

# \$962,273,785 Government National Mortgage Association GINNIE MAE®

# Guaranteed REMIC Pass-Through Securities and MX Securities Ginnie Mae REMIC Trust 2019-005

#### The Securities

The Trust will issue the Classes of Securities listed on the front cover of this offering circular supplement.

#### The Ginnie Mae Guaranty

Ginnie Mae will guarantee the timely payment of principal and interest on the securities. The Ginnie Mae Guaranty is backed by the full faith and credit of the United States of America.

#### The Trust and its Assets

The Trust will own (1) Ginnie Mae Certificates and (2) certain previously issued certificates.

The securities may not be suitable investments for you. You should consider carefully the risks of investing in them.

See "Risk Factors" beginning on page S-10 which highlights some of these risks.

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

nie Mae Remic Trust 2019-005								
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								
CA	\$ 8,143,000	3.50%	SUP/AD	FIX	38381BZL1	January 2049		
CD	4,218,000	3.50	PAC II	FIX	38381BZM9	January 2049		
CZ	2,776	3.50	SUP	FIX/Z	38381BZN7	January 2049		
FA	53,264,776	(5)	PT	FLT	38381BZP2	January 2049		
P	40,155,000	3.50	PAC I/AD	FIX	38381BZQ0	July 2048		
SA	53,264,776	(5)	NTL(PT)	INV/IO	38381BZR8	January 2049		
Z	746,000	3.50	PAC I	FIX/Z	38381BZS6	January 2049		
Security Group 2						-		
AB	64,130,892	3.50	PT	FIX	38381BZT4	January 2049		
IO(1)	14,251,309	4.50	NTL(PT)	FIX/IO	38381BZU1	January 2049		
Security Group 3			, ,					
Α	35,457,000	3.25	SEQ/AD	FIX	38381BZV9	August 2047		
AI	10,212,799	4.50	NTL(PT)	FIX/IO	38381BZW7	January 2049		
ZB	1,309,077	3.25	SEQ	FIX/Z	38381BZX5	January 2049		
Security Group 4								
AC	42,500,000	3.35	SEQ	FIX	38381BZY3	October 2045		
AF(1)	2,125,000	(5)	SEQ	FLT	38381BZZ0	October 2045		
AS(1)	2,125,000	(5)	NTL(SEQ)	INV/IO	38381BA20	October 2045		
FC(1)	28,472,675	(5)	PT	FLT	38381BA38	January 2049		
SC(1)	28,472,675	(5)	NTL(PT)	INV/IO	38381BA46	January 2049		
VA(1)	3,999,000	3.50	SEQ/AD	FIX	38381BA53	April 2030		
VZ(1)	8,321,350	3.50	SEQ	FIX/Z	38381BA61	January 2049		
Security Group 5								
EA	2,800,000	4.00	SUP	SUP FIX		January 2049		
EF	2,483,133	(5)	SUP	FLT/DLY	38381BA87	January 2049		
EJ	3,034,941	3.50	SUP	FIX	38381BA95	January 2049		
ES	551,808	(5)	SUP	INV/DLY	38381BB29	January 2049		
PE	50,000,000	3.50	PAC	FIX	38381BB37	October 2045		
PI	6,250,000	4.00	NTL(PAC)	FIX/IO	38381BB45	October 2045		
V(1)	5,377,000	4.00	PAC/AD	FIX	38381BB52	March 2030		
ZA(1)	9,598,861	4.00	PAC	FIX/Z	38381BB60	January 2049		
Security Group 6								
FH	87,874,148	(5)	PT	FLT	38381BB78	January 2049		
KD	5,024,000	3.50	PAC II	FIX	38381BB86	January 2049		
KV	9,828,000	3.50	SUP/AD	FIX	38381BB94	January 2049		
KZ	2,846	3.50	SUP	FIX/Z	38381BC28	January 2049		
PB	70,203,000	3.50	PAC I/AD	FIX	38381BC36	November 2047		
SH	87,874,148	(5)	NTL(PT)	INV/IO	38381BC44	January 2049		
ZP	2,816,302	3.50	PAC I	FIX/Z	38381BC51	January 2049		
Security Group 7								
YF	100,000,000	(5)	PT	FLT	38381BC69	January 2049		
YS	100,000,000	(5)	NTL(PT)	INV/IO	38381BC77	January 2049		
Security Group 8								
DA	40,920,518	3.25	SC/SEQ	FIX	38381BC85	February 2045		
DI(1)	11,642,074	4.50	NTL(SC/PT)	FIX/IO	38381BC93	May 2041		
DO	928,484	0.00	SC/PT	PO	38381BD27	February 2045		
DZ	3,080,039	3.25	SC/SEQ	FIX/Z	38381BD35	February 2045		

