90	93,030,781.95	138,195,648.71
May 2022	112,440,235.54	146,198,011.32	91,894,174.11	136,680,171.60
June 2022	108,890,202.21	144,535,420.57	90,766,996.00	135,177,267.46
July 2022	105,435,425.13	142,883,663.09	89,649,168.60	133,686,830.93
August 2022	102,073,336.58	141,242,658.85	88,540,613.54	132,208,757.52
September 2022	98,801,437.53	139,612,328.35	87,441,253.07	130,742,943.57
October 2022	95,617,295.78	137,992,592.64	86,351,010.06	129,289,286.23
November 2022	92,518,544.20	136,383,373.28	85,269,808.02	127,847,683.51
December 2022	89,502,878.97	134,784,592.35	84,197,571.05	126,418,034.22
January 2023	86,568,057.94	133,196,172.47	83,134,223.86	125,000,237.98
February 2023	83,711,898.96	131,618,036.74	82,079,691.79	123,594,195.22
March 2023	80,932,278.27	130,050,108.80	81,033,900.75	122,199,807.18
April 2023	78,227,128.98	128,492,312.80	79,996,777.27	120,816,975.87
May 2023	75,594,439.52	126,944,573.39	78,968,248.44	119,445,604.11
June 2023	73,032,252.22	125,406,815.70	77,948,241.97	118,085,595.49
July 2023	70,538,661.82	123,878,965.40	76,936,686.12	116,736,854.36
August 2023	68,111,814.07	122,360,948.61	75,933,509.75	115,399,285.87
September 2023	65,749,904.44	120,852,691.98	74,938,642.27	114,072,795.90
October 2023	63,451,176.73	119,354,122.63	73,952,013.67	112,757,291.11
November 2023	61,213,921.81	117,865,168.15	72,973,554.51	111,452,678.90
140vCIIIDCI 202 <i>J</i>	01,413,741.01	117,000,100.1)	/ 4,7 / 3,334.31	111,772,070.90

Distribution Date	Classes MB and MP (in the aggregate)	Classes MB, MP and MZ (in the aggregate)	Classes BE, EA and EB (in the aggregate)	Classes BE, EA, EB, EF, EJ, EK and ZE (in the aggregate)
December 2023	\$ 59,036,476.33	\$116,385,756.64	\$ 72,003,195.88	\$110,158,867.40
January 2024	56,917,221.58	114,915,816.67	71,040,869.46	108,875,765.51
February 2024	54,854,582.22	113,455,277.26	70,086,507.44	107,603,282.82
March 2024	52,847,025.14	112,004,067.94	69,140,042.59	106,341,329.69
April 2024	50,893,058.39	110,562,118.68	68,201,408.20	105,089,817.17
May 2024	48,991,229.99	109,129,359.93	67,270,538.09	103,848,657.03
June 2024	47,140,126.95	107,705,722.59	66,347,366.62	102,617,761.75
July 2024	45,338,374.18	106,291,138.02	65,431,828.70	101,397,044.53
August 2024	43,584,633.49	104,885,538.05	64,523,859.73	100,186,419.24
September 2024	41,877,602.62	103,488,854.95	63,623,395.64	98,985,800.46
October 2024	40,216,014.27	102,101,021.44	62,730,372.88	97,795,103.45
November 2024	38,598,635.15	100,721,970.68	61,844,728.40	96,614,244.15
December 2024	37,024,265.10	99,351,636.28	60,966,399.67	95,443,139.18
January 2025	35,491,736.20	97,989,952.30	60,095,324.66	94,281,705.83
February 2025	33,999,911.90	96,636,853.22	59,231,441.82	93,129,862.05
March 2025	32,547,686.18	95,292,273.95	58,374,690.11	91,987,526.44
April 2025	31,133,982.75	93,956,149.86	57,525,008.99	90,854,618.29
May 2025	29,757,754.24	92,628,416.71	56,682,338.39	89,731,057.49
June 2025	28,417,981.44	91,309,010.72	55,846,618.73	88,616,764.61
July 2025	27,113,672.55	89,997,868.50	55,017,790.90	87,511,660.85
August 2025	25,843,862.41	88,694,927.11	54,195,796.28	86,415,668.03
September 2025	24,607,611.86	87,400,123.99	53,380,576.72	85,328,708.62
October 2025	23,404,006.98	86,113,397.03	52,572,074.52	84,250,705.69
November 2025	22,232,158.43	84,834,684.51	51,770,232.46	83,181,582.95
December 2025	21,091,200.81	83,563,925.11	50,974,993.78	82,121,264.71
January 2026	19,980,292.02	82,301,057.94	50,186,302.16	81,069,675.89
February 2026	18,898,612.62	81,046,022.49	49,404,101.76	80,026,742.02
March 2026	17,845,365.24	79,798,758.66	48,628,337.15	78,992,389.22
April 2026	16,819,773.96	78,561,738.44	47,858,953.39	77,966,544.20
May 2026	15,821,083.77	77,342,956.46	47,095,895.95	76,949,134.29
June 2026	14,848,560.02	76,142,151.76	46,339,110.75	75,940,087.36
July 2026	13,901,487.81	74,959,067.06	45,588,544.14	74,939,331.89
August 2026	12,979,171.54	73,793,448.68	44,844,142.92	73,946,796.93
September 2026	12,080,934.35	72,645,046.51	44,105,854.30	72,962,412.10
October 2026	11,206,117.60	71,513,613.96	43,373,625.90	71,986,107.58
November 2026	10,354,080.45	70,398,907.87	42,648,235.33	71,018,920.16
December 2026	9,524,199.32	69,300,688.54	41,931,910.47	70,063,820.34
January 2027	8,715,867.43	68,218,719.61	41,224,542.44	69,120,662.97
February 2027	7,928,494.40	67,152,768.05	40,526,023.71	68,189,304.67
March 2027	7,161,505.78	66,102,604.11	39,836,247.96	67,269,603.68
April 2027	6,414,342.59	65,068,001.27	39,155,110.15	66,361,419.93
May 2027	5,686,460.96	64,048,736.17	38,482,506.46	65,464,615.01
June 2027	4,977,331.71	63,044,588.63	37,818,334.26	64,579,052.08
July 2027	4,286,439.93	62,055,341.55	37,162,492.16	63,704,595.96
August 2027	3,613,284.64	61,080,780.88	36,514,879.96	62,841,113.03
September 2027	2,957,378.36	60,120,695.58	35,875,398.61	61,988,471.23
October 2027	2,318,246.80	59,174,877.60	35,243,950.23	61,146,540.06

