

# \$2,248,978,710 Government National Mortgage Association GINNIE MAE®

# Guaranteed REMIC Pass-Through Securities and MX Securities Ginnie Mae REMIC Trust 2019-136

#### **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 November 29, 2019.

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

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

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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							
BA	\$167,692,833 100,000,000	2.50% 2.50	SC/PT SC/PT	FIX FIX	38382A3X1 38382A3Y9	October 2045 October 2045	
CP(1)	26,538,681 100,000,000	1.50 2.50	SC/PAC/AD SC/PT	FIX FIX	38382A3Z6 38382A4A0	August 2045 October 2045	
DP(1)	23,388,650	1.50	SC/PAC/AD	FIX	38382A4B8	July 2045	
EA	100,000,000	2.50	SC/PT	FIX	38382A4C6	October 2045	
EP(1)	27,893,037	1.50	SC/PAC/AD	FIX	38382A4D4	August 2045	
GA`	100,000,000	2.50	SC/PT	FIX	38382A4E2	October 2045	
GP(1)	90,970,768	1.50	SC/PAC/AD	FIX	38382A4F9	July 2045	
HP(1)	111,361,512 18,864,649	1.50 1.50	SC/PAC/AD SC/PAC/AD	FIX FIX	38382A4G7 38382A4H5	October 2045 September 2045	
ZA(1)	3,656,480	1.50	SC/SUP	FIX/Z	38382A4J1	August 2045	
ZB(1)	3,220,627	1.50	SC/SUP	FIX/Z	38382A4K8	July 2045	
ZC(1)	3,843,082	1.50	SC/SUP	FIX/Z	38382A4L6	August 2045	
ZD(1)	12,529,241	1.50	SC/SUP	FIX/Z	38382A4M4	July 2045	
ZE(1)	15,481,893	1.50	SC/SUP	FIX/Z	38382A4N2	October 2045	
ZG(1)	2,615,925	1.50	SC/SUP	FIX/Z	38382A4P7	September 2045	
Security Group 2	1 000 000	5.00	NTL(SC/PT)	FIX/IO	38382A4Q5	June 2046	
CT	1,382,809 13,828,098	2.25	SC/PT	FIX	38382A4R3	June 2046	
Security Group 3							
DI	3,169,606	5.00	NTL(SC/PT)	FIX/IO	38382A4S1	November 2047	
DT	28,814,600	2.25	SC/PT	FIX	38382A4T9	November 2047	
Security Group 4							
GI	3,744,170 18.720.850	5.00 2.25	NTL(SC/PT) SC/PT	FIX/IO FIX	38382A4U6 38382A4V4	May 2048	
GT	18,720,830	2.25	25 30/F1 FIX	FIX	3030ZA4V4	May 2048	
Security Group 5	0.000.005	F 50	NTL (CC/DT)	FIX/IO	38382A4W2	May 0040	
HI	3,303,205 24,223,506	5.50 2.25	NTL(SC/PT) SC/PT	FIX	38382A4X0	May 2049 May 2049	
	24,220,000	2.20	2.20	00/11	1 170	0000271770	Way 2040
Security Group 6 YF	80,000,000	(5)	PT	FLT	38382A4Y8	November 2049	
YS	80,000,000	(5) (5)	NTL(PT)	INV/IO	38382A4Z5	November 2049	
Security Group 7	, ,	. ,	, ,				
FN	25,721,572	(5)	SC/PT	FLT	38382A5A9	August 2043	
Security Group 8	10.000.510	(=)	00/PT	EL T/DL V		0	
FB	16,606,513	(5)	SC/PT	FLT/DLY	38382A5B7	October 2043	
Security Group 9	44.000.005	0.50	OL ID	ED4/57			
CZ	11,289,085 15,147,578	3.50	SUP PAC/AD	FIX/Z FLT	38382A5C5 38382A5D3	November 2049	
KF(1)	20,749,750	(5) (5)	PAC/AD	FLT	38382A5E1	July 2049 November 2049	
KS(1)	20,749,750	(5)	NTL(PAC/AD)	INV/IO	38382A5F8	November 2049	
PA`	106,033,053	2.50	PAC/AD	FIX	38382A5G6	July 2049	
PL	3,317,872	3.00	PAC/AD	FIX	38382A5H4	November 2049	
SK(1)	15,147,578	(5)	NTL(PAC/AD)	INV/IO	38382A5J0	July 2049	
Security Group 10	04 74 4 000	0.00	00/DT	FIV	00000451/7	N	
AD(1) AH(1)	21,714,280 117,633,413	2.00 2.00	SC/PT SC/PT	FIX FIX	38382A5K7 38382A5L5	November 2045 October 2045	
AL	50,000,000	1.50	SC/SEQ	FIX	38382A5M3	November 2045	
AP(1)	195,632,373	1.50	SC/PAC/AD	FIX	38382A5N1	November 2045	
PZ(1)	35,955,089	1.50	SC/SUP	FIX/Z	38382A5P6	November 2045	
Security Group 11 B(1)	332,327,464	2.50	SC/PT	FIX	38382A5Q4	September 2045	
Security Group 12							
EB	176,000,000	2.50	SEQ	FIX	38382A5R2	March 2048	
EF	25,142,857	(5)	SEQ	FLT	38382A5S0	March 2048	
ES	25,142,857	(5)	NTL(SEQ)	INV/IO	38382A5T8	March 2048	
EV(1)	9,309,000 12,754,379	3.00 3.00	SEQ/AD SEQ	FIX FIX/Z	38382A5U5 38382A5V3	March 2038 November 2049	
	12,134,019	0.00	JLQ	11//4	30002A3V3	14040111001 2049	
RR	0	0.00	NPR	NPR	38382A5W1	November 2049	
				1			

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

### J.P. Morgan

### Mischler Financial Group, Inc.

The date of this Offering Circular Supplement is November 22, 2019.

#### **AVAILABLE INFORMATION**

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

- this Offering Circular Supplement (this "Supplement"),
- the Base Offering Circular and
- in the case of the Group 1, 2, 3, 4, 5, 7, 8, 10 and 11 securities, each disclosure document relating to the Underlying Certificates (the "Underlying Certificate Disclosure Documents").

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

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

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

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#### **TERMS SHEET**

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

**Sponsor:** J.P. Morgan Securities LLC

**Co-Sponsor:** Mischler Financial Group, Inc. **Trustee:** U.S. Bank National Association

**Tax Administrator:** The Trustee **Closing Date:** November 29, 2019

**Distribution Dates:** For the Group 1, 2, 3, 4, 5, 6, 8, 9, 10, 11 and 12 Securities, the 20th day of each month or, if the 20th day is not a Business Day, the first Business Day thereafter, commencing in December 2019. For the Group 7 Securities, the 16th day of each month or, if the 16th day is not a Business Day, the first Business Day thereafter, commencing in December 2019.

#### **Trust Assets:**

Trust Asset Group or Subgroup <sup>(3)</sup>	Trust Asset Type	Certificate Rate	Original Term To Maturity (in years)
1A	Underlying Certificates	(1)(2)	(1)
1B	Underlying Certificates	(1)	(1)
1C	Underlying Certificates	(1)	(1)
1D	Underlying Certificate	(1)	(1)
1E	Underlying Certificate	(1)	(1)
1F	Underlying Certificate	(1)	(1)
1G	Underlying Certificates	(1)	(1)
1H	Underlying Certificate	(1)	(1)
1I	Underlying Certificate	(1)	(1)
1J	<b>Underlying Certificates</b>	(1)	(1)
1K	Underlying Certificate	(1)	(1)
2	Underlying Certificate	(1)	(1)
3	Underlying Certificate	(1)	(1)
4	Underlying Certificate	(1)	(1)
5	Underlying Certificate	(1)	(1)
6	Ginnie Mae II	3.5%	30
7	Underlying Certificates	(1)	(1)
8	Underlying Certificates	(1)	(1)
9	Ginnie Mae II	3.5%	30
10A	Underlying Certificates	(1)	(1)
10B	Underlying Certificates	(1)	(1)
10C	Underlying Certificate	(1)	(1)
11	<b>Underlying Certificates</b>	(1)	(1)
12	Ginnie Mae II	3.0%	30

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

## Assumed Characteristics of the Mortgage Loans Underlying the Group 6, 9 and 12 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>
Group 6 Trust Assets			
\$ 80,000,000	357	3	3.952%
<b>Group 9 Trust Assets</b>			
\$ 80,000,000	351	1	4.012%
76,537,338	351	2	4.012%
\$156,537,338			
<b>Group 12 Trust Assets</b>			
\$223,206,236	357	2	3.514%

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

The actual remaining terms to maturity, loan ages and Mortgage Rates of many of the Mortgage Loans underlying the Group 6, 9 and 12 Trust Assets will differ from the weighted averages shown above, perhaps significantly. See "The Trust Assets — The Mortgage Loans" in this Supplement.

Characteristics of the Mortgage Loans Underlying the Group 1, 2, 3, 4, 5, 7, 8, 10 and 11 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.* 

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

<sup>(2)</sup> Each Underlying Certificate included in Trust Asset Subgroup 1A is backed by Ginnie Mae II MBS Certificates that are issued from the same pools and in the same proportions. As a result, the Class Factor of each such Underlying Certificate is expected to reduce proportionately as payments are made on the related Ginnie Mae II MBS Certificates.

<sup>(3)</sup> The Group 1 and 10 Trust Assets consist of subgroups, Subgroups 1A, 1B, 1C, 1D, 1E, 1F, 1G, 1H, 1I, 1J, 1K, 10A, 10B and 10C, respectively (each, a "Subgroup").

<sup>&</sup>lt;sup>(2)</sup> The Mortgage Loans underlying the Group 6, 9 and 12 Trust Assets may bear interest at rates ranging from 0.25% to 1.50% per annum above the related Certificate Rate.

**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 a Principal Only or Interest Only Class. *See "Description of the Securities — Form of Securities" in this Supplement.* 

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

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

Class	Interest Rate Formula(1)	Initial Interest Rate(2)	Minimum Rate	Maximum Rate	Delay (in days)	LIBOR for Minimum Interest Rate
Security Group 6						
YF	LIBOR + 0.67%	2.44425%	0.67%	3.50%	0	0.00%
YS	2.83% - LIBOR	1.05575%	0.00%	2.83%	0	2.83%
Security Group 7						
FN	LIBOR + 0.35%	2.11250%	0.35%	6.50%	0	0.00%
Security Group 8						
FB	LIBOR + 0.30%	2.08138%	0.30%	6.50%	19	0.00%
Security Group 9						
FK	LIBOR + 0.45%	2.20500%	0.45%	6.50%	0	0.00%
KF	LIBOR + 0.45%	2.20500%	0.45%	6.50%	0	0.00%
KS	6.05% – LIBOR	4.29500%	0.00%	6.05%	0	6.05%
PF	LIBOR + 0.45%	2.20500%	0.45%	6.50%	0	0.00%
PS	6.05% – LIBOR	4.29500%	0.00%	6.05%	0	6.05%
SK	6.05% – LIBOR	4.29500%	0.00%	6.05%	0	6.05%
Security Group 12						
EF	LIBOR + 0.45%	2.20500%	0.45%	6.50%	0	0.00%
ES	6.05% - LIBOR	4.29500%	0.00%	6.05%	0	6.05%

<sup>(1)</sup> 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.

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

#### **SECURITY GROUP 1**

The Subgroup 1A Principal Distribution Amount, the Subgroup 1B Principal Distribution Amount, the Subgroup 1C Principal Distribution Amount, the Subgroup 1D Principal Distribution Amount, the Subgroup 1E Principal Distribution Amount, the Subgroup 1F Principal Distribution Amount, the Subgroup 1G Principal Distribution Amount, the Subgroup 1I Principal Distribution Amount, the Subgroup 1J Principal Distribution Amount, the Subgroup 1K Principal Distribution Amount, the ZA Accrual Amount, the ZB Accrual Amount, the ZB

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

Accrual Amount, the ZD Accrual Amount, the ZE Accrual Amount and the ZG Accrual Amount will be allocated as follows:

- 75.0000012419% of the Subgroup 1D Principal Distribution Amount and the ZA Accrual Amount in the following order of priority:
  - 1. To CP, until reduced to its Scheduled Principal Balance for that Distribution Date
  - 2. To ZA, until retired
  - 3. To CP, without regard to its Scheduled Principal Balance, until retired
- 50% of the Subgroup 1E Principal Distribution Amount and the ZB Accrual Amount in the following order of priority:
  - 1. To DP, until reduced to its Scheduled Principal Balance for that Distribution Date
  - 2. To ZB, until retired
  - 3. To DP, without regard to its Scheduled Principal Balance, until retired
- 59.999996219% of the Subgroup 1F Principal Distribution Amount and the ZC Accrual Amount in the following order of priority:
  - 1. To EP, until reduced to its Scheduled Principal Balance for that Distribution Date
  - 2. To ZC, until retired
  - 3. To EP, without regard to its Scheduled Principal Balance, until retired
- 70.0000003382% of the Subgroup 1H Principal Distribution Amount and the ZD Accrual Amount in the following order of priority:
  - 1. To GP, until reduced to its Scheduled Principal Balance for that Distribution Date
  - 2. To ZD, until retired
  - 3. To GP, without regard to its Scheduled Principal Balance, until retired
- 85.0000001675% of the Subgroup 1I Principal Distribution Amount and the ZE Accrual Amount in the following order of priority:
  - 1. To HP, until reduced to its Scheduled Principal Balance for that Distribution Date
  - 2. To ZE, until retired
  - 3. To HP, without regard to its Scheduled Principal Balance, until retired
- 75.0000008729% of the Subgroup 1J Principal Distribution Amount and the ZG Accrual Amount in the following order of priority:
  - 1. To JP, until reduced to its Scheduled Principal Balance for that Distribution Date
  - 2. To ZG, until retired
  - 3. To JP, without regard to its Scheduled Principal Balance, until retired
- The Subgroup 1A Principal Distribution Amount, the Subgroup 1B Principal Distribution Amount, the Subgroup 1C Principal Distribution Amount, the remainder of the Subgroup 1D Principal Distribution Amount, the remainder of the Subgroup 1E Principal Distribution Amount, the remainder of the Subgroup 1F Principal Distribution Amount, the remainder of the Subgroup 1H Principal Distribution Amount, the

remainder of the Subgroup 1I Principal Distribution Amount, the remainder of the Subgroup 1J Principal Distribution Amount and the Subgroup 1K Principal Distribution Amount, concurrently, to BA, CA, DA, EA and GA, pro rata, until retired.

#### **SECURITY GROUP 2**

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

#### **SECURITY GROUP 3**

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

#### **SECURITY GROUP 4**

The Group 4 Principal Distribution Amount will be allocated to GT, until retired

#### **SECURITY GROUP 5**

The Group 5 Principal Distribution Amount will be allocated to HT, until retired

#### **SECURITY GROUP 6**

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

#### **SECURITY GROUP 7**

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

#### **SECURITY GROUP 8**

The Group 8 Principal Distribution Amount will be allocated to FB, until retired

#### **SECURITY GROUP 9**

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

- 1. To FK, KF, PA and PL, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date, as follows:
  - a. 14.2857139907% to KF, while outstanding
  - b. 85.7142860093% in the following order of priority:
    - i. Concurrently, to FK and PA, pro rata, while outstanding
    - ii. To PL, while outstanding
  - 2. To CZ, until retired
- 3. To FK, KF, PA and PL, in the same manner and order of priority as described in step 1. above, but without regard to their Aggregate Scheduled Principal Balance, until retired

#### **SECURITY GROUP 10**

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

- The PZ Accrual Amount in the following order of priority:
  - 1. To AP, until reduced to its Scheduled Principal Balance for that Distribution Date
  - 2. To PZ, until retired
- 49.999996440% of the Subgroup 10A Principal Distribution Amount and 19.9999997469% of the Subgroup 10B Principal Distribution Amount to AH
- 50% of the Subgroup 10C Principal Distribution Amount to AD
- The remainder of the Subgroup 10A Principal Distribution Amount, the remainder of the Subgroup 10B Principal Distribution Amount and the remainder of the Subgroup 10C Principal Distribution Amount in the following order of priority:
  - 1. To AP, until reduced to its Scheduled Principal Balance for that Distribution Date
  - 2. To PZ, until retired
  - 3. To AP, without regard to its Scheduled Principal Balance, until retired
  - 4. To AL, until retired

#### **SECURITY GROUP 11**

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

#### **SECURITY GROUP 12**

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

- The EZ Accrual Amount, sequentially, to EV and EZ, in that order, until retired
- The Group 12 Principal Distribution Amount in the following order of priority:
  - 1. Concurrently, to EB and EF, pro rata, until retired
  - 2. Sequentially, to EV and EZ, in that order, until retired

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

	Structuring Ranges
PAC Classes	
AP	90% PSA through 151% PSA
CP	88% PSA through 149% PSA
DP	88% PSA through 149% PSA
EP	88% PSA through 149% PSA
GP	88% PSA through 149% PSA
HP	88% PSA through 149% PSA
JP	88% PSA through 149% PSA
FK, KF, PA and PL (in the aggregate)	190% PSA through 250% 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 indicated:

Class	Original Class Notional Balance	e Represents Approximately				
Security Group 2						
CI	\$ 1,382,809	10% of CT (SC/PT Class)				
Security Group 3						
DI	\$ 3,169,606	11% of DT (SC/PT Class)				
Security Group 4						
GI	\$ 3,744,170	20% of GT (SC/PT Class)				
Security Group 5						
НІ	\$ 3,303,205	13.6363636364% of HT (SC/PT Class)				
Security Group 6						
YS	\$80,000,000	100% of YF (PT Class)				
Security Group 9						
KS		100% of KF (PAC/AD Class)				
PS		100% of FK and KF (in the aggregate) (PAC/AD Classes)				
SK	15,147,578	100% of FK (PAC/AD Class)				
Security Group 10						
KI		50% of AH (SC/PT Class)				
MI	10,857,140	50% of AD (SC/PT Class)				
Security Group 11						
IB	\$41,540,933	12.5% of B (SC/PT Class)				
Security Group 12						
ES	\$25,142,857	100% of EF (SEQ Class)				

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

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

#### **RISK FACTORS**

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

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

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

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

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

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

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

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

principal payments are slower than you expected.

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

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

The rate of payments on the underlying certificates will directly affect the rate of payments on the group 1, 2, 3, 4, 5, 7, 8, 10 and 11 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 principal entitlements of and the reductions in notional balances of certain of the underlying certificates included in trust asset group 1, 7, 10 and 11 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 2 and 3 and subgroups 1E, 10A and 10B are also previously issued certificates that represent beneficial ownership interests in separate trusts. The rate of payments on the previously issued certificates backing these underlying certificates will directly affect the timing and rate of payments on the group 1, 2, 3 and 10 securities. You should read the related underlying certificate disclosure documents, including the risk factors contained therein, to understand the payments on and related risks of the previously issued certificates backing these underlying certificates.

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

Up to 10% of the mortgage loans underlying the group 2, 3, 6, 7, 9, 10, 11 and 12 trust assets and up to 100% of the mortgage loans underlying the group 1, 4, 5 and 8 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 1, 2, 3, 4, 5, 7, 8, 10 and 11 securities and, in particular, the support, interest only, principal

only, accrual and residual classes, are not suitable investments for all investors.

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

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

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

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

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

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

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

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

#### THE TRUST ASSETS

#### General

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

#### The Trust MBS (Groups 6, 9 and 12)

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 1, 2, 3, 4, 5, 7, 8, 10 and 11)

The Group 1, 2, 3, 4, 5, 7, 8, 10 and 11 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 6, 9 and 12 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 6, 9 and 12 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 principal or notional balance.

#### **Distributions**

Distributions on the Securities will be made on each Distribution Date as specified under "Terms Sheet — Distribution Dates" in this Supplement. On each Distribution Date for a Security, or in the case of the Certificated Securities, on the first Business Day after the related Distribution Date, the Distribution Amount will be distributed to the Holders of record as of the related Record Date. Beneficial Owners of Book-Entry Securities will receive distributions through credits to accounts maintained for their benefit on the books and records of the appropriate financial intermediaries. Holders of Certifi-

cated Securities will receive distributions by check or, subject to the restrictions set forth in the Base Offering Circular, by wire transfer. See "Description of the Securities — Distributions" and "— Method of Distributions" in the Base Offering Circular.

#### **Interest Distributions**

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

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

#### Categories of Classes

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

#### Accrual Periods

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

Class	Accrual Period
Fixed Rate and Delay Classes	The calendar month preceding the related Distribution Date
Group 6, 9 and 12 Floating Rate and Inverse Floating Rate Classes	From the 20th day of the month preceding the month of the related Distribution Date through the 19th day of the month of that Distribution Date
Group 7 Class	From the 16th day of the month preceding the month of the related Distribution Date through the 15th day of the month of that Distribution Date

#### Fixed Rate Classes

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

#### Floating Rate and Inverse Floating Rate Classes

The Floating Rate and Inverse Floating Rate Classes will bear interest as shown under "Terms Sheet — Interest Rates" in this Supplement. The Interest Rates for the Floating Rate and Inverse Floating Rate Classes will be based on LIBOR. The Trustee or its agent will determine LIBOR on the basis of the ICE LIBOR method, as described under "Description of the Securities — Interest Rate Indices — Determination of LIBOR — ICE LIBOR" in the Base Offering Circular. In the case of the Group 7 and 8 Securities, the Trustee will use the same values of LIBOR as are used for the related Underlying Certificates (which will be determined on the basis of the ICE LIBOR method).

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

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 CZ, EZ, PZ, ZA, ZB, ZC, ZD, ZE and ZG is an Accrual Class. Interest will accrue on the Accrual Classes and be distributed as described under "Terms Sheet — Accrual Classes" in this Supplement.

#### **Principal Distributions**

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

#### Categories of Classes

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

#### Notional Classes

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

#### **Residual Securities**

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

#### **Class Factors**

The Trustee will calculate and make available for each Class of Securities, no later than the day preceding the applicable Distribution Date, the factor (carried out to eight decimal places) that when

multiplied by the Original Class Principal Balance (or original Class Notional Balance) of that Class, determines the Class Principal Balance (or Class Notional Balance) after giving effect to the distribution of principal to be made on the Securities (and any addition to the Class Principal Balance of an Accrual Class) or any reduction of Class Notional Balance on that Distribution Date (each, a "Class Factor").

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

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

#### **Termination**

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

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

#### **Modification and Exchange**

All or a portion of the Classes of REMIC Securities specified on the front cover may be exchanged for a proportionate interest in the related MX Class or Classes shown on Schedule I to this Supplement. Similarly, all or a portion of the related MX Class or Classes may be exchanged for proportionate interests in the related Class or Classes of REMIC Securities and, in the case of Combinations 13, 15 and 16, other related MX Classes. This process may occur repeatedly.

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

In the case of Combinations 13, 15 and 16, the related REMIC Securities may be exchanged for proportionate interests in various subcombinations of MX Classes. Similarly, all or a portion of these MX Classes may be exchanged for proportionate interests in the related REMIC Securities or in other subcombinations of the related MX Classes. Each subcombination may be effected only in proportions that result in the principal and interest entitlements of the Securities received being equal to the entitlements of the Securities surrendered. See the example under "Description of the Securities — Modification and Exchange" in the Base Offering Circular.

A Beneficial Owner proposing to effect an exchange must notify the Trustee through the Beneficial Owner's Book-Entry Depository participant. This notice must be received by the Trustee not later than two Business Days before the proposed exchange date. The exchange date can be any Business Day other than the last Business Day of the month. The notice must contain the outstanding principal or notional balances of the Securities to be included in the exchange and the proposed exchange date. The notice is required to be delivered to the Trustee by email to 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 2019-136. 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 1, 2, 3, 4, 5, 7, 8, 10 and 11 Securities are urged to review the discussion under "Risk Factors — *The rate of payments on the underlying certificates will directly affect the rate of payments on the group 1, 2, 3, 4, 5, 7, 8, 10 and 11 securities*" in this Supplement.

#### **Accretion Directed Classes**

Classes AP, CP, DP, EP, EV, FK, GP, HP, JP, KF, PA and PL are Accretion Directed Classes. The related Accrual Amounts will be applied to making principal distributions on those Classes as described in this Supplement. Each of Classes KS and SK is a Notional Class whose Class Notional Balance is determined by reference to the Class Principal Balance of the related Accretion Directed Class shown under "Terms Sheet — Notional Classes" in this Supplement.

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

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

Moreover, based on the Modeling Assumptions, if the related Mortgage Loans prepay at any
constant rate at or below the rate for Class EV shown in the table below, the Class Principal
Balance of such Class would be reduced to zero on, but not before, its Final Distribution Date,
and the Weighted Average Life of such Class would equal its maximum Weighted Average Life
shown in the table below.

• However, the Weighted Average Life of Class EV, will be reduced, and may be reduced significantly, at prepayment speeds higher than the constant rates shown in the table below. See "Yield, Maturity and Prepayment Considerations — Decrement Tables" in this Supplement.

#### **Accretion Directed Class**

Class	Maximum Weighted Average Life (in years) <sup>(1)</sup>	Final Distribution Date	Prepayment Rate at or below
EV	10.0	March 2038	152% PSA

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

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

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

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

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

	Initial Effective Ranges			
PAC Classes				
AP	90% PSA through 151% PSA			
CP	88% PSA through 149% PSA			
DP	88% PSA through 149% PSA			
EP	88% PSA through 149% PSA			
GP	88% PSA through 149% PSA			
HP	88% PSA through 149% PSA			
JP	88% PSA through 149% PSA			
FK, KF, PA and PL (in the aggregate)	190% PSA through 250% PSA			

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

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

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

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

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

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

#### **Assumability**

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

#### **Final Distribution Date**

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

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

#### **Modeling Assumptions**

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

1. The Mortgage Loans underlying the Group 6, 9 and 12 Trust Assets have the assumed characteristics shown under "Assumed Characteristics of the Mortgage Loans Underlying the Group 6, 9 and 12 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 6, 9 or 12 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 Group 1, 2, 3, 4, 5, 6, 8, 9, 10, 11 and 12 Securities are always received on the 20th day of the month, and distributions on the Group 7 Securities are always received on the 16th day of the month, in each case, whether or not a Business Day, commencing in December 2019.
  - 4. A termination of the Trust or the Underlying Trusts does not occur.
  - 5. The Closing Date for the Securities is November 29, 2019.
- 6. No expenses or fees are paid by the Trust other than the Trustee Fee, which is paid as described under "The Trust Assets The Trustee Fee" in this Supplement.
- 7. Distributions on the Underlying Certificates are made as described in the related Underlying Certificate Disclosure Documents.
  - 8. Each Class is held from the Closing Date and is not exchanged in whole or in part.

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

- For example, most of the Mortgage Loans will not have the characteristics assumed, many Distribution Dates will occur on a Business Day after the 16th or 20th day of the month, as applicable, and the Trustee may cause a termination of the Trust as described under "Description of the Securities Termination" in this Supplement.
- In addition, distributions on the Securities are based on Certificate Factors and Calculated Certificate Factors, as applicable, which may not reflect actual receipts on the Trust Assets.

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

#### **Decrement Tables**

Prepayments of mortgage loans are commonly measured by a prepayment standard or model. The 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

	10/11 repayment resumption rates																			
		(	Class Al	В		Class	es BA,	CA, DA	, EA an	d GA		(	Class CI	•			(	Class DI	•	
Distribution Date	0%	88%	118%	149%	300%	0%	88%	118%	149%	300%	0%	88%	118%	149%	300%	0%	88%	118%	149%	300%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2020	98	100 92	91	89	80	100 98	92	91	89	80	100 97	91	91	91	100 91	100 97	91	91	100 91	100 91
November 2021	95	92 85	82	79	64	96 95	92 85	82	79	64	94	83	83	83	73	94	83	83	83	73
	93	79	74	79	51	93	79	74	79	51	91	75	75	75	58	91	75	75	75	58
November 2022 November 2023	90	72	67	62	41	90	72	67	62	41	88	68	68	68	46	88	68	68	68	46
November 2024	90 87	66	60	55	32	90 87	66	60	55	32	84	61	61	61	37	84	61	61	61	37
November 2025	84	61	54	48	26	84	61	54	48	26	81	54	54	54	29	81	54	54	54	29
November 2026	81	56	49	42	20	81	56	49	42	20	77	48	48	48	23	77	48	48	48	23
November 2027	78	51	43	37	16	78	51	43	37	16	73	42	42	42	18	73	42	42	42	18
November 2028	75	46	39	32	13	75 75	46	39	32	13	69	37	37	37	14	69	37	37	37	14
November 2029	72	42	34	28	10	72	42	34	28	10	65	32	32	32	11	65	32	32	32	11
November 2030	68	37	30	24	8	68	38	30	24	8	61	27	27	27	9	61	27	27	27	9
November 2031	64	34	27	21	6	65	34	27	21	6	56	24	24	24	7	56	24	24	24	7
November 2032	61	30	23	18	5	61	30	23	18	5	52	20	20	20	5	52	20	20	20	5
November 2033	57	27	20	15	4	57	27	20	15	4	47	17	17	17	4	47	17	17	17	4
November 2034	53	23	17	13	3	53	23	18	13	3	42	15	15	15	3	42	15	15	15	3
November 2035	48	20	15	11	2	49	20	15	11	2	37	12	12	12	2	37	12	12	12	2
November 2036	44	17	13	9	2	44	18	13	9	2	32	10	10	10	2	31	10	10	10	2
November 2037	39	15	11	Ź	1	40	15	11	7	1	26	8	8	8	1	26	8	8	8	1
November 2038	35	12	9	6	1	35	12	9	6	1	20	7	7	7	1	20	6	6	6	1
November 2039	30	10	7	5	1	30	10	7	5	1	14	5	5	5	1	14	5	5	5	1
November 2040	25	8	5	3	0	25	8	5	3	0	8	4	4	4	0	8	4	4	4	0
November 2041	19	6	4	2	0	19	6	4	2	0	3	3	3	3	0	3	3	3	3	0
November 2042	14	4	3	2	0	14	4	3	2	0	2	2	2	2	0	2	2	2	2	0
November 2043	8	2	1	1	0	8	2	1	1	0	1	1	1	1	0	1	1	1	1	0
November 2044	2	1	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2045	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average																				
Life (years)	14.7	9.5	8.3	7.3	4.3	14.7	9.5	8.3	7.3	4.3	12.7	7.9	7.9	7.9	4.9	12.7	7.9	7.9	7.9	4.9

<b>.</b>	Decoraryment	A	D - 4

	Class EP				Class GP			Class HP					Class JP							
Distribution Date	0%	88%	118%	149%	300%	0%	88%	118%	149%	300%	0%	88%	118%	149%	300%	0%	88%	118%	149%	300%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2020	97	91	91	91	91	97	91	91	91	91	97	91	91	91	91	97	91	91	91	91
November 2021	94	83	83	83	73	94	83	83	83	73	94	83	83	83	73	94	83	83	83	73
November 2022	91	75	75	75	58	91	75	75	75	58	91	75	75	75	58	91	75	75	75	58
November 2023	88	68	68	68	46	88	68	68	68	46	88	68	68	68	46	88	68	68	68	46
November 2024	84	61	61	61	37	84	61	61	61	37	85	61	61	61	37	84	61	61	61	37
November 2025	81	54	54	54	29	81	54	54	54	29	81	54	54	54	29	81	54	54	54	29
November 2026	77	48	48	48	23	77	48	48	48	23	77	48	48	48	23	77	48	48	48	23
November 2027	73	42	42	42	18	73	42	42	42	18	74	42	42	42	18	74	42	42	42	18
November 2028	69	37	37	37	14	69	37	37	37	14	70	37	37	37	14	70	37	37	37	14
November 2029	65	32	32	32	11	65	32	32	32	11	66	32	32	32	11	66	32	32	32	11
November 2030	61	27	27	27	9	61	27	27	27	9	62	28	28	28	9	61	28	28	28	9
November 2031	56	24	24	24	7	56	24	24	24	7	57	24	24	24	7	57	24	24	24	7
November 2032	52	20	20	20	5	52	20	20	20	5	53	21	21	21	5	53	21	21	21	5
November 2033	47	17	17	17	4	47	17	17	17	4	48	18	18	18	4	48	18	18	18	4
November 2034	42	15	15	15	3	42	15	15	15	3	43	15	15	15	3	43	15	15	15	3
November 2035	37	12	12	12	2	37	12	12	12	2	38	13	13	13	2	38	12	12	12	2
November 2036	32	10	10	10	2	32	10	10	10	2	33	10	10	10	2	33	10	10	10	2
November 2037	26	8	8	8	1	26	8	8	8	1	28	9	9	9	1	27	8	8	8	1
November 2038	20	7	7	7	1	20	7	7	7	1	22	7	7	7	1	22	7	7	7	1
November 2039	14	5	5	5	1	14	5	5	5	1	16	5	5	5	1	16	5	5	5	1
November 2040	8	4	4	4	0	8	4	4	4	0	10	4	4	4	0	10	4	4	4	0
November 2041	3	3	3	3	0	3	3	3	3	0	4	3	3	3	0	3	3	3	3	0
November 2042	2	2	2	2	0	2	2	2	2	0	2	2	2	2	0	2	2	2	2	0
November 2043	1	1	1	1	0	1	1	1	1	0	1	1	1	1	0	1	1	1	1	0
November 2044	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2045	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average																				
Life (years)	12.7	7.9	7.9	7.9	4.9	12.7	7.9	7.9	7.9	4.9	12.9	8.0	8.0	8.0	4.9	12.9	8.0	8.0	8.0	4.9

Security Group 1 PSA Prepayment Assumption Rates

			Class P				(	Class TA	1			(	Class TI	3			(	lass TO	;	
Distribution Date	0%	88%	118%	149%	300%	0%	88%	118%	149%	300%	0%	88%	118%	149%	300%	0%	88%	118%	149%	300%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2020	97	91	91	91	91	98	92	91	89	80	98	92	91	89	80	98	92	91	89	80
November 2021	94	83	83	83	73	95	85	82	79	64	95	85	82	79	64	95	85	82	79	64
November 2022	91	75	75	75	58	92	79	74	70	51	92	79	74	70	51	92	79	74	70	51
November 2023	88	68	68	68	46	90	72	67	62	41	90	72	67	62	41	90	72	67	62	41
November 2024	84	61	61	61	37	87	66	60	54	32	87	66	60	54	32	87	66	60	54	32
November 2025	81	54	54	54	29	84	61	54	48	26	84	61	54	48	26	84	61	54	48	26
November 2026	77	48	48	48	23	81	55	48	42	20	81	55	48	42	20	81	55	48	42	20
November 2027	73	42	42	42	18	78	50	43	37	16	78	50	43	37	16	78	50	43	37	16
November 2028	69	37	37	37	14	75	46	39	32	13	75	46	39	32	12	75	46	39	32	13
November 2029	65	32	32	32	11	71	41	34	28	10	71	41	34	28	10	71	41	34	28	10
November 2030	61	28	28	28	9	68	37	30	24	8	68	37	30	24	8	68	37	30	24	8
November 2031	57	24	24	24	7	64	33	27	21	6	64	33	26	21	6	64	33	27	21	6
November 2032	52	20	20	20	5	60	30	23	18	5	60	30	23	18	5	60	30	23	18	5
November 2033	47	17	17	17	4	56	26	20	15	3	56	26	20	15	3	56	26	20	15	3
November 2034	43	15	15	15	3	52	23	17	13	3	52	23	17	13	3	52	23	17	13	3
November 2035	38	12	12	12	2	48	20	15	11	2	48	20	15	11	2	48	20	15	11	2
November 2036	32	10	10	10	2	43	17	12	9	1	43	17	12	9	1	43	17	12	9	1
November 2037	27	8	8	8	1	39	15	10	7	1	39	15	10	7	1	39	15	10	7	1
November 2038	21	7	7	7	1	34	12	8	6	1	34	12	8	6	1	34	12	8	6	1
November 2039	15	- 5	5	5	1	29	10	7	4	1	29	10	7	4	1	29	10	7	4	1
November 2040	9	4	4	4	0	24	8	5	3	0	24	8	5	3	0	24	8	5	3	0
November 2041	3	3	3	3	0	18	6	4	2	0	18	6	4	2	0	18	6	4	2	0
November 2042	2	2	2	2	0	13	4	2	1	0	13	4	2	1	0	13	4	2	1	0
November 2043	1	1	1	1	0	7	2	1	1	0	7	2	1	1	0	7	2	1	1	0
November 2044	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0
November 2045	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average							_ /					_ /					_ ,			
Life (years)	12.8	8.0	8.0	8.0	4.9	14.6	9.4	8.3	7.3	4.3	14.6	9.4	8.3	7.3	4.3	14.6	9.4	8.3	7.3	4.3

PSA Prepayment Assumption Ra	ates

	Class TD			Class TE			Class TG					Class Z								
Distribution Date	0%	88%	118%	149%	300%	0%	88%	118%	149%	300%	0%	88%	118%	149%	300%	0%	88%	118%	149%	300%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2020	98	92	91	89	80	98	93	91	89	80	98	92	91	89	80	102	102	87	72	0
November 2021	95	85	82	79	64	95	85	82	79	64	95	85	82	79	64	103	103	77	50	0
November 2022	92	79	74	70	51	93	79	74	70	51	93	79	74	70	51	105	105	68	32	0
November 2023	90	72	67	62	41	90	73	67	62	41	90	72	67	62	41	106	106	62	19	0
November 2024	87	66	60	54	32	87	67	61	55	32	87	67	60	55	32	108	108	58	10	0
November 2025	84	61	54	48	26	85	61	54	48	26	84	61	54	48	26	109	109	55	4	0
November 2026	81	55	48	42	20	82	56	49	42	20	81	56	49	42	20	111	111	54	1	0
November 2027	78	50	43	37	16	79	51	44	37	16	78	51	44	37	16	113	113	53	0	0
November 2028	75	46	39	32	13	75	46	39	32	13	75	46	39	32	13	114	113	53	0	0
November 2029	71	41	34	28	10	72	42	35	28	10	72	42	34	28	10	116	112	52	0	0
November 2030	68	37	30	24	8	69	38	31	24	8	68	38	30	24	8	118	108	50	0	0
November 2031	64	33	27	21	6	65	34	27	21	6	65	34	27	21	6	120	104	47	0	0
November 2032	60	30	23	18	5	61	30	24	18	5	61	30	23	18	5	122	99	44	0	0
November 2033	56	26	20	15	3	57	27	21	15	4	57	27	20	15	4	123	93	41	0	0
November 2034	52	23	17	13	3	53	24	18	13	3	53	24	18	13	3	125	86	38	0	0
November 2035	48	20	15	11	2	49	21	15	11	2	49	20	15	11	2	127	78	34	0	0
November 2036	43	17	12	9	1	45	18	13	9	2	44	18	13	9	2	129	70	30	0	0
November 2037	39	15	10	7	1	40	15	11	7	1	40	15	11	7	1	131	62	26	0	0
November 2038	34	12	8	6	1	36	13	9	6	1	35	13	9	6	1	133	54	23	0	0
November 2039	29	10	7	4	1	31	10	7	5	1	30	10	7	5	1	135	45	19	0	0
November 2040	24	8	5	3	0	26	8	6	4	0	25	8	5	4	0	137	36	15	0	0
November 2041	18	6	4	2	0	20	6	4	3	0	20	6	4	3	0	135	28	11	0	0
November 2042	13	4	2	1	0	15	4	3	2	0	14	4	3	2	0	99	19	8	0	0
November 2043	7	2	1	1	0	9	3	2	1	0	9	2	1	1	0	58	11	4	0	0
November 2044	1	0	0	0	0	3	1	1	0	0	3	1	0	0	0	15	3	1	0	0
November 2045	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average																				
Life (years)	14.6	9.4	8.3	7.3	4.3	14.9	9.5	8.3	7.3	4.3	14.8	9.5	8.3	7.3	4.3	23.7	18.4	10.6	2.4	0.5