Distribution Date	asses MB and MP n the aggregate)	Classes MB, MP and MZ (in the aggregate)	Classes BE, EA and EB (in the aggregate)	Classes BE, EA, EB, EF, EJ, EK and ZE (in the aggregate)
November 2027	\$ 1,695,428.49	\$ 58,243,121.80	\$ 34,620,438.10	\$ 60,315,190.56
December 2027	1,088,474.42	57,325,225.94	34,004,766.63	59,494,295.26
January 2028	496,947.73	56,420,990.62	33,396,841.34	58,683,728.22
February 2028	0.00	55,530,219.25	32,796,568.88	57,883,364.94
March 2028	0.00	54,652,718.01	32,203,856.99	57,093,082.42
April 2028	0.00	53,788,295.82	31,618,614.47	56,312,759.07
May 2028	0.00	52,936,764.29	31,040,751.23	55,542,274.75
June 2028	0.00	52,097,937.67	30,470,178.22	54,781,510.74
July 2028	0.00	51,271,632.84	29,906,807.43	54,030,349.69
August 2028	0.00	50,457,669.28	29,350,551.89	53,288,675.64
September 2028	0.00	49,655,868.99	28,801,325.67	52,556,374.01
October 2028	0.00	48,866,056.50	28,259,043.81	51,833,331.54
November 2028	0.00	48,088,058.80	27,723,622.39	51,119,436.32
December 2028	0.00	47,321,705.33	27,194,978.47	50,414,577.76
January 2029	0.00	46,566,827.95	26,673,030.06	49,718,646.55
February 2029	0.00	45,823,260.87	26,157,696.16	49,031,534.68
March 2029	0.00	45,090,840.66	25,648,896.72	48,353,135.43
April 2029	0.00	44,369,406.19	25,146,552.63	47,683,343.31
May 2029	0.00	43,658,798.61	24,650,585.69	47,022,054.07
June 2029	0.00	42,958,861.32	24,160,918.67	46,369,164.71
July 2029	0.00	42,269,439.92	23,677,475.21	45,724,573.43
August 2029	0.00	41,590,382.21	23,200,179.87	45,088,179.64
September 2029	0.00	40,921,538.13	22,728,958.07	44,459,883.91
October 2029	0.00	40,262,759.75	22,263,736.15	43,839,588.02
November 2029	0.00	39,613,901.22	21,804,441.29	43,227,194.88
December 2029	0.00	38,974,818.77	21,351,001.54	42,622,608.55
January 2030	0.00	38,345,370.66	20,903,345.81	42,025,734.24
February 2030	0.00	37,725,417.15	20,461,403.81	41,436,478.24
March 2030	0.00	37,114,820.49	20,025,106.12	40,854,747.99
April 2030	0.00	36,513,444.87	19,594,384.12	40,280,452.00
May 2030	0.00	35,921,156.40	19,169,170.02	39,713,499.86
June 2030	0.00	35,337,823.11	18,749,396.79	39,153,802.23
July 2030	0.00	34,763,314.88	18,334,998.23	38,601,270.82
August 2030	0.00	34,197,503.45	17,925,908.92	38,055,818.40
September 2030	0.00	33,640,262.35	17,522,064.18	37,517,358.76
October 2030	0.00	33,091,466.94	17,123,400.14	36,985,806.70
November 2030	0.00	32,550,994.33	16,729,853.64	36,461,078.04
December 2030	0.00	32,018,723.37	16,341,362.31	35,943,089.60
January 2031	0.00	31,494,534.64	15,957,864.48	35,431,759.17
February 2031	0.00	30,978,310.40	15,579,299.24	34,927,005.51
March 2031	0.00	30,469,934.60	15,205,606.38	34,428,748.37
April 2031	0.00	29,969,292.83	14,836,726.41	33,936,908.41
May 2031	0.00	29,476,272.30	14,472,600.55	33,451,407.26
June 2031	0.00	28,990,761.83	14,113,170.69	32,972,167.46
July 2031	0.00	28,512,651.83	13,758,379.46	32,499,112.48
August 2031	0.00	28,041,834.24	13,408,170.11	32,032,166.69
September 2031	0.00	27,578,202.56	13,062,486.62	31,571,255.36