Security Group 1 PSA Prepayment Assumption Rates

			Class ZA				Class ZB Class ZC			:					
Distribution Date	0%	88%	118%	149%	300%	0%	88%	118%	149%	300%	0%	88%	118%	149%	300%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2020	102	102	87	72	0	102	102	87	72	0	102	102	87	72	0
November 2021	103	103	77	50	Ŏ	103	103	77	50	Ŏ	103	103	77	50	Ŏ
November 2022	105	105	68	32	0	105	105	68	32	0	105	105	68	32	0
November 2023	106	106	62	19	0	106	106	62	19	0	106	106	62	19	0
November 2024	108	108	58	10	0	108	108	58	10	0	108	108	58	10	0
November 2025	109	109	55	4	0	109	109	55	4	0	109	109	55	4	0
November 2026	111	111	54	1	0	111	111	54	1	0	111	111	54	1	0
November 2027	113	113	53	0	0	113	113	53	0	0	113	113	53	0	0
November 2028	114	113	53	0	0	114	113	53	0	0	114	113	53	0	0
November 2029	116	111	52	0	0	116	111	52	0	0	116	111	52	0	0
November 2030	118	108	50	0	0	118	108	50	0	0	118	108	50	0	0
November 2031	120	104	47	0	0	120	104	47	0	0	120	104	47	0	0
November 2032	122	98	44	0	0	122	98	44	0	0	122	98	44	0	0
November 2033	123	92	41	0	0	123	92	41	0	0	123	92	41	0	0
November 2034	125	85	37	0	0	125	85	37	0	0	125	85	37	0	0
November 2035	127	78	34	0	0	127	77	34	0	0	127	78	34	0	0
November 2036	129	70	30	0	0	129	69	30	0	0	129	70	30	0	0
November 2037	131	61	26	0	0	131	61	26	0	0	131	61	26	0	0
November 2038	133	53	22	0	0	133	53	22	0	0	133	53	22	0	0
November 2039	135	44	18	0	0	135	44	18	0	0	135	44	18	0	0
November 2040	137	35	14	0	0	137	35	14	0	0	137	35	14	0	0
November 2041	132	27	11	0	0	131	26	11	0	0	132	27	11	0	0
November 2042	93	18	7	0	0	92	18	7	0	0	93	18	7	0	0
November 2043	51	9	4	0	0	50	9	4	0	0	51	9	4	0	0
November 2044	10	2	1	0	0	10	2	1	0	0	10	2	1	0	0
November 2045	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average															
Life (years)	23.6	18.3	10.5	2.4	0.5	23.6	18.3	10.5	2.4	0.5	23.6	18.3	10.5	2.4	0.5

PSA	Prenav	ment	Assum	ntion	Rates

			Class ZD	)				Class ZE	:				Class ZG	r	
Distribution Date	0%	88%	118%	149%	300%	0%	88%	118%	149%	300%	0%	88%	118%	149%	300%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2020	102	102	87	72	0	102	102	87	72	0	102	102	87	72	0
November 2021	103	103	77	50	0	103	103	77	50	0	103	103	77	50	0
November 2022	105	105	68	32	0	105	105	68	33	0	105	105	68	33	0
November 2023	106	106	62	19	0	106	106	62	20	0	106	106	62	19	0
November 2024	108	108	58	10	0	108	108	58	10	0	108	108	58	10	0
November 2025	109	109	55	4	0	109	109	55	4	0	109	109	55	4	0
November 2026	111	111	54	1	0	111	111	54	1	0	111	111	54	1	0
November 2027	113	113	53	0	0	113	113	53	0	0	113	113	53	0	0
November 2028	114	113	53	0	0	114	113	53	0	0	114	113	53	0	0
November 2029	116	111	52	0	0	116	112	52	0	0	116	112	52	0	0
November 2030	118	108	50	0	0	118	109	50	0	0	118	109	50	0	0
November 2031	120	104	47	0	0	120	105	48	0	0	120	104	47	0	0
November 2032	122	98	44	0	0	122	99	45	0	0	122	99	45	0	0
November 2033	123	92	41	0	0	123	93	41	0	0	123	93	41	0	0
November 2034	125	85	37	0	0	125	87	38	0	0	125	86	38	0	0
November 2035	127	77	34	0	0	127	79	34	0	0	127	79	34	0	0
November 2036	129	69	30	0	0	129	71	31	0	0	129	71	30	0	0
November 2037	131	61	26	0	0	131	63	27	0	0	131	63	27	0	0
November 2038	133	53	22	0	0	133	55	23	0	0	133	54	23	0	0
November 2039	135	44	18	0	0	135	47	19	0	0	135	46	19	0	0
November 2040	137	35	14	0	0	137	38	16	0	0	137	37	15	0	0
November 2041	132	27	11	0	0	139	29	12	0	0	139	29	12	0	0
November 2042	93	18	7	0	0	109	21	8	0	0	104	20	8	0	0
November 2043	51	9	4	0	0	68	13	5	0	0	63	12	5	0	0
November 2044	8	1	1	0	0	25	4	2	0	0	19	3	1	0	0
November 2045	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	23.6	18.3	10.5	2.4	0.5	23.9	18.6	10.7	2.4	0.5	23.8	18.5	10.6	2.4	0.5

Security Group 2 PSA Prepayment Assumption Rates

		Cla	asses CI and	CT	
Distribution Date	0%	100%	244%	350%	500%
Initial Percent	100	100	100	100	100
November 2020	96	90	81	75	66
November 2021	91	81	66	57	44
November 2022	88	73	54	43	30
November 2023	84	65	44	32	20
November 2024	80	59	36	24	13
November 2025	76	52	29	18	9
November 2026	72	46	23	13	6
November 2027	67	41	19	10	4
November 2028	63	36	15	7	2
November 2029	58	31	12	5	1
November 2030	53	26	9	4	1
November 2031	47	22	7	2	0
November 2032	41	18	5	2	0
November 2033	35	15	5 3	1	0
November 2034	29	11	2	0	0
November 2035	22	8	1	0	0
November 2036	15	5	1	0	0
November 2037	9	3	0	0	0
November 2038	3	1	0	0	0
November 2039	Ō	0	0	0	0
November 2040	0	0	0	0	0
November 2041	0	0	0	0	0
November 2042	0	0	0	0	0
November 2043	0	0	0	0	0
November 2044	0	0	0	0	0
November 2045	0	0	0	0	0
November 2046	0	0	0	0	0
Weighted Average					
Life (years)	10.8	7.3	4.6	3.4	2.4

Security Group 3 PSA Prepayment Assumption Rates

		Cla	asses DI and	DT	
Distribution Date	0%	100%	244%	350%	500%
Initial Percent	100	100	100	100	100
November 2020	96	90	82	76	67
November 2021	93	82	68	58	45
November 2022	89	74	55	44	31
November 2023	85	67	45	33	20
November 2024	81	60	37	25	14
November 2025	77	53	30	19	9
November 2026	72	47	24	14	6
November 2027	68	41	19	10	4
November 2028	62	36	15	7	
November 2029	57	31	12	5	3 2
November 2030	51	26	9	4	1
November 2031	46	22	7	3 2	1
November 2032	40	18	5	2	0
November 2033	35	15	4	1	0
November 2034	29	12	3	1	0
November 2035	23	9	2	1	0
November 2036	17	6	1	0	0
November 2037	10	3	1	0	0
November 2038	4	1	0	0	0
November 2039	0	0	0	0	0
November 2040	0	0	0	0	0
November 2041	0	0	0	0	0
November 2042	0	0	0	0	0
November 2043	0	0	0	0	0
November 2044	0	0	0	0	0
November 2045	0	0	0	0	0
November 2046	0	0	0	0	0
November 2047	0	0	0	0	0
Weighted Average					
Life (years)	10.9	7.4	4.7	3.5	2.5

Security Group 4
PSA Prepayment Assumption Rates

		Cla	asses GI and	GT	
Distribution Date	0%	100%	244%	350%	500%
Initial Percent	100	100	100	100	100
November 2020	95	90	81	75	67
November 2021	90	80	66	56	44
November 2022	85	71	53	42	29
November 2023	79	62	42	31	19
November 2024	74	54	33	23	12
November 2025	67	46	26	16	8
November 2026	61	39	20	12	5 3
November 2027	54	33	15	8	3
November 2028	46	27	11	6	2
November 2029	39	21	8	4	1
November 2030	30	15	5	2	1
November 2031	23	11	5 3	1	0
November 2032	16	7	2	1	0
November 2033	10	4	1	0	0
November 2034	9	3	1	0	0
November 2035	7	3 3 2	1	0	0
November 2036	5	2	0	0	0
November 2037	3	1	0	0	0
November 2038	1	0	0	0	0
November 2039	0	0	0	0	0
November 2040	0	0	0	0	0
November 2041	0	0	0	0	0
November 2042	0	0	0	0	0
November 2043	0	0	0	0	0
November 2044	0	0	0	0	0
November 2045	0	0	0	0	0
November 2046	0	0	0	0	0
November 2047	0	0	0	0	0
November 2048	0	0	0	0	0
Weighted Average					
Life (years)	8.5	6.2	4.2	3.3	2.4

Security Group 5 PSA Prepayment Assumption Rates

				*	
		Cla	sses HI and	нт	
Distribution Date	0%	100%	252%	450%	600%
Initial Percent	100	100	100	100	100
November 2020	96	90	82	70	62
November 2021	92	81	66	49	38
November 2022	88	73	54	34	23
November 2023	83	65	43	24	14
November 2024	78	58	35	16	8
November 2025	73	51	27	11	5
November 2026	68	44	22	7	3 2
November 2027	62	38	17	5	2
November 2028	56	32	13	3	1
November 2029	49	27	10	2	1
November 2030	43	22	7	1	0
November 2031	35	17	5	1	0
November 2032	27	12	5 3 2	0	0
November 2033	21	9	2	0	0
November 2034	15	6	1	0	0
November 2035	10	4	1	0	0
November 2036	5	2	0	0	0
November 2037	1	0	0	0	0
November 2038	0	0	0	0	0
November 2039	0	0	0	0	0
November 2040	0	0	0	0	0
November 2041	0	0	0	0	0
November 2042	0	0	0	0	0
November 2043	0	0	0	0	0
November 2044	0	0	0	0	0
November 2045	0	0	0	0	0
November 2046	0	0	0	0	0
November 2047	0	0	0	0	0
November 2048	0	0	0	0	0
November 2049	0	0	0	0	0
Weighted Average					
Life (years)	9.6	6.8	4.4	2.7	2.0

Security Group 6 PSA Prepayment Assumption Rates

		Cla	asses YF and	YS	
Distribution Date	0%	100%	281%	450%	600%
Initial Percent	100	100	100	100	100
November 2020	99	96	93	90	87
November 2021	97	90	80	71	63
November 2022	95	83	65	51	40
November 2023	94	77	53	36	25
November 2024	92	70	43	26	16
November 2025	90	65	35	18	10
November 2026	88	59	28	13	6
November 2027	86	54	23	9	4
November 2028	84	49	19	7	2
November 2029	81	45	15	5	1
November 2030	79	41	12	3	1
November 2031	76	37	10	2	1
November 2032	74	33	8	2	0
November 2033	71	30	6	1	0
November 2034	68	27	5	1	0
November 2035	65	24	4	1	0
November 2036	61	21	3	0	0
November 2037	58	19	2	0	0
November 2038	54	16	2	0	0
November 2039	51	14	1	0	0
November 2040	47	12	1	0	0
November 2041	42	10	1	0	0
November 2042	38	9	1	0	0
November 2043	33	7	0	0	0
November 2044	28	6	0	0	0
November 2045	23	4	0	0	0
November 2046	18	3	0	0	0
November 2047	12	2	0	0	0
November 2048	6	1	0	0	0
November 2049	0	0	0	0	0
Weighted Average					
Life (years)	18.6	10.6	5.6	3.9	3.1

Security Group 7
PSA Prepayment Assumption Rates

			Class FN		
Distribution Date	0%	100%	241%	350%	500%
Initial Percent	100	100	100	100	100
November 2020	97	91	82	76	67
November 2021	94	82	67	57	44
November 2022	90	74	55	43	29
November 2023	86	66	44	32	20
November 2024	82	59	36	24	13
November 2025	78	53	29	18	9
November 2026	74	46	24	14	6
November 2027	69	41	19	10	4
November 2028	64	35	15	7	2
November 2029	59	31	12	5	2
November 2030	54	26	9	4	1
November 2031	48	22	7	3	1
November 2032	42	19	5	2	0
November 2033	36	15	4	1	0
November 2034	30	12	3	1	0
November 2035	23	9	2	1	0
November 2036	17	6	1	0	0
November 2037	10	3	1	0	0
November 2038	3	1	0	0	0
November 2039	1	0	0	0	0
November 2040	0	0	0	0	0
November 2041	0	0	0	0	0
November 2042	0	0	0	0	0
November 2043	0	0	0	0	0
Weighted Average					
Life (years)	11.1	7.4	4.6	3.5	2.5

Security Group 8 PSA Prepayment Assumption Rates

			Class FB		
Distribution Date	0%	100%	241%	350%	500%
Initial Percent	100	100	100	100	100
November 2020	96	91	82	76	67
November 2021	92	82	68	58	45
November 2022	88	73	55	43	30
November 2023	84	65	45	33	20
November 2024	79	58	36	24	13
November 2025	74	51	29	18	9
November 2026	68	44	23	13	6
November 2027	62	38	18	9	4
November 2028	56	32	14	7	2
November 2029	50	27	10	5	1
November 2030	42	22	8	5 3	1
November 2031	35	17	5	2	0
November 2032	27	12	4	1	0
November 2033	19	8	2	1	0
November 2034	11	4	1	0	0
November 2035	3	1	0	0	0
November 2036	0	0	0	0	0
November 2037	0	0	0	0	0
November 2038	0	0	0	0	0
November 2039	0	0	0	0	0
November 2040	0	0	0	0	0
November 2041	0	0	0	0	0
November 2042	0	0	0	0	0
November 2043	0	0	0	0	0
Weighted Average					
Life (years)	9.4	6.7	4.5	3.4	2.5

Security Group 9 PSA Prepayment Assumption Rates

			Class CZ				Classes	FK, PA	and SK			Classes KF and KS						
Distribution Date	0%	190%	220%	250%	500%	0%	190%	220%	250%	500%	0%	190%	220%	250%	500%			
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100			
November 2020	104	104	97	90	35	98	94	94	94	94	98	95	95	95	95			
November 2021	107	107	86	65	0	96	84	84	84	76	96	85	85	85	76			
November 2022	111	111	72	34	0	94	71	71	71	51	94	72	72	72	53			
November 2023	115	115	64	14	0	92	60	60	60	34	92	61	61	61	36			
November 2024	119	119	60	4	0	89	50	50	50	23	90	51	51	51	25			
November 2025	123	123	59	0	0	87	41	41	41	15	87	43	43	43	17			
November 2026	128	126	60	0	0	84	34	34	34	9	85	35	35	35	11			
November 2027	132	124	59	0	0	82	27	27	27	5	82	29	29	29	8			
November 2028	137	120	56	0	0	79	22	22	22	3	80	24	24	24	5			
November 2029	142	114	52	1	0	76	18	18	18	1	77	20	20	20	4			
November 2030	147	106	48	1	0	73	14	14	14	0	74	16	16	16	2			
November 2031	152	98	44	1	0	70	11	11	11	0	70	13	13	13	2			
November 2032	158	89	40	1	0	66	8	8	8	0	67	11	11	11	1			
November 2033	163	80	36	1	0	63	6	6	6	0	64	9	9	9	1			
November 2034	169	72	31	1	0	59	5	5	5	0	60	7	7	7	0			
November 2035	175	63	28	1	0	55	3	3	3	0	56	6	6	6	0			
November 2036	181	56	24	1	0	51	2	2	2	0	52	5	5	5	0			
November 2037	188	48	21	1	0	47	1	1	1	0	48	4	4	4	0			
November 2038	194	41	17	1	0	42	0	0	0	0	44	3	3	3	0			
November 2039	201	35	15	1	0	37	0	0	0	0	39	2	2	2	0			
November 2040	208	29	12	1	0	32	0	0	0	0	34	2	2	2	0			
November 2041	216	24	10	1	0	27	0	0	0	0	29	1	1	1	0			
November 2042	223	20	8	1	0	21	0	0	0	0	24	1	1	1	0			
November 2043	231	15	7	1	0	16	0	0	0	0	18	1	1	1	0			
November 2044	240	12	5	1	0	10	0	0	0	0	12	0	0	0	0			
November 2045	248	9	4	1	0	3	0	0	0	0	6	0	0	0	0			
November 2046	247	6	3	1	0	0	0	0	0	0	0	0	0	0	0			
November 2047	169	3	2	1	0	0	0	0	0	0	0	0	0	0	0			
November 2048	87	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
November 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Weighted Average																		
Life (years)	28.5	16.8	10.7	2.8	0.8	16.0	6.0	6.0	6.0	3.6	16.3	6.5	6.5	6.5	3.9			

Security Group 9 PSA Prepayment Assumption Rates

		Clas	ses PF an	d PS	1 ,	1	Class PL								
Distribution Date	0%	190%	220%	250%	500%	0%	190%	220%	250%	500%					
Initial Percent	100	100	100	100	100	100	100	100	100	100					
November 2020	98	94	94	94	94	100	100	100	100	100					
November 2021	96	84	84	84	76	100	100	100	100	100					
November 2022	94	72	72	72	52	100	100	100	100	100					
November 2023	92	61	61	61	35	100	100	100	100	100					
November 2024	90	51	51	51	24	100	100	100	100	100					
November 2025	87	42	42	42	16	100	100	100	100	100					
November 2026	85	35	35	35	10	100	100	100	100	100					
November 2027	82	28	28	28	7	100	100	100	100	100					
November 2028	79	23	23	23	4	100	100	100	100	100					
November 2029	76	19	19	19	2	100	100	100	100	100					
November 2030	73	15	15	15	1	100	100	100	100	91					
November 2031	70	12	12	12	1	100	100	100	100	61					
November 2032	67	10	10	10	1	100	100	100	100	41					
November 2033	63	8	8	8	0	100	100	100	100	28					
November 2034	60	6	6	6	0	100	100	100	100	18					
November 2035	56	5	5	5	0	100	100	100	100	12					
November 2036	52	3	3	3	0	100	100	100	100	8					
November 2037	47	2	2	2	0	100	100	100	100	5					
November 2038	43	2	2	2	0	100	100	100	100	3					
November 2039	38	1	1	1	0	100	82	82	82	2					
November 2040	33	1	1	1	0	100	63	63	63	1					
November 2041	28	1	1	1	0	100	47	47	47	1					
November 2042	23	1	1	1	0	100	35	35	35	1					
November 2043	17	0	0	0	0	100	25	25	25	0					
November 2044	11	0	0	0	0	100	16	16	16	0					
November 2045	5	0	0	0	0	100	10	10	10	0					
November 2046	0	0	0	0	0	5	5	5	5	0					
November 2047	Ö	0	Õ	0	Ö	ĺ	í	í	í	0					
November 2048	Ŏ	Ŏ	ŏ	Ŏ	Ö	0	0	0	0	Ö					
November 2049	Ö	0	Õ	0	Ö	0	0	Õ	Õ	0					
Weighted Average															
Life (years)	16.2	6.3	6.3	6.3	3.8	26.8	22.4	22.4	22.4	13.3					

Security Group 10 PSA Prepayment Assumption Rates

	Class AC						Classes AD, MA, MB, MC, MD, ME, MG, MH, MI and MO						lass A0	÷					A, KB, KC, KD, I, KI and KO				
Distribution Date	0%	90%	120%	151%	300%	0%	90%	120%	151%	300%	0%	90%	120%	151%	300%	0%	90%	120%	151%	300%			
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100			
November 2020	97	90	88	86	74	98	93	91	89	80	98	92	90	88	79	98	92	90	88	79			
November 2021	94	81	77	73	54	95	85	82	79	64	95	85	81	78	62	95	84	81	78	62			
November 2022	91	72	67	61	37	93	79	74	70	51	92	77	73	68	49	92	77	73	68	48			
November 2023	87	64	57	51	24	91	73	67	62	41	90	71	65	60	38	89	70	65	59	37			
November 2024	84	56	49	41	13	88	67	60	55	33	87	64	58	52	29	86	64	58	52	28			
November 2025	80	49	41	33	4	85	61	54	48	26	84	59	52	45	22	83	58	51	45	21			
November 2026	76	42	33	25	0	82	56	49	42	21	80	53	46	39	16	80	52	45	38	16			
November 2027	72	36	27	18	0	79	51	44	37	16	77	48	40	33	12	77	47	40	33	11			
November 2028	68	30	20	12	0	76	46	39	32	13	74	43	35	29	8	73	42	35	28	7			
November 2029	63	24	15	7	0	73	42	35	28	10	70	38	31	24	6	69	37	30	23	5			
November 2030	59	19	10	2	0	69	38	31	24	8	66	34	26	20	4	66	33	26	19	3			
November 2031	54	13	5	0	0	66	34	27	21	6	62	30	22	17	2	62	29	22	16	2			
November 2032	49	9	0	0	0	62	30	24	18	5	58	26	19	13	1	57	25	18	13	1			
November 2033	43	4	0	0	0	58	27	20	15	4	54	22	16	11	1	53	21	15	10	0			
November 2034	38	0	0	0	0	54	24	18	13	3	49	19	13	8	0	48	18	12	7	0			
November 2035	32	0	0	0	0	50	21	15	11	2	45	15	10	6	0	44	14	9	5	0			
November 2036	26	0	0	0	0	46	18	13	9	2	40	12	8	4	0	39	11	7	3	0			
November 2037	20	0	0	0	0	41	15	11	7	1	35	10	5	3	0	34	8	5	2	0			
November 2038	13	0	0	0	0	36	13	9	6	1	29	7	4	2	0	28	6	3	1	0			
November 2039	7	0	0	0	0	31	10	7	5	1	24	5	2	1	0	22	4	2	0	0			
November 2040	0	0	0	0	0	26	8	5	3	0	18	3	1	1	0	16	2	1	0	0			
November 2041	0	0	0	0	0	20	6	4	3	0	12	1	1	0	0	10	1	0	0	0			
November 2042	0	0	0	0	0	14	4	3	2	0	6	1	0	0	0	4	0	0	0	0			
November 2043	0	0	0	0	0	8	2	1	1	0	1	0	0	0	0	0	0	0	0	0			
November 2044	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
November 2045	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Weighted Average																							
Life (years)	12.0	6.4	5.4	4.6	2.6	15.0	9.5	8.3	7.3	4.4	14.0	8.6	7.5	6.5	3.8	13.8	8.5	7.3	6.4	3.7			

Security Group 10 PSA Prepayment Assumption Rates

			Class AL					Class AP	,			Class PZ						
Distribution Date	0%	90%	120%	151%	300%	0%	90%	120%	151%	300%	0%	90%	120%	151%	300%			
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100			
November 2020	100	100	100	100	100	96	88	88	88	88	102	102	87	72	0			
November 2021	100	100	100	100	100	92	77	77	77	64	103	103	76	50	0			
November 2022	100	100	100	100	100	88	66	66	66	44	105	105	68	32	0			
November 2023	100	100	100	100	100	84	56	56	56	28	106	106	62	19	0			
November 2024	100	100	100	100	100	79	47	47	47	15	108	108	58	10	0			
November 2025	100	100	100	100	100	74	38	38	38	5	109	109	55	4	0			
November 2026	100	100	100	100	88	70	30	30	30	0	111	111	53	1	0			
November 2027	100	100	100	100	62	64	22	22	22	0	113	113	53	0	0			
November 2028	100	100	100	100	41	59	14	14	14	0	114	113	53	0	0			
November 2029	100	100	100	100	28	54	8	8	8	0	116	111	52	0	0			
November 2030	100	100	100	100	18	48	2	2	2	0	118	108	50	0	0			
November 2031	100	100	100	88	11	42	0	0	0	0	120	87	31	0	0			
November 2032	100	100	100	70	6	35	0	0	0	0	122	56	2	0	0			
November 2033	100	100	83	54	2	29	0	0	0	0	123	27	0	0	0			
November 2034	100	100	66	39	1	22	0	0	0	0	125	0	0	0	0			
November 2035	100	81	50	29	1	15	0	0	0	0	127	0	0	0	0			
November 2036	100	64	36	20	1	7	0	0	0	0	129	0	0	0	0			
November 2037	100	48	26	13	0	0	0	0	0	0	128	0	0	0	0			
November 2038	100	33	17	7	0	0	0	0	0	0	86	0	0	0	0			
November 2039	100	22	10	3	0	0	0	0	0	0	42	0	0	0	0			
November 2040	97	13	4	2	0	0	0	0	0	0	0	0	0	0	0			
November 2041	63	4	2	1	0	0	0	0	0	0	0	0	0	0	0			
November 2042	28	2	1	1	0	0	0	0	0	0	0	0	0	0	0			
November 2043	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0			
November 2044	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
November 2045	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Weighted Average																		
Life (years)	22.4	18.2	16.5	14.8	9.1	10.1	5.0	5.0	5.0	2.9	19.5	13.0	7.5	2.4	0.5			

Security Group 11 PSA Prepayment Assumption Rates

	Classe	es B, BC, BD,	BG, BH, BK,	BM, BN, BP	and IB
Distribution Date	0%	100%	311%	500%	700%
Initial Percent	100	100	100	100	100
November 2020	98	92	79	67	55
November 2021	95	84	62	45	31
November 2022	93	76	48	29	16
November 2023	90	70	37	19	8
November 2024	87	63	29	12	4
November 2025	84	57	22	7	1
November 2026	81	52	16	3	0
November 2027	78	46	12	1	0
November 2028	75	41	9	0	0
November 2029	72	37	6	0	0
November 2030	68	33	4	0	0
November 2031	64	29	2	0	0
November 2032	60	25	1	0	0
November 2033	56	22	0	0	0
November 2034	52	18	0	0	0
November 2035	48	15	0	0	0
November 2036	43	13	0	0	0
November 2037	38	10	0	0	0
November 2038	33	8	0	0	0
November 2039	28	5	0	0	0
November 2040	22	3	0	0	0
November 2041	16	1	0	0	0
November 2042	10	0	0	0	0
November 2043	4	0	0	0	0
November 2044	0	0	0	0	0
November 2045	0	0	0	0	0
Weighted Average					
Life (years)	14.5	8.5	3.8	2.3	1.6

Security Group 12 PSA Prepayment Assumption Rates

	Classes EB, EF and ES						Class EL					(	Class EV				(	Class EZ	:	
Distribution Date	0%	100%	215%	350%	500%	0%	100%	215%	350%	500%	0%	100%	215%	350%	500%	0%	100%	215%	350%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2020	98	96	94	91	89	100	100	100	100	100	96	96	96	96	96	103	103	103	103	103
November 2021	96	90	83	75	66	100	100	100	100	100	92	92	92	92	92	106	106	106	106	106
November 2022	94	82	69	56	42	100	100	100	100	100	87	87	87	87	87	109	109	109	109	109
November 2023	92	74	57	40	26	100	100	100	100	100	83	83	83	83	83	113	113	113	113	113
November 2024	90	67	47	29	14	100	100	100	100	100	78	78	78	78	78	116	116	116	116	116
November 2025	88	60	38	20	6	100	100	100	100	100	73	73	73	73	73	120	120	120	120	120
November 2026	86	54	31	12	1	100	100	100	100	100	68	68	68	68	68	123	123	123	123	123
November 2027	83	49	24	7	0	100	100	100	100	72	63	63	63	63	0	127	127	127	127	124
November 2028	81	43	19	3	0	100	100	100	100	49	58	58	58	58	0	131	131	131	131	84
November 2029	78	38	14	0	0	100	100	100	96	33	52	52	52	42	0	135	135	135	135	57
November 2030	75	34	10	0	0	100	100	100	73	22	47	47	47	0	0	139	139	139	126	38
November 2031	72	29	7	0	0	100	100	100	55	15	41	41	41	0	0	143	143	143	96	26
November 2032	69	25	4	0	0	100	100	100	42	10	35	35	35	0	0	148	148	148	73	17
November 2033	66	22	1	0	0	100	100	100	32	7	29	29	29	0	0	152	152	152	55	12
November 2034	63	18	0	0	0	100	100	92	24	4	22	22	4	0	0	157	157	157	41	8
November 2035	59	15	0	0	0	100	100	76	18	3	16	16	0	0	0	162	162	132	31	5
November 2036	55	12	0	0	0	100	100	62	13	2	9	9	0	0	0	166	166	108	23	3
November 2037	52	9	0	0	0	100	100	51	10	1	2	2	0	0	0	171	171	88	17	2
November 2038	47	7	0	0	0	100	100	41	7	1	0	0	0	0	0	173	173	71	12	1
November 2039	43	4	0	0	0	100	100	33	5	1	0	0	0	0	0	173	173	57	9	1
November 2040	39	2	0	0	0	100	100	26	4	0	0	0	0	0	0	173	173	46	7	1
November 2041	34	0	0	0	0	100	100	21	3	0	0	0	0	0	0	173	173	36	5	0
November 2042	29	0	0	0	0	100	85	16	2	0	0	0	0	0	0	173	147	28	3	0
November 2043	24	0	0	0	0	100	69	12	1	0	0	0	0	0	0	173	119	21	2	0
November 2044	19	0	0	0	0	100	55	9	1	0	0	0	0	0	0	173	94	15	1	0
November 2045	14	0	0	0	0	100	41	6	1	0	0	0	0	0	0	173	71	11	1	0
November 2046	8	0	0	0	0	100	29	4	0	0	0	0	0	0	0	173	50	7	1	0
November 2047	2	0	0	0	0	100	18	2	0	0	0	0	0	0	0	173	30	4	0	0
November 2048	0	0	0	0	0	60	7	1	0	0	0	0	0	0	0	104	12	1	0	0
November 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average																				
Life (years)	17.1	8.8	5.5	3.8	2.9	29.2	25.5	19.1	13.4	9.7	10.0	10.0	9.6	7.9	6.3	29.2	25.5	19.5	14.2	10.5

#### **Yield Considerations**

An investor seeking to maximize yield should make a decision whether to invest in any Regular or MX Class based on the anticipated yield of that Class resulting from its purchase price, the investor's own projection of Mortgage Loan prepayment rates under a variety of scenarios, in the case of the Group 1, 2, 3, 4, 5, 7, 8, 10 and 11 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 (especially the Principal Only Classes), slower than anticipated rates of principal payments could result in actual yields to investors that are lower than the anticipated yields.

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 benefit from a higher yield at high levels of LIBOR because the rate on such Classes is capped at a maximum rate described under "Terms Sheet — Interest Rates."

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

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

#### **Yield Tables**

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

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

The yields were calculated by

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

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

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

#### **SECURITY GROUP 2**

# Sensitivity of Class CI to Prepayments Assumed Price 18.0%\*

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

100%	244%	325%	350%	500%
16.3%	6.1%	0.0%	(1.9)%	(14.3)%

#### **SECURITY GROUP 3**

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

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

100%	244%	325%	350%	500%
15.9%	5.9%	0.0%	(1.8)%	(13.3)%

#### **SECURITY GROUP 4**

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

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

100%	244%	307%	350%	500%
14.5%	4.5%	0.0%	(3.1)%	(14.4)%

#### **SECURITY GROUP 5**

# Sensitivity of Class HI to Prepayments Assumed Price 20.0%\*

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

100%	252%	318%	450%	600%
15.4%	4.8%	0.1%	(9.8)%	(21.7)%

# **SECURITY GROUP 6**

# Sensitivity of Class YS to Prepayments Assumed Price 5.84375%\*

	PSA Prepayment Assumption Rates			tes
LIBOR	100%	281%	450%	600%

 1.77425%
 10.4%
 0.3%
 (9.5)%
 (18.7)%

 2.30213%
 (0.5)%
 (10.9)%
 (21.2)%
 (30.8)%

 2.83000% and above
 \*\*
 \*\*
 \*\*
 \*\*
 \*\*

25.5%

15.9%

6.6%

(1.9)%

1.00000% .....

<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 9**

# Sensitivity of Class KS to Prepayments Assumed Price 18.25%\*

	PSA Prepayment Assumption Rates			
LIBOR	190%	220%	250%	500%
1.0000%	14.8%	14.8%	14.8%	2.5%
1.7550%	9.9%	9.9%	9.9%	(3.0)%
3.9025%	(4.6)%	(4.6)%	(4.6)%	(19.0)%
6.0500% and above	**	**	**	**

# Sensitivity of Class PS to Prepayments Assumed Price 18.25%\*

	PSA Prepayment Assumption Rates			
LIBOR	190%	220%	250%	500%
1.0000%	14.5%	14.5%	14.5%	1.5%
1.7550%	9.5%	9.5%	9.5%	(4.1)%
3.9025%	(5.3)%	(5.3)%	(5.3)%	(20.8)%
6.0500% and above	**	3/43/4	3636	**

# Sensitivity of Class SK to Prepayments Assumed Price 18.25%\*

	PSA Prepayment Assumption Rates			
LIBOR	190%	220%	250%	500%
1.0000%	14.0%	14.0%	14.0%	0.0%
1.7550%	9.0%	9.0%	9.0%	(5.9)%
3.9025%	(6.6)%	(6.6)%	(6.6)%	(25.1)%
6.0500% and above	**	**	**	**

# **SECURITY GROUP 10**

# Sensitivity of Class KI to Prepayments Assumed Price 10.46875%\*

# **PSA Prepayment Assumption Rates**

90%	120%	151%	300%	420%
30.1%	27.7%	25.2%	12.0%	0.0%

# Sensitivity of Class KO to Prepayments Assumed Price 92.0%

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

90%	120%	151%	300%
1.0%	1.2%	1.3%	2.3%

<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 MI to Prepayments Assumed Price 12.25%\*

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

90%	120%	151%	300%	425%
24.9%	22.8%	20.6%	9.7%	0.1%

# Sensitivity of Class MO to Prepayments Assumed Price 92.0%

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

90%	120%	151%	300%
0.9%	1.0%	1.2%	2.0%

#### **SECURITY GROUP 11**

# Sensitivity of Class IB to Prepayments Assumed Price 16.75%\*

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

100%	272%	311%	500%	700%
14.0%	0.1%	(3.5)%	(23.3)%	(43.7)%

#### **SECURITY GROUP 12**

# Sensitivity of Class ES to Prepayments Assumed Price 18.625%\*

	PS.	A Prepaymen	t Assumption	Rates
LIBOR	100%	215%	350%	500%
1.0000%	19.5%	11.6%	1.4%	(10.4)%
1.7550%	14.7%	6.5%	(4.3)%	(16.8)%
3.9025%	0.4%	(9.9)%	(23.2)%	(38.1)%
6.0500% 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.

#### CERTAIN UNITED STATES FEDERAL INCOME TAX CONSEQUENCES

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

#### **REMIC Elections**

In the opinion of Cleary Gottlieb Steen & Hamilton LLP, the Trust will constitute a Double REMIC Series for United States federal income tax purposes. Separate REMIC elections will be made for the Pooling REMIC and the Issuing REMIC.

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

#### **Regular Securities**

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

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

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

Group(s)	PSA
1	118%
2, 3 and 4	244%
5	252%
6	281%
7 and 8	241%
9	220%
10	120%
11	311%
12	215%

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

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

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

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

#### **MX Securities**

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

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

#### Foreign Account Tax Compliance Act

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

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

#### **ERISA MATTERS**

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

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

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

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

See "ERISA Considerations" in the Base Offering Circular.

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

#### LEGAL INVESTMENT CONSIDERATIONS

Institutions whose investment activities are subject to legal investment laws and regulations or to review by certain regulatory authorities may be subject to restrictions on investment in the Securities. No representation is made about the proper characterization of any Class for legal investment or other purposes, or about the permissibility of the purchase by particular investors of any Class under applicable legal investment restrictions.

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

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

#### PLAN OF DISTRIBUTION

Subject to the terms and conditions of the Sponsor Agreement, the Sponsor has agreed to purchase all of the Securities if any are sold and purchased. The Sponsor proposes to offer the Regular and MX Classes to the public from time to time for sale in negotiated transactions at varying prices to be determined at the time of sale, plus accrued interest, if any, from (1) November 1, 2019 on the Fixed Rate and Delay Classes, (2) November 16, 2019 on the Group 7 Class and (3) November 20, 2019 on the Group 6, 9 and 12 Floating Rate and Inverse Floating Rate Classes. The Sponsor may effect these transactions by sales to or through certain securities dealers. These dealers may receive compensation in the form of discounts, concessions or commissions from the Sponsor and/or commissions from any purchasers for which they act as agents. Some of the Securities may be sold through dealers in relatively small sales. In the usual case, the commission charged on a relatively small sale of securities will be a higher percentage of the sales price than that charged on a large sale of securities.