Distribution Date	Classes MB and MP (in the aggregate)	Classes MB, MP and MZ (in the aggregate)	Classes BE, EA and EB (in the aggregate)	Classes BE, EA, EB, EF, EJ, EK and ZE (in the aggregate)
October 2031	\$ 0.00	\$ 27,121,651.80	\$ 12,721,273.57	\$ 31,116,304.63
November 2031	0.00	26,672,078.45	12,384,476.26	30,667,241.55
December 2031	0.00	26,229,380.50	12,052,040.58	30,223,993.99
January 2032	0.00	25,793,457.36	11,723,913.13	29,786,490.72
February 2032	0.00	25,364,209.91	11,400,041.09	29,354,661.33
March 2032	0.00	24,941,540.39	11,080,372.27	28,928,436.24
April 2032	0.00	24,525,352.49	10,764,855.12	28,507,746.71
May 2032	0.00	24,115,551.24	10,453,438.70	28,092,524.82
June 2032	0.00	23,712,043.01	10,146,072.66	27,682,703.44
July 2032	0.00	23,314,735.54	9,842,707.27	27,278,216.25
August 2032	0.00	22,923,537.87	9,543,293.36	26,878,997.70
September 2032	0.00	22,538,360.32	9,247,782.38	26,484,983.06
October 2032	0.00	22,159,114.52	8,956,126.32	26,096,108.32
November 2032	0.00	21,785,713.35	8,668,277.77	25,712,310.26
December 2032	0.00	21,418,070.91	8,384,189.88	25,333,526.40
January 2033	0.00	21,056,102.56	8,103,816.34	24,959,695.02
February 2033	0.00	20,699,724.85	7,827,111.41	24,590,755.12
March 2033	0.00	20,348,855.53	7,554,029.89	24,226,646.42
April 2033	0.00	20,003,413.53	7,284,527.10	23,867,309.37
May 2033	0.00	19,663,318.91	7,018,558.92	23,512,685.13
June 2033	0.00	19,328,492.92	6,756,081.73	23,162,715.55
July 2033	0.00	18,998,857.89	6,497,052.45	22,817,343.18
August 2033	0.00	18,674,337.29	6,241,428.51	22,476,511.26
September 2033	0.00	18,354,855.68	5,989,167.84	22,140,163.70
October 2033	0.00	18,040,338.68	5,740,228.87	21,808,245.07
November 2033	0.00	17,730,713.01	5,494,570.52	21,480,700.61
December 2033	0.00	17,425,906.41	5,252,152.23	21,157,476.22
January 2034	0.00	17,125,847.67	5,012,933.89	20,838,518.44
February 2034	0.00	16,830,466.59	4,776,875.90	20,523,774.45
March 2034	0.00	16,539,693.98	4,543,939.09	20,213,192.04
April 2034	0.00	16,253,461.65	4,314,084.81	19,906,719.66
May 2034	0.00	15,971,702.39	4,087,274.82	19,604,306.35
June 2034	0.00	15,694,349.92	3,863,471.38	19,305,901.76
July 2034	0.00	15,421,338.96	3,642,637.17	19,011,456.15
August 2034	0.00	15,152,605.14	3,424,735.34	18,720,920.38
September 2034	0.00	14,888,085.01	3,209,729.47	18,434,245.88
October 2034	0.00	14,627,716.04	2,997,583.56	18,151,384.68
November 2034	0.00	14,371,436.60	2,788,262.07	17,872,289.36
December 2034	0.00	14,119,185.94	2,581,729.87	17,596,913.09
January 2035	0.00	13,870,904.19	2,377,952.25	17,325,209.60
February 2035	0.00	13,626,532.34	2,176,894.92	17,057,133.16
March 2035	0.00	13,386,012.22	1,978,523.99	16,792,638.59
April 2035	0.00	13,149,286.51	1,782,806.00	16,531,681.27
May 2035	0.00	12,916,298.70	1,589,707.86	16,274,217.08
June 2035	0.00	12,686,993.10	1,399,196.89	16,020,202.46
July 2035	0.00	12,461,314.83	1,211,240.83	15,769,594.37
August 2035	0.00	12,239,209.78	1,025,807.74	15,522,350.26
120000 2000	0.00	1-,207,207.70	1,020,007.74	1,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