# **INCREASE IN SIZE**

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

#### **LEGAL MATTERS**

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

# Available Combinations(1)

	Original Class Principal Balance	r to the	Maximum Original Class Principal Balance				<b>M</b> OLLO	Final
	or Class Notional Balance	Kelated MX Class	or Class Notional Balance(2)	Frincipal Type(3)	Rate	Type(3)	Number	Date(4)
Security Group 1								
	\$ 26,538,681	AB	\$340,364,545	SC/PT	1.50%	FIX	38382A5X9	October 2045
	23,388,650							
	27,893,037							
	90,970,768							
	111,361,512							
	18,864,649							
	3,656,480							
	3,220,627							
	3.843.082							
	12,529,241							
	15,481,893							
	2,615,925							
Combination 2								
	\$ 26,538,681	Ь	\$299,017,297	SC/PAC/AD	1.50%	FIX	38382A5Y7	October 2045
	23,388,650							
	27,893,037							
	90,970,768							
	111,361,512							
	18,864,649							
Combination 3								
	\$ 3,656,480	Z	\$ 41,347,248	SC/SUP	1.50%	FIX/Z	38382A5Z4	October 2045
	3,220,627							
	3,843,082							
	12,529,241							
	15,481,893							
	2,615,925							

REMIC Securities	cs			M	MX Securities			
Class	Original Class Principal Balance or Class Notional Balance	Related MX Class	Maximum Original Class Principal Balance or Class Notional Balance(2)	Principal Type(3)	Interest Rate	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
Combination 4						:		
CP	\$ 26,538,681	TA	\$ 30,195,161	SC/PT	1.50%	FIX	38382A6A8	August 2045
ZA	3,656,480							)
Combination 5								
DP	\$ 23,388,650	TB	\$ 26,609,277	SC/PT	1.50%	FIX	38382A6B6	July 2045
ZB	3,220,627							
Combination 6								
EP	\$ 27,893,037	TC	\$ 31,736,119	SC/PT	1.50%	FIX	38382A6C4	August 2045
ZC	3,843,082							
Combination 7								
GP	\$ 90,970,768	TD	\$103,500,009	SC/PT	1.50%	FIX	38382A6D2	July 2045
ZD	12,529,241							
Combination 8								
HP	\$111,361,512	TE	\$126,843,405	SC/PT	1.50%	FIX	38382A6E0	October 2045
ZE	15,481,893							
Combination 9								
JP	\$ 18,864,649	JC	\$ 21,480,574	SC/PT	1.50%	FIX	38382A6F7	September 2045
ZG	2,615,925							
Security Group 9								
Combination 10								
FK	\$ 15,147,578	PF	\$ 35,897,328	PAC/AD	9	FLT	38382A6G5	November 2049
KF	20,749,750							
Combination 11								
KS	\$ 20,749,750	PS	\$ 35,897,328	NTL(PAC/AD)	9	OI/ANI	38382A6H3	November 2049
SK	15,147,578							
Security Group 10								
Combination 12								
AD	\$ 21,714,280	AG	\$139,347,693	SC/PT	2.00%	FIX	38382A7P4	November 2045
AH	117,633,413							

REMIC Securities				N	MX Securities			
	Original Class Principal Balance		Maximum Original Class Principal Balance					Final
Class	or Class Notional Balance	Related MX Class	or Class Notional Balance(2)	Principal Type(3)	Interest Rate	Interest Type(3)	CUSIP	Distribution Date(4)
Combination 13(5)								
AH	\$117,633,413	KA	\$117,633,413	SC/PT	0.50%	FIX	38382A6J9	October 2045
		KB	117,633,413	SC/PT	1.00	FIX	38382A6K6	October 2045
		KC	117,633,413	SC/PT	1.50	FIX	38382A6L4	October 2045
		K	94,106,730	SC/PT	2.50	FIX	38382A6M2	October 2045
		KE	78,422,275	SC/PT	3.00	FIX	38382A6N0	October 2045
		KG	67,219,093	SC/PT	3.50	FIX	38382A6P5	October 2045
		KH	58,816,706	SC/PT	4.00	FIX	38382A6Q3	October 2045
		KI	58,816,706	NTL(SC/PT)	4.00	FIX/IO	38382A6R1	October 2045
		KO	117,633,413	SC/PT	0.00	ЬО	38382A6S9	October 2045
Combination 14								
AP	\$195,632,373	AC	\$231,587,462	SC/SEQ	1.50%	FIX	38382A6T7	November 2045
PZ	35,955,089							
Combination 15(5)								
AD	\$ 21,714,280	MA	\$ 21,714,280	SC/PT	0.50%	FIX	38382A6U4	November 2045
		MB	21,714,280	SC/PT	1.00	FIX	38382A6V2	November 2045
		MC	21,714,280	SC/PT	1.50	FIX	38382A6W0	November 2045
		MD	17,371,424	SC/PT	2.50	FIX	38382A6X8	November 2045
		ME	14,476,186	SC/PT	3.00	FIX	38382A6Y6	November 2045
		MG	12,408,160	SC/PT	3.50	FIX	38382A6Z3	November 2045
		MH	10,857,140	SC/PT	4.00	FIX	38382A7A7	November 2045
		MI	10,857,140	NTL(SC/PT)	4.00	FIX/IO	38382A7B5	November 2045
		MO	21,714,280	SC/PT	0.00	ЬО	38382A7C3	November 2045

	REMIC Securities				W	MX Securities			
	Class	Original Class Principal Balance or Class Notional Balance	Related MX Class	Maximum Original Class Principal Balance or Class Notional Balance(2)	Principal Type(3)	Interest Rate	Interest Type(3)	CUSIP	Final Distribution Date(4)
	<b>Security Group 11</b> Combination 16(5)								
	В	\$332,327,464	BC	\$332,327,464	SC/PT	2.00%	FIX	38382A7D1	September 2045
			BD	332,327,464	SC/PT	2.25	FIX	38382A7E9	September 2045
			BG	221,551,642	SC/PT	2.75	FIX	38382A7F6	September 2045
			BH	166,163,732	SC/PT	3.00	FIX	38382A7G4	September 2045
			BK	132,930,985	SC/PT	3.25	FIX	38382A7H2	September 2045
			$_{ m BM}$	110,775,821	SC/PT	3.50	FIX	38382A7J8	September 2045
			BN	94,950,704	SC/PT	3.75	FIX	38382A7K5	September 2045
			BP	83,081,866	SC/PT	4.00	FIX	38382A7L3	September 2045
			IB	41,540,933	NTL(SC/PT)	4.00	FIX/IO	38382A7M1	September 2045
	Security Group 12 Combination 17								
/	EV EZ	\$ 9,309,000 12,754,379	EL	\$ 22,063,379	SEQ	3.00%	FIX	38382A7N9	38382A7N9 November 2049

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

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)

In the case of Combinations 13, 15 and 16, various subcombinations are permitted. See "Description of the Securities — Modification and Exchange" in the Base Offering Circular for a discussion of subcombinations.

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

# Schedule II

# SCHEDULED PRINCIPAL BALANCES

Distribution Date	Class CP	Class DP	Class EP	Class GP
Initial Balance	\$26,538,681.00	\$23,388,650.00	\$27,893,037.00	\$90,970,768.00
December 2019	26,338,716.16	23,212,319.37	27,682,867.30	90,285,035.56
January 2020	26,139,704.52	23,036,829.79	27,473,699.45	89,602,573.77
February 2020	25,941,641.65	22,862,177.34	27,265,528.77	88,923,367.42
March 2020	25,744,523.12	22,688,358.12	27,058,350.64	88,247,401.37
April 2020	25,548,344.55	22,515,368.27	26,852,160.44	87,574,660.52
May 2020	25,353,101.57	22,343,203.91	26,646,953.56	86,905,129.87
June 2020	25,158,789.81	22,171,861.21	26,442,725.44	86,238,794.47
July 2020	24,965,404.94	22,001,336.34	26,239,471.51	85,575,639.46
August 2020	24,772,942.66	21,831,625.50	26,037,187.24	84,915,650.01
September 2020	24,581,398.66	21,662,724.89	25,835,868.12	84,258,811.39
October 2020	24,390,768.67	21,494,630.73	25,635,509.65	83,605,108.92
November 2020	24,201,048.43	21,327,339.28	25,436,107.37	82,954,528.01
December 2020	24,012,233.70	21,160,846.79	25,237,656.81	82,307,054.09
January 2021	23,824,320.27	20,995,149.54	25,040,153.54	81,662,672.70
February 2021	23,637,303.94	20,830,243.82	24,843,593.15	81,021,369.43
March 2021	23,451,180.53	20,666,125.95	24,647,971.26	80,383,129.93
April 2021	23,265,945.88	20,502,792.26	24,453,283.47	79,747,939.93
May 2021	23,081,595.85	20,340,239.08	24,259,525.45	79,115,785.20
June 2021	22,898,126.30	20,178,462.78	24,066,692.86	78,486,651.59
July 2021	22,715,533.15	20,017,459.74	23,874,781.37	77,860,525.03
August 2021	22,533,812.30	19,857,226.35	23,683,786.71	77,237,391.48
September 2021	22,352,959.69	19,697,759.02	23,493,704.60	76,617,236.98
October 2021	22,172,971.26	19,539,054.18	23,304,530.77	76,000,047.65
November 2021	21,993,842.99	19,381,108.27	23,116,261.00	75,385,809.64
December 2021	21,815,570.86	19,223,917.75	22,928,891.06	74,774,509.20
January 2022	21,638,150.89	19,067,479.09	22,742,416.76	74,166,132.60
February 2022	21,461,579.08	18,911,788.80	22,556,833.92	73,560,666.20
March 2022	21,285,851.50	18,756,843.36	22,372,138.38	72,958,096.42
April 2022	21,110,964.19	18,602,639.31	22,188,326.00	72,358,409.74
May 2022	20,936,913.23	18,449,173.18	22,005,392.65	71,761,592.69
June 2022	20,763,694.73	18,296,441.53	21,823,334.24	71,167,631.88
July 2022	20,591,304.79	18,144,440.93	21,642,146.67	70,576,513.96
August 2022	20,419,739.54	17,993,167.96	21,461,825.88	69,988,225.66
September 2022	20,248,995.13	17,842,619.22	21,282,367.83	69,402,753.76
October 2022	20,079,067.73	17,692,791.34	21,103,768.48	68,820,085.09
November 2022	19,909,953.53	17,543,680.94	20,926,023.82	68,240,206.57
December 2022	19,741,648.71	17,395,284.66	20,749,129.86	67,663,105.15
January 2023	19,574,149.51	17,247,599.18	20,573,082.63	67,088,767.84
February 2023	19,407,452.15	17,100,621.17	20,397,878.15	66,517,181.73
March 2023	19,241,552.89	16,954,347.31	20,223,512.51	65,948,333.96
April 2023	19,076,448.00	16,808,774.32	20,049,981.77	65,382,211.71
May 2023	18,912,133.76	16,663,898.92	19,877,282.03	64,818,802.25
June 2023	18,748,606.47	16,519,717.85	19,705,409.41	64,258,092.88
July 2023	18,585,862.46	16,376,227.86	19,534,360.04	63,700,070.97

Distribution Date	Class CP	Class DP	Class EP	Class GP
August 2023	\$18,423,898.05	\$16,233,425.71	\$19,364,130.06	\$63,144,723.95
September 2023	18,262,709.61	16,091,308.19	19,194,715.65	62,592,039.30
October 2023	18,102,293.51	15,949,872.09	19,026,112.98	62,042,004.56
November 2023	17,942,646.12	15,809,114.22	18,858,318.27	61,494,607.32
December 2023	17,783,763.86	15,669,031.40	18,691,327.72	60,949,835.24
January 2024	17,625,643.13	15,529,620.49	18,525,137.57	60,407,676.02
February 2024	17,468,280.38	15,390,878.32	18,359,744.08	59,868,117.44
March 2024	17,311,672.05	15,252,801.77	18,195,143.52	59,331,147.30
April 2024	17,155,814.61	15,115,387.72	18,031,332.16	58,796,753.48
May 2024	17,000,704.55	14,978,633.07	17,868,306.33	58,264,923.92
June 2024	16,846,338.37	14,842,534.72	17,706,062.33	57,735,646.59
July 2024	16,692,712.57	14,707,089.60	17,544,596.50	57,208,909.54
August 2024	16,539,823.69	14,572,294.65	17,383,905.20	56,684,700.86
September 2024	16,387,668.28	14,438,146.82	17,223,984.80	56,163,008.69
October 2024	16,236,242.89	14,304,643.07	17,064,831.68	55,643,821.24
November 2024	16,085,544.11	14,171,780.39	16,906,442.25	55,127,126.76
December 2024	15,935,568.53	14,039,555.77	16,748,812.92	54,612,913.56
January 2025	15,786,312.76	13,907,966.21	16,591,940.14	54,101,169.99
February 2025	15,637,773.42	13,777,008.74	16,435,820.35	53,591,884.48
March 2025	15,489,947.14	13,646,680.39	16,280,450.01	53,085,045.48
April 2025	15,342,830.60	13,516,978.20	16,125,825.63	52,580,641.52
May 2025	15,196,420.44	13,387,899.25	15,971,943.68	52,078,661.16
June 2025	15,050,713.37	13,259,440.60	15,818,800.70	51,579,093.03
July 2025	14,905,706.07	13,131,599.33	15,666,393.20	51,081,925.80
August 2025	14,761,395.27	13,004,372.56	15,514,717.75	50,587,148.19
September 2025	14,617,777.69	12,877,757.39	15,363,770.89	50,094,748.99
October 2025	14,474,850.08	12,751,750.95	15,213,549.22	49,604,717.02
November 2025	14,332,609.20	12,626,350.39	15,064,049.31	49,117,041.15
December 2025	14,191,051.81	12,501,552.85	14,915,267.79	48,631,710.32
January 2026	14,050,174.72	12,377,355.49	14,767,201.28	48,148,713.50
February 2026	13,909,974.72	12,253,755.51	14,619,846.41	47,668,039.72
March 2026	13,770,448.62	12,130,750.08	14,473,199.85	47,189,678.05
April 2026	13,631,593.27	12,008,336.42	14,327,258.25	46,713,617.64
May 2026	13,493,405.51	11,886,511.74	14,182,018.32	46,239,847.65
June 2026	13,355,882.20	11,765,273.27	14,037,476.74	45,768,357.30
July 2026	13,219,020.21	11,644,618.25	13,893,630.23	45,299,135.88
August 2026	13,082,816.44	11,524,543.94	13,750,475.53	44,832,172.71
September 2026	12,947,267.78	11,405,047.60	13,608,009.38	44,367,457.15
October 2026	12,812,371.15	11,286,126.52	13,466,228.54	43,904,978.64
November 2026	12,678,123.49	11,167,777.98	13,325,129.78	43,444,726.63
December 2026	12,544,521.74	11,049,999.29	13,184,709.89	42,986,690.64
January 2027	12,411,562.86	10,932,787.76	13,044,965.68	42,530,860.24
February 2027	12,279,243.82	10,816,140.73	12,905,893.97	42,077,225.04
March 2027	12,147,561.61	10,700,055.53	12,767,491.58	41,625,774.69
April 2027	12,016,513.23	10,584,529.52	12,629,755.37	41,176,498.90
May 2027	11,886,095.68	10,469,560.06	12,492,682.19	40,729,387.42
June 2027	11,756,306.01	10,355,144.52	12,356,268.93	40,284,430.05
July 2027	11,627,141.25	10,241,280.31	12,220,512.47	39,841,616.63
August 2027	11,498,598.45	10,127,964.80	12,085,409.71	39,400,937.06

Distribution Date	Class CP	Class DP	Class EP	Class GP
September 2027	\$11,370,721.82	\$10,015,261.94	\$11,951,007.11	\$38,962,599.60
October 2027	11,244,015.77	9,903,591.24	11,817,834.84	38,528,276.19
November 2027	11,118,470.40	9,792,943.94	11,685,882.48	38,097,932.84
December 2027	10,994,075.88	9,683,311.38	11,555,139.69	37,671,535.84
January 2028	10,870,822.46	9,574,684.96	11,425,596.25	37,249,051.74
February 2028	10,748,700.47	9,467,056.16	11,297,241.97	36,830,447.39
March 2028	10,627,700.33	9,360,416.52	11,170,066.79	36,415,689.88
April 2028	10,507,812.51	9,254,757.64	11,044,060.71	36,004,746.58
May 2028	10,389,027.59	9,150,071.20	10,919,213.80	35,597,585.15
June 2028	10,271,336.20	9,046,348.95	10,795,516.24	35,194,173.47
July 2028	10,154,729.08	8,943,582.71	10,672,958.27	34,794,479.72
August 2028	10,039,197.00	8,841,764.36	10,551,530.21	34,398,472.32
September 2028	9,924,730.84	8,740,885.84	10,431,222.47	34,006,119.96
October 2028	9,811,321.55	8,640,939.16	10,312,025.53	33,617,391.56
November 2028	9,698,960.14	8,541,916.41	10,193,929.95	33,232,256.33
December 2028	9,587,637.71	8,443,809.72	10,076,926.37	32,850,683.70
January 2029	9,477,345.42	8,346,611.30	9,961,005.50	32,472,643.37
February 2029	9,368,074.50	8,250,313.43	9,846,158.13	32,098,105.28
March 2029	9,259,816.26	8,154,908.43	9,732,375.12	31,727,039.62
April 2029	9,152,562.09	8,060,388.71	9,619,647.41	31,359,416.82
May 2029	9,046,303.43	7,966,746.71	9,507,966.02	30,995,207.54
June 2029	8,941,031.80	7,873,974.97	9,397,322.04	30,634,382.70
July 2029	8,836,738.79	7,782,066.06	9,287,706.61	30,276,913.44
August 2029	8,733,416.06	7,691,012.63	9,179,110.98	29,922,771.17
September 2029	8,631,055.33	7,600,807.37	9,071,526.45	29,571,927.48
October 2029	8,529,648.39	7,511,443.05	8,964,944.39	29,224,354.24
November 2029	8,429,187.12	7,422,912.49	8,859,356.24	28,880,023.52
December 2029	8,329,663.42	7,335,208.57	8,754,753.53	28,538,907.64
January 2030	8,231,069.31	7,248,324.23	8,651,127.83	28,200,979.13
February 2030	8,133,396.83	7,162,252.46	8,548,470.81	27,866,210.76
March 2030	8,036,638.11	7,076,986.32	8,446,774.17	27,534,575.50
April 2030	7,940,785.34	6,992,518.91	8,346,029.72	27,206,046.58
May 2030	7,845,830.77	6,908,843.41	8,246,229.31	26,880,597.40
June 2030	7,751,766.71	6,825,953.03	8,147,364.85	26,558,201.62
July 2030	7,658,585.55	6,743,841.06	8,049,428.35	26,238,833.09
August 2030	7,566,279.73	6,662,500.82	7,952,411.86	25,922,465.89
September 2030	7,474,841.74	6,581,925.71	7,856,307.49	25,609,074.30
October 2030	7,384,264.15	6,502,109.17	7,761,107.43	25,298,632.82
November 2030	7,294,539.60	6,423,044.69	7,666,803.94	24,991,116.16
December 2030	7,205,660.75	6,344,725.83	7,573,389.32	24,686,499.23
January 2031	7,117,620.37	6,267,146.18	7,480,855.95	24,384,757.14
February 2031	7,030,411.26	6,190,299.39	7,389,196.26	24,085,865.23
March 2031	6,944,026.27	6,114,179.19	7,298,402.77	23,789,799.02
April 2031	6,858,458.34	6,038,779.32	7,208,468.02	23,496,534.23
May 2031	6,773,700.44	5,964,093.59	7,119,384.65	23,206,046.80
June 2031	6,689,745.61	5,890,115.87	7,031,145.33	22,918,312.84
July 2031	6,606,586.95	5,816,840.06	6,943,742.81	22,633,308.68
August 2031	6,524,217.61	5,744,260.13	6,857,169.90	22,351,010.83
September 2031	6,442,630.81	5,672,370.08	6,771,419.45	22,071,395.99

Distribution Date	Class CP	Class DP	Class EP	Class GP
October 2031	\$ 6,361,819.79	\$ 5,601,163.98	\$ 6,686,484.38	\$21,794,441.07
November 2031	6,281,777.90	5,530,635.94	6,602,357.69	21,520,123.16
December 2031	6,202,498.49	5,460,780.11	6,519,032.39	21,248,419.53
January 2032	6,123,975.00	5,391,590.70	6,436,501.59	20,979,307.65
February 2032	6,046,200.91	5,323,061.96	6,354,758.43	20,712,765.16
March 2032	5,969,169.76	5,255,188.19	6,273,796.13	20,448,769.91
April 2032	5,892,875.14	5,187,963.73	6,193,607.95	20,187,299.90
May 2032	5,817,310.70	5,121,382.99	6,114,187.20	19,928,333.33
June 2032	5,742,470.12	5,055,440.40	6,035,527.26	19,671,848.58
July 2032	5,668,347.15	4,990,130.44	5,957,621.56	19,417,824.20
August 2032	5,594,935.60	4,925,447.65	5,880,463.57	19,166,238.92
September 2032	5,522,229.31	4,861,386.60	5,804,046.85	18,917,071.65
October 2032	5,450,222.18	4,797,941.91	5,728,364.96	18,670,301.47
November 2032	5,378,908.17	4,735,108.25	5,653,411.56	18,425,907.64
December 2032	5,308,281.27	4,672,880.33	5,579,180.34	18,183,869.56
January 2033	5,238,335.54	4,611,252.90	5,505,665.04	17,944,166.84
February 2033	5,169,065.06	4,550,220.75	5,432,859.47	17,706,779.24
March 2033	5,100,464.00	4,489,778.72	5,360,757.47	17,471,686.68
April 2033	5,032,526.54	4,429,921.70	5,289,352.94	17,238,869.26
May 2033	4,965,246.93	4,370,644.61	5,218,639.83	17,008,307.24
June 2033	4,898,619.47	4,311,942.41	5,148,612.15	16,779,981.04
July 2033	4,832,638.48	4,253,810.12	5,079,263.93	16,553,871.23
August 2033	4,767,298.35	4,196,242.77	5,010,589.29	16,329,958.57
September 2033	4,702,593.53	4,139,235.45	4,942,582.36	16,108,223.94
October 2033	4,638,518.47	4,082,783.31	4,875,237.34	15,888,648.42
November 2033	4,575,067.71	4,026,881.50	4,808,548.48	15,671,213.22
December 2033	4,512,235.81	3,971,525.24	4,742,510.06	15,455,899.71
January 2034	4,450,017.39	3,916,709.77	4,677,116.43	15,242,689.41
February 2034	4,388,407.10	3,862,430.39	4,612,361.97	15,031,564.00
March 2034	4,327,399.65	3,808,682.42	4,548,241.11	14,822,505.32
April 2034	4,266,989.78	3,755,461.23	4,484,748.32	14,615,495.33
May 2034	4,207,172.28	3,702,762.22	4,421,878.14	14,410,516.17
June 2034	4,147,941.98	3,650,580.84	4,359,625.13	14,207,550.12
July 2034	4,089,293.76	3,598,912.56	4,297,983.90	14,006,579.59
August 2034	4,031,222.54	3,547,752.90	4,236,949.11	13,807,587.16
September 2034	3,973,723.27	3,497,097.43	4,176,515.46	13,610,555.54
October 2034	3,916,790.95	3,446,941.72	4,116,677.70	13,415,467.58
November 2034	3,860,420.64	3,397,281.41	4,057,430.62	13,222,306.29
December 2034	3,804,607.40	3,348,112.16	3,998,769.05	13,031,054.80
January 2035	3,749,346.37	3,299,429.68	3,940,687.87	12,841,696.39
February 2035	3,694,632.70	3,251,229.69	3,883,181.99	12,654,214.47
March 2035	3,640,461.62	3,203,507.97	3,826,246.37	12,468,592.61
April 2035	3,586,828.35	3,156,260.33	3,769,876.02	12,284,814.49
May 2035	3,533,728.18	3,109,482.60	3,714,065.98	12,102,863.95
June 2035	3,481,156.44	3,063,170.67	3,658,811.34	11,922,724.93
July 2035	3,429,108.49	3,017,320.44	3,604,107.21	11,744,381.53
August 2035	3,377,579.73	2,971,927.86	3,549,948.76	11,567,817.99
September 2035	3,326,565.59	2,926,988.90	3,496,331.21	11,393,018.65
October 2035	3,276,061.56	2,882,499.57	3,443,249.79	11,219,968.00

Distribution Date	Class CP	Class DP	Class EP	Class GP
November 2035	\$ 3,226,063.14	\$ 2,838,455.92	\$ 3,390,699.79	\$11,048,650.67
December 2035	3,176,565.90	2,794,854.03	3,338,676.53	10,879,051.38
January 2036	3,127,565.40	2,751,690.00	3,287,175.38	10,711,155.01
February 2036	3,079,057.29	2,708,959.98	3,236,191.75	10,544,946.56
March 2036	3,031,037.22	2,666,660.14	3,185,721.06	10,380,411.15
April 2036	2,983,500.90	2,624,786.68	3,135,758.79	10,217,534.02
May 2036	2,936,444.04	2,583,335.85	3,086,300.47	10,056,300.54
June 2036	2,889,862.43	2,542,303.91	3,037,341.64	9,896,696.19
July 2036	2,843,751.86	2,501,687.17	2,988,877.90	9,738,706.60
August 2036	2,798,108.17	2,461,481.94	2,940,904.87	9,582,317.48
September 2036	2,752,927.24	2,421,684.60	2,893,418.21	9,427,514.68
October 2036	2,708,204.98	2,382,291.54	2,846,413.62	9,274,284.17
November 2036	2,663,937.32	2,343,299.16	2,799,886.84	9,122,612.04
December 2036	2,620,120.24	2,304,703.94	2,753,833.63	8,972,484.48
January 2037	2,576,749.76	2,266,502.35	2,708,249.81	8,823,887.80
February 2037	2,533,821.90	2,228,690.89	2,663,131.21	8,676,808.44
March 2037	2,491,332.76	2,191,266.11	2,618,473.70	8,531,232.94
April 2037	2,449,278.43	2,154,224.57	2,574,273.21	8,387,147.94
May 2037	2,407,655.07	2,117,562.88	2,530,525.66	8,244,540.22
June 2037	2,366,458.83	2,081,277.66	2,487,227.04	8,103,396.65
July 2037	2,325,685.92	2,045,365.55	2,444,373.36	7,963,704.21
August 2037	2,285,332.59	2,009,823.25	2,401,960.67	7,825,450.00
September 2037	2,245,395.09	1,974,647.46	2,359,985.03	7,688,621.21
October 2037	2,205,869.74	1,939,834.92	2,318,442.56	7,553,205.17
November 2037	2,166,752.85	1,905,382.38	2,277,329.41	7,419,189.27
December 2037	2,128,040.79	1,871,286.65	2,236,641.75	7,286,561.05
January 2038	2,089,729.94	1,837,544.54	2,196,375.78	7,155,308.12
February 2038	2,051,816.74	1,804,152.89	2,156,527.74	7,025,418.22
March 2038	2,014,297.63	1,771,108.58	2,117,093.91	6,896,879.17
April 2038	1,977,169.10	1,738,408.50	2,078,070.58	6,769,678.90
May 2038	1,940,427.64	1,706,049.57	2,039,454.09	6,643,805.45
June 2038	1,904,069.81	1,674,028.75	2,001,240.79	6,519,246.95
July 2038	1,868,092.16	1,642,343.00	1,963,427.09	6,395,991.63
August 2038	1,832,491.31	1,610,989.33	1,926,009.41	6,274,027.83
September 2038	1,797,263.86	1,579,964.76	1,888,984.19	6,153,343.97
October 2038	1,762,406.49	1,549,266.34	1,852,347.93	6,033,928.58
November 2038	1,727,915.86	1,518,891.14	1,816,097.13	5,915,770.28
December 2038	1,693,788.69	1,488,836.27	1,780,228.34	5,798,857.78
January 2039	1,660,021.72	1,459,098.85	1,744,738.13	5,683,179.91
February 2039	1,626,611.71	1,429,676.02	1,709,623.10	5,568,725.57
March 2039	1,593,555.45	1,400,564.95	1,674,879.87	5,455,483.75
April 2039	1,560,849.76	1,371,762.85	1,640,505.10	5,343,443.54
May 2039	1,528,491.49	1,343,266.92	1,606,495.48	5,232,594.14
June 2039	1,496,477.50	1,315,074.42	1,572,847.72	5,122,924.81
July 2039	1,464,804.71	1,287,182.60	1,539,558.56	5,014,424.92
August 2039	1,433,470.02	1,259,588.75	1,506,624.76	4,907,083.92
September 2039	1,402,470.40	1,232,290.19	1,474,043.12	4,800,891.35
October 2039	1,371,802.81	1,205,284.25	1,441,810.47	4,695,836.85
November 2039	1,341,464.27	1,178,568.29	1,409,923.65	4,591,910.13
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Distribution Date	Class CP	Class DP	Class EP	Class GP
December 2039	\$ 1,311,451.79	\$ 1,152,139.67	\$ 1,378,379.53	\$ 4,489,100.99
January 2040	1,281,762.42	1,125,995.81	1,347,175.02	4,387,399.33
February 2040	1,252,393.25	1,100,134.13	1,316,307.05	4,286,795.12
March 2040	1,223,341.37	1,074,552.06	1,285,772.56	4,187,278.42
April 2040	1,194,603.91	1,049,247.08	1,255,568.53	4,088,839.36
May 2040	1,166,178.03	1,024,216.67	1,225,691.97	3,991,468.19
June 2040	1,138,060.88	999,458.33	1,196,139.92	3,895,155.20
July 2040	1,110,249.67	974,969.61	1,166,909.41	3,799,890.79
August 2040	1,082,741.63	950,748.04	1,137,997.54	3,705,665.42
September 2040	1,055,533.99	926,791.21	1,109,401.41	3,612,469.66
October 2040	1,028,624.02	903,096.69	1,081,118.14	3,520,294.13
November 2040	1,002,009.01	879,662.10	1,053,144.88	3,429,129.53
December 2040	975,686.29	856,485.08	1,025,478.82	3,338,966.67
January 2041	949,653.18	833,563.27	998,117.15	3,249,796.40
February 2041	923,907.04	810,894.34	971,057.11	3,161,609.68
March 2041	898,445.26	788,475.99	944,295.92	3,074,397.51
April 2041	873,265.23	766,305.93	917,830.88	2,988,151.01
May 2041	848,364.39	744,381.88	891,659.26	2,902,861.33
June 2041	823,740.17	722,701.60	865,778.39	2,818,519.73
July 2041	799,390.06	701,262.85	840,185.61	2,735,117.53
August 2041	775,311.53	680,063.43	814,878.28	2,652,646.12
September 2041	751,502.10	659,101.13	789,853.78	2,571,096.96
October 2041	727,959.31	638,373.78	765,109.52	2,490,461.60
November 2041	704,680.70	617,879.23	740,642.93	2,410,731.65
December 2041	681,663.85	597,615.33	716,451.45	2,331,898.79
January 2042	658,906.35	577,579.97	692,532.57	2,253,954.77
February 2042	636,405.83	557,771.04	668,883.77	2,176,891.41
March 2042	614,159.91	538,186.46	645,502.56	2,100,700.62
April 2042	592,166.25	518,824.16	622,386.49	2,025,374.34
May 2042	570,422.52	499,682.08	599,533.11	1,950,904.60
June 2042	548,926.42	480,758.21	576,940.00	1,877,283.51
July 2042	527,675.67	462,050.52	554,604.75	1,804,503.23
August 2042	506,668.00	443,557.01	532,524.99	1,732,555.98
September 2042	485,901.16	425,275.71	510,698.35	1,661,434.07
October 2042	465,372.92	407,204.65	489,122.49	1,591,129.86
November 2042	445,081.08	389,341.88	467,795.09	1,521,635.76
December 2042	425,023.45	371,685.48	446,713.85	1,452,944.29
January 2043	405,197.85	354,233.52	425,876.48	1,385,047.98
February 2043	385,602.13	336,984.12	405,280.73	1,317,939.46
March 2043	366,234.15	319,935.38	384,924.34	1,251,611.42
April 2043	347,091.81	303,085.45	364,805.10	1,186,056.58
May 2043	328,173.00	286,432.47	344,920.80	1,121,267.77
June 2043	309,475.64	269,974.61	325,269.26	1,057,237.85
July 2043	290,997.67	253,710.05	305,848.30	993,959.74
August 2043	272,737.05	237,636.98	286,655.77	931,426.44
September 2043	254,691.74	221,753.63	267,689.55	869,631.00
October 2043	236,859.74	206,058.22	248,947.53	808,566.51
November 2043	219,239.05	190,548.98	230,427.60	748,226.15
December 2043	201,827.70	175,224.19	212,127.69	688,603.15

Distribution Date	Class CP			Class DP	_	Class EP	_	Class GP
January 2044	\$	184,623.73	\$	160,082.11	\$	194,045.74	\$	629,690.78
February 2044		167,625.19		145,121.03		176,179.72		571,482.39
March 2044		150,830.17		130,339.25		158,527.58		513,971.37
April 2044		134,236.74		115,735.08		141,087.34		457,151.19
May 2044		117,843.02		101,306.87		123,857.00		401,015.34
June 2044		101,647.14		87,052.95		106,834.58		345,557.39
July 2044		85,647.22		76,486.57		90,018.14		290,770.97
August 2044		73,297.28		66,047.70		77,037.94		236,649.75
September 2044		61,096.86		55,735.14		64,214.89		183,187.46
October 2044		49,044.54		45,547.70		51,547.50		130,378.50
November 2044		37,138.93		35,607.73		39,034.31		103,657.43
December 2044		25,378.65		25,789.01		26,673.86		77,262.04
January 2045		13,762.32		16,412.66		14,464.71		51,189.25
February 2045		6,838.11		8,155.24		7,187.14		25,436.02
March 2045 and thereafter		0.00		0.00		0.00		0.00

Distribution Date	Class HP	Class JP	Classes FK, KF, PA and PL (in the aggregate)	Class AP
Initial Balance	\$111,361,512.00	\$18,864,649.00	\$145,248,253.00	\$195,632,373.00
December 2019	110,528,833.03	18,723,291.69	144,856,570.12	193,649,824.07
January 2020	109,700,108.29	18,582,606.21	144,414,578.74	191,676,656.92
February 2020	108,875,319.41	18,442,589.43	143,922,478.49	189,712,827.18
March 2020	108,054,448.11	18,303,238.25	143,380,517.80	187,758,290.70
April 2020	107,237,476.17	18,164,549.58	142,788,993.87	185,813,003.52
May 2020	106,424,385.48	18,026,520.32	142,148,252.47	183,876,921.88
June 2020	105,615,157.99	17,889,147.42	141,458,687.71	181,950,002.23
July 2020	104,809,775.73	17,752,427.83	140,720,741.70	180,032,201.21
August 2020	104,008,220.84	17,616,358.50	139,934,904.20	178,123,475.67
September 2020	103,210,475.51	17,480,936.42	139,101,712.07	176,223,782.66
October 2020	102,416,522.03	17,346,158.57	138,221,748.77	174,333,079.42
November 2020	101,626,342.75	17,212,021.95	137,295,643.69	172,451,323.39
December 2020	100,839,920.13	17,078,523.58	136,324,071.47	170,578,472.20
January 2021	100,057,236.68	16,945,660.50	135,307,751.17	168,714,483.69
February 2021	99,278,275.01	16,813,429.74	134,247,445.44	166,859,315.88
March 2021	98,503,017.79	16,681,828.36	133,143,959.54	165,012,927.00
April 2021	97,731,447.79	16,550,853.43	131,998,140.40	163,175,275.44
May 2021	96,963,547.83	16,420,502.03	130,810,875.45	161,346,319.82
June 2021	96,199,300.85	16,290,771.27	129,583,091.54	159,526,018.92
July 2021	95,438,689.82	16,161,658.25	128,315,753.67	157,714,331.74
August 2021	94,681,697.81	16,033,160.09	127,009,863.76	155,911,217.43
September 2021	93,928,307.98	15,905,273.94	125,666,459.24	154,116,635.37
October 2021	93,178,503.54	15,777,996.93	124,286,611.70	152,330,545.10
November 2021	92,432,267.79	15,651,326.23	122,871,425.39	150,552,906.36
December 2021	91,689,584.11	15,525,259.02	121,422,035.71	148,783,679.05
January 2022	90,950,435.95	15,399,792.48	119,939,607.66	147,022,823.29
February 2022	90,214,806.82	15,274,923.82	118,425,334.16	145,270,299.36
March 2022	89,482,680.33	15,150,650.24	116,880,434.47	143,526,067.73
April 2022	88,754,040.14	15,026,968.97	115,328,389.05	141,790,089.06
May 2022	88,028,870.02	14,903,877.25	113,792,939.45	140,062,324.17
June 2022	87,307,153.76	14,781,372.33	112,273,907.80	138,342,734.08
July 2022	86,588,875.28	14,659,451.48	110,771,118.06	136,631,279.99
August 2022	85,874,018.54	14,538,111.96	109,284,396.05	134,927,923.26
September 2022	85,162,567.57	14,417,351.07	107,813,569.38	133,232,625.45
October 2022	84,454,506.49	14,297,166.11	106,358,467.46	131,545,348.27
November 2022	83,749,819.48	14,177,554.39	104,918,921.46	129,866,053.64
December 2022	83,048,490.80	14,058,513.23	103,494,764.32	128,194,703.62
January 2023	82,350,504.77	13,940,039.97	102,085,830.71	126,531,260.48
February 2023	81,655,845.79	13,822,131.95	100,691,957.02	124,875,686.64
March 2023	80,964,498.33	13,704,786.55	99,312,981.34	123,227,944.70
April 2023	80,276,446.92	13,588,001.13	97,948,743.46	121,587,997.43
•	79,591,676.18	13,471,773.08	96,599,084.80	119,955,807.77
May 2023		13,356,099.79	95,263,848.47	119,933,807.77
June 2023	78,910,170.79			116,714,553.90
July 2023	78,231,915.48	13,240,978.67	93,942,879.20	
August 2023	77,556,895.08	13,126,407.14	92,636,023.30	115,105,416.44
September 2023	76,885,094.48	13,012,382.63	91,343,128.74	113,503,890.05