Distribution Date	Classes MB and MP (in the aggregate)	Classes MB, MP and MZ (in the aggregate)	Classes BE, EA and EB (in the aggregate)	Classes BE, EA, EB, EF, EJ, EK and ZE (in the aggregate)
September 2035	\$ 0.00	\$ 12,020,624.65	\$ 842,866.14	\$ 15,278,428.13
October 2035	0.00	11,805,506.89	662,384.88	15,037,786.44
November 2035	0.00	11,593,804.70	484,333.19	14,800,384.19
December 2035	0.00	11,385,467.04	308,680.67	14,566,180.84
January 2036	0.00	11,180,443.60	135,397.31	14,335,136.36
February 2036	0.00	10,978,684.80	0.00	14,107,211.19
March 2036	0.00	10,780,141.79	0.00	13,882,366.25
April 2036	0.00	10,584,766.38	0.00	13,660,562.92
May 2036	0.00	10,392,511.13	0.00	13,441,763.05
June 2036	0.00	10,203,329.26	0.00	13,225,928.95
July 2036	0.00	10,017,174.66	0.00	13,013,023.40
August 2036	0.00	9,834,001.89	0.00	12,803,009.59
September 2036	0.00	9,653,766.18	0.00	12,595,851.20
October 2036	0.00	9,476,423.41	0.00	12,391,512.30
November 2036	0.00	9,301,930.07	0.00	12,189,957.42
December 2036	0.00	9,130,243.31	0.00	11,991,151.53
January 2037	0.00	8,961,320.88	0.00	11,795,059.98
February 2037	0.00	8,795,121.16	0.00	11,601,648.59
March 2037	0.00	8,631,603.12	0.00	11,410,883.54
April 2037	0.00	8,470,726.33	0.00	11,222,731.47
May 2037	0.00	8,312,450.95	0.00	11,037,159.37
June 2037	0.00	8,156,737.71	0.00	10,854,134.68
July 2037	0.00	8,003,547.92	0.00	10,673,625.19
August 2037	0.00	7,852,843.44	0.00	10,495,599.10
September 2037	0.00	7,704,586.68	0.00	10,320,025.00
October 2037	0.00	7,558,740.63	0.00	10,146,871.85
November 2037	0.00	7,415,268.77	0.00	9,976,108.98
December 2037	0.00	7,274,135.15	0.00	9,807,706.11
January 2038	0.00	7,135,304.33	0.00	9,641,633.31
February 2038	0.00	6,998,741.37	0.00	9,477,861.01
March 2038	0.00	6,864,411.86	0.00	9,316,360.01
April 2038	0.00	6,732,281.88	0.00	9,157,101.47
May 2038	0.00	6,602,318.01	0.00	9,000,056.87
June 2038	0.00	6,474,487.32	0.00	8,845,198.06
July 2038	0.00	6,348,757.35	0.00	8,692,497.23
August 2038	0.00	6,225,096.11	0.00	8,541,926.91
September 2038	0.00	6,103,472.09	0.00	8,393,459.94
October 2038	0.00	5,983,854.24	0.00	8,247,069.51
November 2038	0.00	5,866,211.96	0.00	8,102,729.14
December 2038	0.00	5,750,515.08	0.00	7,960,412.66
January 2039	0.00	5,636,733.89	0.00	7,820,094.22
February 2039	0.00	5,524,839.12	0.00	7,681,748.28
March 2039	0.00	5,414,801.91	0.00	7,545,349.63
April 2039	0.00	5,306,593.84	0.00	7,410,873.34
May 2039	0.00	5,200,186.88	0.00	7,278,294.81
June 2039	0.00	5,095,553.43	0.00	7,147,589.71
July 2039	0.00	4,992,666.30	0.00	7,018,734.03