Distribution Date	Class HP	Class JP	Classes FK, KF, PA and PL (in the aggregate)	Class AP
October 2023	\$ 76,216,498.62	\$12,898,902.59	\$ 90,064,045.03	\$111,909,938.53
November 2023	75,551,092.53	12,785,964.47	88,798,623.26	110,323,525.83
December 2023	74,888,861.31	12,673,565.74	87,546,716.07	108,744,616.07
January 2024	74,229,790.10	12,561,703.87	86,308,177.63	107,173,173.54
February 2024	73,573,864.13	12,450,376.36	85,082,863.62	105,609,162.69
March 2024	72,921,068.70	12,339,580.70	83,870,631.25	104,052,548.13
April 2024	72,271,389.15	12,229,314.41	82,671,339.20	102,503,294.63
May 2024	71,624,810.93	12,119,575.00	81,484,847.61	100,961,367.14
June 2024	70,981,319.51	12,010,360.03	80,311,018.10	99,426,730.74
July 2024	70,340,900.46	11,901,667.02	79,149,713.72	97,899,350.71
August 2024	69,703,539.39	11,793,493.54	78,000,798.94	96,379,192.46
September 2024	69,069,222.00	11,685,837.16	76,864,139.66	94,866,221.57
October 2024	68,437,934.03	11,578,695.45	75,739,603.16	93,360,403.78
November 2024	67,809,661.31	11,472,066.00	74,627,058.11	91,861,704.98
December 2024	67,184,389.70	11,365,946.41	73,526,374.56	90,370,091.22
January 2025	66,562,105.17	11,260,334.31	72,437,423.89	88,885,528.72
February 2025	65,942,793.70	11,155,227.30	71,360,078.84	87,407,983.83
March 2025	65,326,441.39	11,050,623.02	70,294,213.48	85,937,423.07
April 2025	64,713,034.36	10,946,519.12	69,239,703.18	84,473,813.11
May 2025	64,102,558.80	10,842,913.25	68,196,424.60	83,017,120.78
June 2025	63,495,000.99	10,739,803.07	67,164,255.73	81,567,313.06
July 2025	62,890,347.24	10,637,186.27	66,143,075.78	80,124,357.07
August 2025	62,288,583.94	10,535,060.52	65,132,765.25	78,688,220.10
September 2025	61,689,697.53	10,433,423.52	64,133,205.88	77,258,869.58
October 2025	61,093,674.52	10,332,272.99	63,144,280.65	75,836,273.08
November 2025	60,500,501.48	10,231,606.64	62,165,873.76	74,420,398.34
December 2025	59,910,165.04	10,131,422.19	61,197,870.60	73,011,213.24
January 2026	59,322,651.88	10,031,717.39	60,241,716.96	71,608,685.80
February 2026	58,737,948.77	9,932,489.99	59,299,764.44	70,212,784.19
March 2026	58,156,042.51	9,833,737.74	58,371,808.38	68,823,476.74
April 2026	57,576,919.96	9,735,458.41	57,457,647.00	67,440,731.91
May 2026	57,000,568.07	9,637,649.78	56,557,081.40	66,064,518.30
June 2026	56,426,973.81	9,540,309.64	55,669,915.46	64,694,804.68
July 2026	55,856,124.25	9,443,435.78	54,795,955.86	63,331,559.94
August 2026	55,288,006.47	9,347,026.03	53,935,011.99	61,974,753.12
September 2026	54,722,607.65	9,251,078.20	53,086,895.95	60,624,353.40
October 2026	54,159,915.02	9,155,590.11	52,251,422.50	59,280,330.11
November 2026	53,599,915.85	9,060,559.60	51,428,408.99	57,942,652.72
December 2026	53,042,597.47	8,965,984.53	50,617,675.40	56,611,290.83
January 2027	52,487,947.30	8,871,862.75	49,819,044.23	55,286,214.18
February 2027	51,935,952.78	8,778,192.13	49,032,340.50	53,967,392.66
March 2027	51,386,601.41	8,684,970.54	48,257,391.70	52,654,796.30
April 2027	50,839,880.78	8,592,195.88	47,494,027.77	51,348,395.25
May 2027	50,295,778.49	8,499,866.05	46,742,081.06	50,048,159.81
June 2027	49,754,282.23	8,407,978.93	46,001,386.29	48,754,060.42
July 2027	49,734,282.23	8,316,532.47	45,271,780.53	47,466,067.65
August 2027	48,679,058.80	8,225,524.57	44,553,103.14	46,184,152.19
August 202/	40,079,030.00	0,44),)44.)/	44,773,103.14	40,104,132.19

Distribution Date	Class HP	Class JP	Classes FK, KF, PA and PL (in the aggregate)	Class AP
September 2027	\$ 48,145,307.26	\$ 8,134,953.17	\$ 43,845,195.79	\$ 44,911,111.75
October 2027	47,614,557.70	8,044,993.95	43,147,902.36	43,649,584.59
November 2027	47,088,647.64	7,955,855.99	42,461,068.96	42,399,472.81
December 2027	46,567,536.21	7,867,532.34	41,784,543.90	41,160,679.29
January 2028	46,051,182.86	7,780,016.12	41,118,177.60	39,933,107.72
February 2028	45,539,547.40	7,693,300.52	40,461,822.65	38,716,662.55
March 2028	45,032,589.92	7,607,378.74	39,815,333.69	37,511,249.03
April 2028	44,530,270.87	7,522,244.08	39,178,567.46	36,316,773.19
May 2028	44,032,551.01	7,437,889.87	38,551,382.71	35,133,141.82
June 2028	43,539,391.43	7,354,309.50	37,933,640.19	33,960,262.46
July 2028	43,050,753.51	7,271,496.42	37,325,202.67	32,798,043.43
August 2028	42,566,598.97	7,189,444.13	36,725,934.82	31,646,393.79
September 2028	42,086,889.84	7,108,146.18	36,135,703.26	30,505,223.34
October 2028	41,611,588.45	7,027,596.18	35,554,376.50	29,374,442.61
November 2028	41,140,657.43	6,947,787.77	34,981,824.92	28,253,962.88
December 2028	40,674,059.74	6,868,714.67	34,417,920.75	27,143,696.15
January 2029	40,211,758.62	6,790,370.64	33,862,538.02	26,043,555.14
February 2029	39,753,717.62	6,712,749.49	33,315,552.58	24,953,453.28
March 2029	39,299,900.58	6,635,845.08	32,776,842.02	23,873,304.71
April 2029	38,850,271.65	6,559,651.32	32,246,285.68	22,803,024.28
May 2029	38,404,795.24	6,484,162.17	31,723,764.62	21,742,527.53
June 2029	37,963,436.10	6,409,371.64	31,209,161.61	20,691,730.70
July 2029	37,526,159.21	6,335,273.80	30,702,361.05	19,650,550.69
August 2029	37,092,929.89	6,261,862.74	30,203,249.03	18,618,905.13
September 2029	36,663,713.71	6,189,132.62	29,711,713.24	17,596,712.27
October 2029	36,238,476.53	6,117,077.65	29,227,642.97	16,583,891.08
November 2029	35,817,184.48	6,045,692.08	28,750,929.10	15,580,361.15
December 2029	35,399,803.99	5,974,970.20	28,281,464.06	14,586,042.76
January 2030	34,986,301.74	5,904,906.36	27,819,141.80	13,600,856.83
February 2030	34,576,644.70	5,835,494.95	27,363,857.82	12,624,724.93
March 2030	34,170,800.10	5,766,730.41	26,915,509.07	11,657,569.27
April 2030	33,768,735.43	5,698,607.21	26,473,994.00	10,699,312.72
May 2030	33,370,418.46	5,631,119.89	26,039,212.49	9,749,878.74
June 2030	32,975,817.22	5,564,263.02	25,611,065.87	8,809,191.47
July 2030	32,584,900.01	5,498,031.20	25,189,456.87	7,877,175.63
August 2030	32,197,635.36	5,432,419.12	24,774,289.59	6,953,756.57
September 2030	31,813,992.10	5,367,421.45	24,365,469.54	6,038,860.26
October 2030	31,433,939.27	5,303,032.96	23,962,903.55	5,132,413.28
November 2030	31,057,446.21	5,239,248.44	23,566,499.79	4,234,342.80
December 2030	30,684,482.46	5,176,062.71	23,176,167.74	3,344,576.60
January 2031	30,315,017.86	5,113,470.66	22,791,818.20	2,463,043.04
February 2031	29,949,022.45	5,051,467.19	22,413,363.21	1,589,671.09
March 2031	29,586,466.56	4,990,047.28	22,040,716.09	724,390.27
April 2031	29,227,320.73	4,929,205.91	21,673,791.39	0.00
May 2031	28,871,555.76	4,868,938.13	21,312,504.91	0.00
June 2031	28,519,142.67	4,809,239.03	20,956,773.61	0.00
July 2031	28,170,052.74	4,750,103.72	20,606,515.69	0.00

Distribution Date	Class HP	Class JP	Classes FK, KF, PA and PL (in the aggregate)	Class AP
August 2031	\$ 27,824,257.47	\$ 4,691,527.36	\$ 20,261,650.48	\$ 0.00
September 2031	27,481,728.60	4,633,505.16	19,922,098.49	0.00
October 2031	27,142,438.11	4,576,032.36	19,587,781.37	0.00
November 2031	26,806,358.19	4,519,104.25	19,258,621.88	0.00
December 2031	26,473,461.26	4,462,716.12	18,934,543.91	0.00
January 2032	26,143,720.00	4,406,863.36	18,615,472.41	0.00
February 2032	25,817,107.27	4,351,541.35	18,301,333.43	0.00
March 2032	25,493,596.17	4,296,745.52	17,992,054.09	0.00
April 2032	25,173,160.04	4,242,471.35	17,687,562.54	0.00
May 2032	24,855,772.41	4,188,714.34	17,387,787.95	0.00
June 2032	24,541,407.04	4,135,470.04	17,092,660.54	0.00
July 2032	24,230,037.90	4,082,734.03	16,802,111.52	0.00
August 2032	23,921,639.19	4,030,501.93	16,516,073.07	0.00
September 2032	23,616,185.31	3,978,769.39	16,234,478.37	0.00
October 2032	23,313,650.86	3,927,532.10	15,957,261.56	0.00
November 2032	23,014,010.66	3,876,785.80	15,684,357.71	0.00
December 2032	22,717,239.76	3,826,526.22	15,415,702.84	0.00
January 2033	22,423,313.36	3,776,749.19	15,151,233.88	0.00
February 2033	22,132,206.92	3,727,450.51	14,890,888.67	0.00
March 2033	21,843,896.07	3,678,626.06	14,634,605.97	0.00
April 2033	21,558,356.65	3,630,271.74	14,382,325.38	0.00
May 2033	21,275,564.70	3,582,383.47	14,133,987.41	0.00
June 2033	20,995,496.45	3,534,957.23	13,889,533.39	0.00
July 2033	20,718,128.33	3,487,989.01	13,648,905.54	0.00
August 2033	20,443,436.97	3,441,474.84	13,412,046.87	0.00
September 2033	20,171,399.19	3,395,410.79	13,178,901.25	0.00
October 2033	19,901,991.99	3,349,792.95	12,949,413.32	0.00
November 2033	19,635,192.58	3,304,617.46	12,723,528.56	0.00
December 2033	19,370,978.33	3,259,880.47	12,501,193.22	0.00
January 2034	19,109,326.82	3,215,578.17	12,282,354.31	0.00
February 2034	18,850,215.82	3,171,706.80	12,066,959.64	0.00
March 2034	18,593,623.25	3,128,262.61	11,854,957.74	0.00
April 2034	18,339,527.24	3,085,241.88	11,646,297.91	0.00
May 2034	18,087,906.10	3,042,640.93	11,440,930.17	0.00
June 2034	17,838,738.31	3,000,456.10	11,238,805.28	0.00
July 2034	17,592,002.53	2,958,683.78	11,039,874.67	0.00
August 2034	17,347,677.60	2,917,320.37	10,844,090.53	0.00
September 2034	17,105,742.52	2,876,362.31	10,651,405.71	0.00
October 2034	16,866,176.49	2,835,806.07	10,461,773.74	0.00
November 2034	16,628,958.85	2,795,648.13	10,275,148.83	0.00
December 2034	16,394,069.14	2,755,885.03	10,091,485.87	0.00
January 2035	16,161,487.06	2,716,513.32	9,910,740.38	0.00
February 2035	15,931,192.46	2,677,529.58	9,732,868.53	0.00
March 2035	15,703,165.38	2,638,930.43	9,557,827.14	0.00
April 2035	15,477,386.02	2,600,712.49	9,385,573.64	0.00
May 2035	15,253,834.73	2,562,872.43	9,216,066.10	0.00
June 2035	15,032,492.04	2,525,406.96	9,049,263.16	0.00
June 20 <i>9)</i>	17,032,492.04	4,747,400.90	7,047,203.10	0.00

Distribution Date	Class HP	Class JP	Classes FK, KF, PA and PL (in the aggregate)	Class AP
July 2035	\$ 14,813,338.63	\$ 2,488,312.79	\$ 8,885,124.11	\$ 0.00
August 2035	14,596,355.35	2,451,586.66	8,723,608.80	0.00
September 2035	14,381,523.20	2,415,225.36	8,564,677.66	0.00
October 2035	14,168,823.33	2,379,225.68	8,408,291.71	0.00
November 2035	13,958,237.08	2,343,584.46	8,254,412.55	0.00
December 2035	13,749,745.89	2,308,298.55	8,103,002.30	0.00
January 2036	13,543,331.41	2,273,364.83	7,954,023.67	0.00
February 2036	13,338,975.41	2,238,780.20	7,807,439.89	0.00
March 2036	13,136,659.81	2,204,541.60	7,663,214.73	0.00
April 2036	12,936,366.70	2,170,645.99	7,521,312.50	0.00
May 2036	12,738,078.30	2,137,090.35	7,381,698.01	0.00
June 2036	12,541,776.98	2,103,871.69	7,244,336.60	0.00
July 2036	12,347,445.27	2,070,987.04	7,109,194.11	0.00
August 2036	12,155,065.83	2,038,433.46	6,976,236.87	0.00
September 2036	11,964,621.47	2,006,208.03	6,845,431.72	0.00
October 2036	11,776,095.14	1,974,307.85	6,716,745.97	0.00
November 2036	11,589,469.95	1,942,730.06	6,590,147.41	0.00
December 2036	11,404,729.11	1,911,471.82	6,465,604.30	0.00
January 2037	11,221,856.02	1,880,530.30	6,343,085.37	0.00
February 2037	11,040,834.17	1,849,902.69	6,222,559.81	0.00
March 2037	10,861,647.22	1,819,586.23	6,103,997.24	0.00
April 2037	10,684,278.95	1,789,578.17	5,987,367.75	0.00
May 2037	10,508,713.29	1,759,875.77	5,872,641.85	0.00
June 2037	10,334,934.29	1,730,476.33	5,759,790.49	0.00
July 2037	10,162,926.14	1,701,377.17	5,648,785.04	0.00
August 2037	9,992,673.15	1,672,575.61	5,539,597.31	0.00
September 2037	9,824,159.77	1,644,069.03	5,432,199.49	0.00
October 2037	9,657,370.59	1,615,854.81	5,326,564.20	0.00
November 2037	9,492,290.31	1,587,930.34	5,222,664.46	0.00
December 2037	9,328,903.77	1,560,293.06	5,120,473.67	0.00
January 2038	9,167,195.93	1,532,940.42	5,019,965.66	0.00
February 2038	9,007,151.87	1,505,869.88	4,921,114.59	0.00
	8,848,756.80	1,479,078.93	4,823,895.05	0.00
March 2038	8,691,996.07	1,452,565.08	4,728,281.96	0.00
May 2038	8,536,855.13	1,426,325.87	4,634,250.65	0.00
June 2038	8,383,319.56	1,400,358.85	4,541,776.77	0.00
July 2038	8,231,375.05	1,374,661.58	4,450,836.38	0.00
August 2038	8,081,007.42	1,349,231.68	4,361,405.84	0.00
September 2038	7,932,202.62	1,324,066.73	4,273,461.89	0.00
October 2038	7,784,946.70	1,299,164.39	4,186,981.61	0.00
November 2038	7,639,225.82	1,274,522.30	4,101,942.41	0.00
December 2038	7,495,026.28	1,250,138.14	4,018,322.03	0.00
_	, ,	1,226,009.59	3,936,098.55	0.00
January 2039	7,352,334.48	, ,		
February 2039	7,211,136.92	1,202,134.37	3,855,250.37	0.00
March 2039	7,071,420.25	1,178,510.21	3,775,756.20	0.00
April 2039	6,933,171.20	1,155,134.86	3,697,595.08	0.00
May 2039	6,796,376.62	1,132,006.09	3,620,746.35	0.00

Distribution Date	 Class HP	Class JP	Classes FK, KF, PA and PL n the aggregate)	 Class AP
June 2039	\$ 6,661,023.48	\$ 1,109,121.69	\$ 3,545,189.64	\$ 0.00
July 2039	6,527,098.84	1,086,479.45	3,470,904.92	0.00
August 2039	6,394,589.88	1,064,077.21	3,397,872.43	0.00
September 2039	6,263,483.90	1,041,912.80	3,326,072.69	0.00
October 2039	6,133,768.28	1,019,984.10	3,255,486.54	0.00
November 2039	6,005,430.52	998,288.97	3,186,095.10	0.00
December 2039	5,878,458.22	976,825.31	3,117,879.73	0.00
January 2040	5,752,839.10	955,591.03	3,050,822.12	0.00
February 2040	5,628,560.97	934,584.08	2,984,904.20	0.00
March 2040	5,505,611.73	913,802.39	2,920,108.17	0.00
April 2040	5,383,979.41	893,243.93	2,856,416.50	0.00
May 2040	5,263,652.12	872,906.69	2,793,811.93	0.00
June 2040	5,144,618.07	852,788.67	2,732,277.44	0.00
July 2040	5,026,865.59	832,887.87	2,671,796.27	0.00
August 2040	4,910,383.07	813,202.35	2,612,351.91	0.00
September 2040	4,795,159.04	793,730.14	2,553,928.10	0.00
October 2040	4,681,182.10	774,469.31	2,496,508.81	0.00
November 2040	4,568,440.96	755,417.95	2,440,078.25	0.00
December 2040	4,456,924.40	736,574.15	2,384,620.88	0.00
January 2041	4,346,621.33	717,936.03	2,330,121.38	0.00
February 2041	4,237,520.73	699,501.73	2,276,564.67	0.00
March 2041	4,129,611.68	681,269.38	2,223,935.87	0.00
April 2041	4,022,883.36	663,237.16	2,172,220.35	0.00
May 2041	3,917,325.01	645,403.23	2,121,403.68	0.00
June 2041	3,812,926.00	627,765.79	2,071,471.66	0.00
July 2041	3,709,675.77	610,323.05	2,022,410.30	0.00
August 2041	3,607,563.85	593,073.24	1,974,205.80	0.00
September 2041	3,506,579.86	576,014.58	1,926,844.58	0.00
October 2041	3,406,713.52	559,145.35	1,880,313.28	0.00
November 2041	3,307,954.60	542,463.79	1,834,598.71	0.00
December 2041	3,210,293.00	525,968.21	1,789,687.90	0.00
January 2042	3,113,718.68	509,656.88	1,745,568.07	0.00
February 2042	3,018,221.70	493,528.14	1,702,226.62	0.00
March 2042	2,923,792.18	477,580.29	1,659,651.15	0.00
April 2042	2,830,420.36	461,811.69	1,617,829.45	0.00
May 2042	2,738,096.52	446,220.69	1,576,749.48	0.00
June 2042	2,646,811.06	430,805.65	1,536,399.39	0.00
July 2042	2,556,554.44	415,564.96	1,496,767.50	0.00
August 2042	2,467,317.20	400,497.01	1,457,842.33	0.00
September 2042	2,379,089.98	385,600.22	1,419,612.54	0.00
October 2042	2,291,863.48	370,873.00	1,382,066.99	0.00
November 2042	2,205,628.48	356,313.79	1,345,194.68	0.00
December 2042	2,120,375.85	341,921.05	1,308,984.79	0.00
January 2043	2,036,096.53	327,693.23	1,273,426.68	0.00
February 2043	1,952,781.53	313,628.81	1,238,509.84	0.00
March 2043	1,870,421.95	299,726.28	1,204,223.93	0.00
April 2043	1,789,008.95	285,984.14	1,170,558.78	0.00

Distribution Date	Class HP	Class JP	Classes FK, KF, PA and PL (in the aggregate)	Class AP
May 2043	1,708,533.79	\$ 272,400.91	\$ 1,137,504.36	\$ 0.00
June 2043	1,628,987.78	258,975.11	1,105,050.79	0.00
July 2043	1,550,362.32	245,705.28	1,073,188.35	0.00
August 2043	1,472,648.86	232,589.98	1,041,907.46	0.00
September 2043	1,395,838.96	219,627.76	1,011,198.69	0.00
October 2043	1,319,924.21	206,817.21	981,052.74	0.00
November 2043	1,244,896.30	194,156.91	951,460.46	0.00
December 2043	1,170,746.99	181,645.47	922,412.86	0.00
January 2044	1,097,468.10	169,281.50	893,901.05	0.00
February 2044	1,025,051.51	157,063.62	865,916.29	0.00
March 2044	953,489.20	144,990.46	838,449.98	0.00
April 2044	882,773.19	133,060.68	811,493.65	0.00
May 2044	812,895.58	121,272.94	785,038.95	0.00
June 2044	743,848.54	109,625.90	759,077.66	0.00
July 2044	675,624.30	98,118.25	733,601.69	0.00
August 2044	608,215.16	86,748.69	708,603.07	0.00
September 2044	541,613.48	75,515.91	684,073.95	0.00
October 2044	475,811.70	64,418.63	660,006.60	0.00
November 2044	410,802.31	53,455.58	636,393.42	0.00
December 2044	346,577.87	42,625.50	613,226.91	0.00
January 2045	283,131.00	31,927.13	590,499.69	0.00
February 2045	220,454.39	21,359.24	568,204.50	0.00
March 2045	158,540.79	10,920.60	546,334.17	0.00
April 2045	97,383.01	5,426.04	524,881.68	0.00
May 2045	36,973.92	0.00	503,840.07	0.00
June 2045	0.00	0.00	483,202.53	0.00
July 2045	0.00	0.00	462,962.32	0.00
August 2045	0.00	0.00	443,112.82	0.00
September 2045	0.00	0.00	423,647.52	0.00
October 2045	0.00	0.00	404,559.99	0.00
November 2045	0.00	0.00	385,843.92	0.00
December 2045	0.00	0.00	367,493.07	0.00
January 2046	0.00	0.00	349,501.33	0.00
February 2046	0.00	0.00	331,862.66	0.00
March 2046	0.00	0.00	314,571.11	0.00
April 2046	0.00	0.00	297,620.85	0.00
May 2046	0.00	0.00	281,006.12	0.00
June 2046	0.00	0.00	264,721.24	0.00
July 2046	0.00	0.00	248,760.64	0.00
August 2046	0.00	0.00	233,118.82	0.00
September 2046	0.00	0.00	217,790.38	0.00
October 2046	0.00	0.00	202,769.98	0.00
November 2046	0.00	0.00	188,052.40	0.00
December 2046	0.00	0.00	173,632.46	0.00
January 2047	0.00	0.00	159,505.08	0.00
February 2047	0.00	0.00	145,665.28	0.00
March 2047	0.00	0.00	132,108.11	0.00

Distribution Date	Class HP	 Class JP	lasses FK, KF, PA and PL the aggregate)	Class AP
April 2047	\$ 0.00	\$ 0.00	\$ 118,828.74	\$ 0.00
May 2047	0.00	0.00	105,822.39	0.00
June 2047	0.00	0.00	93,084.38	0.00
July 2047	0.00	0.00	80,610.06	0.00
August 2047	0.00	0.00	68,394.90	0.00
September 2047	0.00	0.00	56,434.42	0.00
October 2047	0.00	0.00	44,724.20	0.00
November 2047	0.00	0.00	33,259.91	0.00
December 2047	0.00	0.00	22,037.27	0.00
January 2048	0.00	0.00	11,052.08	0.00
February 2048	0.00	0.00	300.19	0.00
March 2048 and thereafter	0.00	0.00	0.00	0.00

Underlying Certificates

Ginnie Mae I or II	==	==	==	==	П	==	= =	п	==	п	==	==	==	® ⊛	98	П	<u></u> ,	→ ⊢		П	==	==	= :	==	==	=	П	==	==	п	==	=	==	:
Approximate Weighted Average Loan Age of Mortgage Loans (in months)(3)	12.12	51	Z 5	25 25	51	12,32	22.7	75	27 25	(E)	64.5	7.12	23	<b>®</b> 3	38	15.	120	118	117	151	182	160	150	157	153	153	152	9 61	(E)	26	¥ &	1.32	¥ \$	* (
Weighted Average Remaining Term to Maturity of Mortgage Loans (in months)(3)	305	302	305	305	305	305	301	302	30°, 40°,	6	307	205	303	88	98	197	230	252	232	198	172	191	204	193	195	199	200	291	(E)	298	302 304	302	302 302	1
Approximate Weighted Average Coupon of Mortgage Loans(3)	3.883%	3.883	3.883	3.872	3.885	3.885	3.848	3.856	3.881 1881 1881	6	3.887	3.883	3.873	<b>®</b> 3	98	5.951	5.500	2,500	5.500	6.455	6.413	6.421	6.468	6.458	6.467	6.473	6.470	4,344	(12)	4.369	4.355	4.355	4.355	0004
Percentage of Class in Trust	100.00000000000000000000000000000000000	9.8131675000	61.4285720000	41.1764707336	47.3684213103	100.0000000000	100.0000000000	53.5210954602	47.3684220708 100.0000000000	100.0000000000	100.0000000000	0.1868325000	77.0258980785	100.0000000000	100.0000000000	100.0000000000	100.0000000000	100.0000000000	100.0000000000	100.0000000000	100.00000000000	100.0000000000	77.1527213647	100.00000000000	100.0000000000	100,0000000000	100,00000000000	100.00000000000	68.8490460419	100.0000000000	2.1372023091	97.8627976909	77.5245565031	0/00/04000
Principal or Notional Balance in Trust	\$ 47,026,052	7,360,043	23,036,239	18,504,369	28,611,549	111,267,137	53,218,554	52,893,532	14,423,589	147,857,155	149,227,535	140 177	65,441,387	13,828,098	18.720.850	24,223,506	10,066,901	951,205	9,291.847	1,475,744	2,170,946	1.915.067	1,114,290	1,011,795	1,562,761	1,064,126	2,046,487	87,123,259	86 298 689	143,509,969	7,257,620	332,327,464	36,851,551	
Underlying Certificate Factor(2)	0.38000850	0.37500854	0.37500854	0.37008738	0.36969511	0.36969511	0.29721389	0.36604521	0.36815545	0.34129888	0.39270404	0.2/200629	0.35488822	0.67454141	0.73345628	0.90475479	0.21826526	0.2200//45	0.37114955	0.14146170	0.27311851	0.18211975	0.14665575	0.15922917	0.1302139	0.15565316	0.16129817	0.42746744	0.43002130	0.43244768	0.43966155	0.43966155	0.43966155	((100/0410
Original Principal or Notional Balance of Class	\$123,750,000	200,000,000	100,000,000	121,428,571	163,383,714	300,970,000	179,058,101	269,987,000	82,709,084	433,218,989	380,000,000	200,000,000	239,400,000	20,500,000	25 524 153	26,773,560	46,122,322	4,251,252	25,035,318	10,432,109	7,948,731	10,515,430	9,848,000	0,354,335	11,369,300	6,836,518	12,687,604	203,812,620	304 645 566	331,855,101	04,662,764	-		
Principal Type(1)	PAC	PAC	NTL(PAC)	PAC NTL(PAC)	NTL(PAC)	PAC	SC/PT/PAC	PAC	NTL(PAC) PAC	PAC	PAC	PAC	PAC	SC/PT/SEQ	PT	PT	M	PACI	PT/PAC I	PT	T P	PT	FI	PI.	PT	PT	PT	PAC	SC/PAC		PAC I/AD	PAC I/AD	NTL(PAC L/AD)	
Final Distribution Date	September 2045 September 2045	September 2045	September 2045	August 2045 August 2045	September 2045	September 2045	July 2045	August 2045	August 2045 August 2045	July 2045	October 2045	September 2045	August 2045	June 2046	November 2047 May 2048	May 2049	August 2043	December 2041	August 2043	June 2043	July 2043 July 2043	July 2043	July 2043	August 2043	August 2043 Angust 2043	September 2043	October 2043	August 2045	August 2045	August 2045	September 2045 November 2045	September 2045	September 2045 NTL(PAC L/AD) September 2045 NTL(PAC L/AD)	
Interest Type(1)	FIX	HX	FIX/IO	FIX/IO	FIX/IO	FIX	ΞĚ	FIX	FIX/IO	FIX	FIX	A K	E X	XI.	Y E	FIX	FLT	FLI	ELT	FLT/DLY	FLT/DLY	FLT/DLY	FLT/DLY	FLT/DLY	FLI/DLI FLT/DLY	FLT/DLY	FLT/DLY	XI E	Y K	FIX	FIX	Ε	FIX/IO FIX/IO	
Interest	1.80%	1.75	3.50	3.50	3.50	1.60	2.00	1.90	3.50 1.60	1.80	1.65	 	2.50	2.75	3.25	3.00	<u>@</u> 9	99	99	:@:	<u></u>	99	99	99	99	9	9	1.7	. 6	1.60	1.60	1.60	4.00 0.04	2
CUSIP Number	38379QKK0		38379QLR4	38379MMK7	38379QHG3	38379QHN8	38379MFT6	38379MRZ9	38379MIMQ4 38379MIMR2	38379NQB1	38379Q5N1	38379OIM5	38379MVK7	38380KTD7	38380WM48	38381VSU5	38378WFY4	385/8VD44	38378VL29	38378TXC9	38378VSE0	38378VOW8	38378VIE3	38378WGE7	38378VY74	38378WS61	38378UNG8	38379MSV7	38379MPD0	38379MNL4			38379QFQ3 38379OFR1	
Issue Date	September 30, 2015 September 30, 2015	September 30, 2015	September 30, 2015	August 28, 2015 August 28, 2015	September 30, 2015	September 30, 2015	July 30, 2015	August 28, 2015	August 28, 2015 August 28, 2015	July 30, 2015	October 30, 2015	September 30, 2015 September 30, 2015	August 28, 2015	November 30, 2017	November 50, 2017 May 30, 2018	May 30, 2019	August 29, 2013	August 29, 2015	August 29, 2013	June 28, 2013	July 30, 2013 July 30, 2013	July 30, 2013	July 30, 2013	August 29, 2013	August 29, 2013 Angust 29, 2013	September 30, 2013	October 30, 2013	August 28, 2015	August 28, 2015	August 28, 2015	September 30, 2015 November 30, 2015	September 30, 2015	September 30, 2015 September 30, 2015	
Class	CD(4)(5)	_	NI(4)(5)	10(5)	J(4)(5)	PG(4)(5)	PE(4)(5)	PA(4)(5)	JJ(5) PJ(5)	GP(4)(5)(7)	NJ(4)(5)	ND(4)(5)		_	6J(4J(9) GA(5)(10)			ΨĦ	MF(4)	H	FK(5)	KF(5)	BF(5)	AF DE(E)	WF(5)	FW	WF	EP(4)	FP(4)(12)				<u>Z</u> 2	
Series	2015-131	2015-131	2015-131	2015-111	2015-126	2015-126	2015-103	2015-112	2015-111	2015-095	2015-153	2015-151	2015-119	2017-163	201-/102	2019-057	2013-114	2015-116	2013-116	2013-090	2013-099	2013-099	2013-104	2013-114	2013-1114	2013-129	2013-147	2015-112	2015-132	2015-111	2015-126	2015-126	2015-126	
Issuer	Ginnie Mae		Ginnie Mae			Ginnie Mae			Ginnie Mae Ginnie Mae		Ginnie Mae	Ginnie Mae			Ginnie Mae Ginnie Mae			Ginnie Mae			Ginnie Mae			Ginnie Mae				Ginnie Mae	Ginnie Mae		Ginnie Mae		Ginnie Mae Ginnie Mae	
Trust Asset Group or Subgroup	1A 1A	1A	1A 11	19 EP	1C	21	E	1F	1 1 2 1	H	п:	<b>-</b> =	ίĶ	2.5	C 4	·ν		\ r	· [~	- 00	တ္တ	o oo	<b>x</b>	oc o	0 00	· 00	\$	10A	10B	10B	10B	11	===	:

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

Underlying Certificate Factors are as of November 2019.

Based on information as of November 2019.

More than 10% of the Mortgage Loans underlying this Underlying Certificate may be higher balance Mortgage Loans. See "Risk Factors" in this Supplement. (2) Underlying(3) Based on in(4) MX Class.(5) More than 1

- The Interest Rate will be calculated or described under "Terms Sheet Interest Rates" in the related Underlying Certificate Disclosure Document. 9
  - Ginnie Mae 2015-095 Class GP is an MX Class that is derived from REMIC Classes of separate Security Groups, which are backed by certain mortgage loans whose approximate weighted average characteristics are as follows: 0

Approximate Weighted Average Loan Age of Mortgage Loans (in months)(3)	57
Average Remaining Term to Mortgage Loans (in months)(3)	299 304
Approximate Weighted Average Coupon of Mortgage Loans(3)	3.841% 3.853
Trust Asset Group	1 4
Series	2015-095

Group 15 and Class AH from Security Group 16. Ginnie Mae 2017-163 Class AH is backed by a previously issued MX Certificate, Class PD from Ginnie Mae 2003-085. Ginnie Mae 2017-163 Class LA is related to separate Trust Asset Subgroups. These Trust Asset Subgroups and Ginnie Mae 2017-163 Class AK is an MX Class that is derived from REMIC Classes of separate Security Groups, Class LA from Security previously issued certificates are backed by certain mortgage loans whose approximate weighted average characteristics are as follows: 8

Ginnie Mae I or II	П	П	Ι	Ι	Ι	П	П	П	П	П	П	П	П	П	Ι	Ι	П	Ι	Ι	Ι	Ι	Ι	Ι	Ι	Ι
Approximate Weighted Average Loan Age of Mortgage Loans (in months)(3)	195	115	144	118	132	174	150	174	265	191	254	276	293	136	170	176	168	141	167	151	147	149	206	275	306
Approximate Weighted Average Average Remaining Term to Maturity of Mortgage Loans (in	154	237	207	232	45	173	209	95	9/	158	76	9/	09	222	182	171	190	208	179	202	208	208	151	79	20
Approximate Weighted Average Coupon of Mortgage Loans(3)	6.400%	5.000	000'9	5.500	6.500	5.626	5.990	5.912	6.924	7.045	7.720	8.228	8.793	6.150	5.900	000'9	6.100	6.150	6.200	6.250	6.300	6.350	6.500	7.000	7.500
Class or Trust Asset Subgroup	PD	15A	15B	15C	15D	15F	15G	15H	151	15J	15K	15L	15M	15N	150	15Q	15R	15S	15T	15U	15V	15W	15X	15Y	15Z
Series	2003-085	2017-163	2017-163	2017-163	2017-163	2017-163	2017-163	2017-163	2017-163	2017-163	2017-163	2017-163	2017-163	2017-163	2017-163	2017-163	2017-163	2017-163	2017-163	2017-163	2017-163	2017-163	2017-163	2017-163	2017-163

Group 1 and Class CJ from Security Group 2. Ginnie Mae 2017-163 Class CJ is backed by a previously issued REMIC Certificate, Class NP from Ginnie Mae 2011-024. These previously issued certificates are backed by certain mortgage loans whose approximate weighted aver-Ginnie Mae 2017-163 Class BJ is an MX Class that is derived from REMIC Classes of separate Security Groups, Class AJ from Security age characteristics are as follows: 6

		nie	:⊨I		
		S S	orII		_
Approximate	Average Loan Age of	Mortgage	months)(3)	114	127
Approximate Weighted Average	Term to Maturity of	Mortgage Loane (in	months)(3)	237	224
,	Approximate Weighted Average	Coupon of	Loans(3)	4.927%	0055
			Class	NP	ΔI
			Series	2011-024	2017-163

(10) Ginnie Mae 2018-065 Class GA is a REMIC Class that is related to separate Trust Asset Subgroups that are backed by certain mortgage loans whose approximate weighted average characteristics are as follows:

Ginnie Mae I or II	П	Ι	_
Approximate Weighted Average Loan Age of Mortgage Loans (in months)(3)	119	123	184
Approximate Weighted Average Remaining Term to Maturity of Mortgage Loans (in months)(3)	195	230	163
Approximate Weighted Average Coupon of Mortgage Loans(3)	4.865%	5.000	0009
Trust Asset Subgroup	5A	5B	200
Series	2018-065	2018-065	2018-065

group 2B is backed by previously issued MX certificates, Classes AI and BP from Ginnie Mae 2015-055. These Trust Asset Subgroups and (11) Ginnie Mae 2015-152 Class PA is a REMIC Class that is related to separate Trust Asset Subgroups. Ginnie Mae 2015-152 Trust Asset Subpreviously 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)	61	09
Weighted Average Remaining Term to Maturity of Mortgage Loans (in months)(3)	291	292
Approximate Weighted Average Coupon of Mortgage Loans(3)	4.346%	4.342
Classes or Trust Asset Subgroup	AI and BP	2A
Series	2015-055	2015-152

(12) Ginnie Mae 2015-111 Class EP is an MX Class that is derived from REMIC Classes of separate Security Groups, Class XP from Security Group 6. Ginnie Mae 2015-111 Class XP is backed by a previously issued MX Certificate, Class TW from Ginnie Mae 2015-080. 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)	59 55
Wetrage Average Remaining Term to Manurity of Mortgage Loans (in months)(3)	294 300
Approximate Weighted Average Coupon of Mortgage Loans(3)	4.361% 4.359
Class	TW
Series	2015-080 2015-111



\$2,248,978,710

# **Government National Mortgage Association**

# **GINNIE MAE®**

Guaranteed REMIC
Pass-Through Securities
and MX Securities
Ginnie Mae REMIC Trust 2019-136

OFFERING CIRCULAR SUPPLEMENT November 22, 2019

J.P. Morgan

Mischler Financial Group, Inc.