Distribution Date	Classes MB and MP (in the aggregate)	Classes MB, MP and MZ (in the aggregate)	Classes BE, EA and EB (in the aggregate)	Classes BE, EA, EB, EF, EJ, EK and ZE (in the aggregate)
August 2039	\$ 0.00	\$ 4,891,498.68	\$ 0.00	\$ 6,891,704.04
September 2039	0.00	4,792,024.17	0.00	6,766,476.31
October 2039	0.00	4,694,216.74	0.00	6,643,027.69
November 2039	0.00	4,598,050.76	0.00	6,521,335.30
December 2039	0.00	4,503,500.96	0.00	6,401,376.57
January 2040	0.00	4,410,542.45	0.00	6,283,129.17
February 2040	0.00	4,319,150.71	0.00	6,166,571.07
March 2040	0.00	4,229,301.57	0.00	6,051,680.49
April 2040	0.00	4,140,971.21	0.00	5,938,435.93
May 2040	0.00	4,054,136.18	0.00	5,826,816.14
June 2040	0.00	3,968,773.37	0.00	5,716,800.14
July 2040	0.00	3,884,859.99	0.00	5,608,367.21
August 2040	0.00	3,802,373.61	0.00	5,501,496.87
September 2040	0.00	3,721,292.12	0.00	5,396,168.90
October 2040	0.00	3,641,593.74	0.00	5,292,363.32
November 2040	0.00	3,563,257.00	0.00	5,190,060.42
December 2040	0.00	3,486,260.76	0.00	5,089,240.68
January 2041	0.00	3,410,584.18	0.00	4,989,884.88
February 2041	0.00	3,336,206.75	0.00	4,891,974.00
March 2041	0.00	3,263,108.23	0.00	4,795,489.24
April 2041	0.00	3,191,268.71	0.00	4,700,412.08
May 2041	0.00	3,120,668.55	0.00	4,606,724.18
June 2041	0.00	3,051,288.42	0.00	4,514,407.46
July 2041	0.00	2,983,109.26	0.00	4,423,444.02
August 2041	0.00	2,916,112.31	0.00	4,333,816.23
September 2041	0.00	2,850,279.07	0.00	4,245,506.65
October 2041	0.00	2,785,591.32	0.00	4,158,498.05
November 2041	0.00	2,722,031.12	0.00	4,072,773.42
December 2041	0.00	2,659,580.78	0.00	3,988,315.96
January 2042	0.00	2,598,222.88	0.00	3,905,109.08
February 2042	0.00	2,537,940.27	0.00	3,823,136.39
March 2042	0.00	2,478,716.03	0.00	3,742,381.71
April 2042	0.00	2,420,533.52	0.00	3,662,829.04
May 2042	0.00	2,363,376.32	0.00	3,584,462.59
June 2042	0.00	2,307,228.28	0.00	3,507,266.78
July 2042	0.00	2,252,073.46	0.00	3,431,226.19
August 2042	0.00	2,197,896.20	0.00	3,356,325.62
September 2042	0.00	2,144,681.02	0.00	3,282,550.04
October 2042	0.00	2,092,412.72	0.00	3,209,884.61
November 2042	0.00	2,041,076.29	0.00	3,138,314.69
December 2042	0.00	1,990,656.98	0.00	3,067,825.79
January 2043	0.00	1,941,140.22	0.00	2,998,403.63
February 2043	0.00	1,892,511.69	0.00	2,930,034.08
March 2043	0.00	1,844,757.27	0.00	2,862,703.20
April 2043	0.00	1,797,863.04	0.00	2,796,397.23
May 2043	0.00	1,751,815.32	0.00	2,731,102.58
June 2043	0.00	1,706,600.61	0.00	2,666,805.80

Distribution Date	Classes MB and MP (in the aggregate)	Classes MB, MP and MZ (in the aggregate)	Classes BE, EA and EB (in the aggregate)	Classes BE, EA, EB, EF, EJ, EK and ZE (in the aggregate)
July 2043	\$ 0.00	\$ 1,662,205.60	\$ 0.00	\$ 2,603,493.63
August 2043	0.00	1,618,617.23	0.00	2,541,152.99
September 2043	0.00	1,575,822.58	0.00	2,479,770.93
October 2043	0.00	1,533,808.95	0.00	2,419,334.68
November 2043	0.00	1,492,563.83	0.00	2,359,831.63
December 2043	0.00	1,452,074.90	0.00	2,301,249.32
January 2044	0.00	1,412,330.01	0.00	2,243,575.45
February 2044	0.00	1,373,317.22	0.00	2,186,797.86
March 2044	0.00	1,335,024.73	0.00	2,130,904.56
April 2044	0.00	1,297,440.97	0.00	2,075,883.71
May 2044	0.00	1,260,554.49	0.00	2,021,723.59
June 2044	0.00	1,224,354.04	0.00	1,968,412.66
July 2044	0.00	1,188,828.55	0.00	1,915,939.51
August 2044	0.00	1,153,967.10	0.00	1,864,292.86
September 2044	0.00	1,119,758.94	0.00	1,813,461.60
October 2044	0.00	1,086,193.47	0.00	1,763,434.74
November 2044	0.00	1,053,260.27	0.00	1,714,201.42
December 2044	0.00	1,020,949.07	0.00	1,665,750.94
January 2045	0.00	989,249.75	0.00	1,618,072.71
February 2045	0.00	958,152.35	0.00	1,571,156.28
March 2045	0.00	927,647.06	0.00	1,524,991.35
April 2045	0.00	897,724.22	0.00	1,479,567.71
May 2045	0.00	868,374.30	0.00	1,434,875.33
June 2045	0.00	839,587.95	0.00	1,390,904.26
July 2045	0.00	811,355.92	0.00	1,347,644.69
August 2045	0.00	783,669.13	0.00	1,305,086.94
September 2045	0.00	756,518.63	0.00	1,263,221.46
October 2045	0.00	729,895.61	0.00	1,222,038.79
November 2045	0.00	703,791.37	0.00	1,181,529.61
December 2045	0.00	678,197.39	0.00	1,141,684.73
January 2046	0.00	653,105.23	0.00	1,102,495.04
February 2046	0.00	628,506.61	0.00	1,063,951.58
March 2046	0.00	604,393.36	0.00	1,005,951.58
April 2046	0.00	580,757.45	0.00	988,768.01
May 2046	0.00	557,590.96	0.00	952,110.50
June 2046	0.00	534,886.09	0.00	916,064.44
July 2046	0.00	512,635.18	0.00	880,621.41
August 2046	0.00	490,830.66	0.00	845,773.09
September 2046	0.00	469,465.10	0.00	811,511.26
October 2046	0.00	448,531.16	0.00	
November 2046	0.00		0.00	777,827.83 744,714.79
December 2046		428,021.63		
	0.00	407,929.40	0.00	712,164.23
January 2047	0.00	388,247.49	0.00	680,168.37
February 2047	0.00	368,969.00	0.00	648,719.49
March 2047	0.00	350,087.15	0.00	617,809.99
April 2047	0.00	331,595.27	0.00	587,432.37
May 2047	0.00	313,486.78	0.00	557,579.21

Distribution Date	MB and MP aggregate)	Classes MB, MP and MZ (in the aggregate)		Classes BE, EA and EB (in the aggregate)		Classes BE, EA, EB EF, EJ, EK and ZE (in the aggregate)		
June 2047	\$ 0.00	\$	295,755.20	\$	0.00	\$	528,243.20	
July 2047	0.00		278,394.17		0.00		499,417.10	
August 2047	0.00		261,397.42		0.00		471,093.80	
September 2047	0.00		244,758.75		0.00		443,266.24	
October 2047	0.00		228,472.10		0.00		415,927.48	
November 2047	0.00		212,531.48		0.00		389,070.65	
December 2047	0.00		196,930.98		0.00		362,688.98	
January 2048	0.00		181,664.82		0.00		336,775.78	
February 2048	0.00		166,727.26		0.00		311,324.45	
March 2048	0.00		152,112.70		0.00		286,328.46	
April 2048	0.00		137,815.58		0.00		261,781.39	
May 2048	0.00		123,830.47		0.00		237,676.89	
June 2048	0.00		110,151.99		0.00		214,008.67	
July 2048	0.00		96,774.87		0.00		190,770.56	
August 2048	0.00		83,693.89		0.00		167,956.44	
September 2048	0.00		70,903.95		0.00		145,560.28	
October 2048	0.00		58,400.01		0.00		123,576.13	
November 2048	0.00		46,177.09		0.00		101,998.10	
December 2048	0.00		34,230.33		0.00		80,820.39	
January 2049	0.00		22,554.92		0.00		60,037.29	
February 2049	0.00		11,146.11		0.00		39,643.13	
March 2049	0.00		0.00		0.00		19,632.33	
April 2049 and thereafter	0.00		0.00		0.00		0.00	

# Underlying Certificates

ute 1 of Ginnie Mae (3) I or II		п	п	п	П	П	П	П	П	П	п	п
Approxima Weighted Average Loan Age o Mortgage Loans	24 (6)	6	8	9	(10)	31	39	œ	4	(11)	3	2
Approximate Weighted Weighted Average Remaining Term to Maturity of Mortgage Loans (in months)(3)	333	6	8	9	(10)	327	328	351	355	(11)	356	358
Approximate Weighted Wersage Coupon of Mortgage Loans(3)	3.899%	6	8	9	(10)	4.416	4.435	4.509	4.515	(11)	4.519	4.518
Percentage of Class in Trust	100.00000000000000000000000000000000000	100.0000000000	80.0000016291	100.0000000000	100.0000000000	75.00000000000	75.00000000000	100.0000000000	100.0000000000	100.0000000000	100.0000000000	100.0000000000
Notional Balance in Trust	\$12,730,716 14,209,508	15,882,615	5,277,531	6,656,662	36,180,472	12,834,497	15,410,245	23,768,745	15,193,563	39,487,358	13,710,750	7,125,886
nderlying ertificate ?actor(2)	.65462692	.80961933	.26867078	.20700221	.41847164	.57419264	.63007294	.97127483	.98938893	.98169827	.99374719	.99739474
Original Notional U Balance C of Class	\$19,447,285 19,958,286	19,617,386	24,553,892	32,157,446	86,458,600	29,803,000	32,610,500	24,471,699	15,356,512	40,223,518	13,797,020	7,144,500
Principal Type(1)	NTL(PT) NTL(SC/PT)	NTL(SC/PT)	NTL(SC/PAC/AD)	NTL(SC/PT)	NTL(SC/PT)	NTL(PAC/AD)	NTL(PAC/AD)	NTL(PAC/AD)	NTL(PAC/AD)	NTL(SC/PT)	NTL(PAC/AD)	NTL(PAC/AD)
Final Distribution Date					-,	-,						
Interest Type(1)	FIX/10 FIX/10	FIX/IO	FIX/IO	FIX/10	FIX/IO	FIX/IO	FIX/IO	FIX/IO	FIX/IO	FIX/IO	FIX/IO	FIX/IO
Interest Rate	3.500%	3.500	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000
CUSIP	m		38379NXD9		38380G2W3	38380HP63	38380KUR4	38381XDX1	38382ARZ0	38382ADW2	38382AQ65	38382BSM6
Issue Date	February 28, 2018 May 30, 2019	July 30, 2019	July 30, 2015	December 30, 2015	September 29, 2017	October 30, 2017	November 30, 2017	July 30, 2019	October 30, 2019	October 30, 2019	November 29, 2019	December 30, 2019
Class	IO(5) BI(5)(6)	BI(5)(7)	QI(4)(5)(8)	TI(5)(9)	A(4)(5)(10)	MI(4)(5)	MI(4)(5)	10(4)	EI(4)(5)	NI(5)(11)	LI(4)(5)	HI(5)
Issuer Series	Ginnie Mae 2018-024 Ginnie Mae 2019-065 B	e Mae 2019-086	e Mae 2015-102	e Mae 2015-191	e Mae 2017-144 L	e Mae 2017-155	e Mae 2017-170	e Mae 2019-084	e Mae 2019-125	e Mae 2019-133	Ginnie Mae 2019-138	Ginnie Mae 2019-153
Trust Asset Group Issu	5 Ginni 5 Ginni	5 Ginni	6 Ginni	6 Ginni	6 Ginnie	6 Ginnie	6 Ginnie	7 Ginnie	7 Ginnik	7 Ginnik	7 Ginnik	7 Ginnik

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

Underlying Certificate Factors are as of January 2020. S S F S

Based on information as of January 2020.

MX Class.

More than 10% of the Mortgage Loans underlying this Underlying Certificate may be higher balance Mortgage Loans. See "Risk Factors" in this Supplement. Ginnie Mae 2019-065 Class BI is backed by previously issued REMIC Certificates, Class IG from Ginnie Mae 2018-015 and Class IC from Ginnie Mae 2018-055. These previously issued certificates are backed by certain mortgage loans whose approximate weighted average characteristics are as follows: 9

Approximate Weighted Average Loan Age of Mortgage Loans (In months)(3)	26	22
Wegnica Average Remaining Term to Manurity of Mortgage Loans (in months)(3)	332	336
Approximate Weighted Average Coupon of Mortgage Loans(3)	3.897%	3.928
Class	IG	IC
Series	2018-015	2018-055

nie Mae 2017-180. These previously issued certificates are backed by certain mortgage loans whose approximate weighted average Ginnie Mae 2019-086 Class BI is backed previously issued REMIC Certificates, Class BI from Ginnie Mae 2017-031 and Class IP from Gincharacteristics are as follows: 0

Approximate Weighted Average Loan Age of Mortgage Loans (In months)(3)	35	26
Approximated Average Average Remaining Term to Maturity of Mortgage Loans (in months)(3)	323	332
Approximate Weighted Average Coupon of Mortgage Loans(3)	3.887%	3.896
Class	BI	IP
Series	2017-031	2017-180

2014-044 Class TC is an MX Class that is derived from REMIC Class TA from Security Group 8 and Class TB from Security Group 9. Ginnie Mae 2014-044 Class TY is derived from Class TI from Security Group 8 and Class IT from Security Group 9. These previously issued Ginnie Mae 2015-102 Class QI is backed by previously issued MX Certificates, Classes TC and TY from Ginnie Mae 2014-044. Ginnie Mae certificates are backed by certain mortgage loans whose approximate weighted characteristics are as follows: 8

Approximate Weighted Average Loan Age of Montagge Loans (In months)(3)	66	72	66	72
Weighted Average Average Remaining Term to Maturity of Mortgage Loans (in months)(3)	252	284	252	284
Approximate Weighted Average Coupon of Mortgage Loans(3)	4.312%	4.323	4.312	4.323
Class	П	TA	TB	II
Series	2014-044	2014-044	2014-044	2014-044

Ginnie Mae 2015-191 Class TI is backed by previously issued MX Certificate, Class DI from Ginnie Mae 2013-185 and previously issued REMIC Certificate, Class PI from Ginnie Mae 2015-012. These previously issued certificates are backed by certain mortgage loans whose approximate weighted average characteristics are as follows: 6

ate	, p	e	Jo	je se	n.	(3)	l		
Annaoria	Weighte	Averag	Loan Age	Mortgag	[] Ioans	months)	75	69	
Weighted	Remaining	Term to	Maturity of	Mortgage	Loans (In	months)(3)	282	287	
	Approximate	Weighted	Average	Coupon of	Mortgage	Loans(3)	4.369%	4.341	
						Class	ΙΩ	PI	
						Series	2013-185	2015-012	1

(10) Ginnie Mae Class 2017-144 Class IA is an MX Class that is derived from REMIC Classes of separate Security Groups, Class IO from Security Group 1 and Class IJ from Security Group 7. Ginnie Mae 2017-144 Class IJ is in turn backed by previously issued REMIC Certificates, Class IO from Ginnie Mae 2017-043 and Class IO from Ginnie Mae 2017-116. These previously issued certificates are backed by certain mortgage loans whose approximate weighted average characteristics are as follows:

Approximate Weighted Average Loan Age of Mortgage Loans (In months)(3)	35	34	27
Average Remaining Term to Maturity of Mortgage Loans (In	324	323	330
Approximate Weighted Average Coupon of Mortgage Loans(3)	4.360%	4.385	4 302
Class	O	O	2
Series	2017-043	2017-116	2017 144

(11) Ginnie Mae 2019-133 Class NI is backed by previously issued MX Certificates, Class IM from Ginnie Mae 2019-085 and Class IO from Ginnie Mae 2019-106, and previously issued REMIC Certificates, Classes IO and MI from Ginnie Mae 2019-085, and Class HI from Ginnie Mae 2019-103. These previously issued certificates are backed by certain mortgage loans whose approximate weighted average characteristics are as follows:

Approximate Weighted Average Loan Age of Mortgage Loans (In months)(3)	∞	7	8	9	7
Approximated Weighted Weighted Average Remaining Term to Maturity of Mortgage Loans (In months)(3)	351	352	351	353	352
Approximate Weighted Average Coupon of Mortgage Loans(3)	4.495%	4.499	4.495	4.507	4.509
Class	IM	OI	MI	H	0
Series	2019-085	2019-085	2019-085	2019-103	2019-106



\$853,057,273

**Government National Mortgage Association** 

# **GINNIE MAE**®

Guaranteed REMIC
Pass-Through Securities
and MX Securities
Ginnie Mae REMIC Trust 2020-009

OFFERING CIRCULAR SUPPLEMENT January 24, 2020

Goldman Sachs & Co. LLC Ramirez & Co., Inc.