(Cover continued on next page)

### J.P. Morgan

#### Mischler Financial Group, Inc.

Class of REMIC Securities	Original Principal Balance(2)	Interest Rate	Principal Type(3)	Interest Type(3)	CUSIP Number	Final Distribution Date(4)	
Security Group 9							
AM	\$100,000,000	3.50%	PT	FIX	38381BD43	January 2049	
FM	100,000,000	(5)	PT	FLT	38381BD50	January 2049	
SM	100,000,000	(5)	NTL(PT)	INV/IO	38381BD68	January 2049	
Security Group 10							
Jl	18,166,129	5.00	NTL(SC/PT)	FIX/IO	38381BD76	July 2044	
Security Group 11							
BO	460,776	0.00	SC/PT	PO	38381BD84	December 2039	
EB	59,533,242	3.25	SC/SEQ/AD	FIX	38381BD92	May 2047	
EZ	1,277,015	3.25	SC/SEQ	FIX/Z	38381BE26	January 2049	
MI	7,048,085	4.00	NTL(PT)	FIX/IO	38381BE34	January 2049	
Security Group 12							
VB(1)	4,425,479	3.50	SC/AD/SEQ	FIX	38381BE42	November 2048	
ZC(1)	9,209,647	3.50	SC/SEQ	FIX/Z	38381BE59	November 2048	
Residual							
RR	0	0.00	NPR	NPR	38381BE67	January 2049	

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

#### **AVAILABLE INFORMATION**

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

- this Offering Circular Supplement (this "Supplement"),
- the Base Offering Circular and
- in the case of the Group 8, 10, 11 and 12 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:** January 30, 2019

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

#### **Trust Assets:**

Trust Asset Group or Subgroup <sup>(2)</sup>	Trust Asset Type	Certificate Rate	Original Term To Maturity (in years)
1	Ginnie Mae II	5.000%	30
2	Ginnie Mae II	4.500%	30
3	Ginnie Mae I	4.500%	30
4	Ginnie Mae II	4.500%	30
5	Ginnie Mae II	4.000%	30
6	Ginnie Mae II	5.000%	30
7	Ginnie Mae II	4.500%	30
8A	Underlying Certificate	(1)	(1)
8B	Underlying Certificates	(1)	(1)
9	Ginnie Mae II	5.000%	30
10	Underlying Certificates	(1)	(1)
11A	Ginnie Mae II	4.000%	30
11B	Underlying Certificate	(1)	(1)
11C	Underlying Certificate	(1)	(1)
12	Underlying Certificates	(1)	(1)

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

<sup>(2)</sup> The Group 8 and 11 Trust Assets consist of subgroups, Subgroup 8A, Subgroup 8B, Subgroup 11A, Subgroup 11B and Subgroup 11C, respectively (each, a "Subgroup").

**Security Groups:** This series of Securities consists of multiple Security Groups (each, a "Group"), as shown on the front cover of this Supplement and on Schedule I to this Supplement. Except in the case of a certain MX Class in Groups 2 and 8, payments on each Group will be based solely on payments on the Trust Asset Group with the same numerical designation.

## Assumed Characteristics of the Mortgage Loans Underlying the Group 1, 2, 3, 4, 5, 6, 7 and 9 and Subgroup 11A Trust Assets<sup>(1)</sup>:

Principal Balance	Weighted Average Remaining Term to Maturity (in months)	Weighted Average Loan Age (in months)	Weighted Average Mortgage Rate <sup>(2)</sup>
<b>Group 1 Trust Assets</b> \$106,529,552	358	1	5.484%
<b>Group 2 Trust Assets</b> \$64,130,892	241	109	4.930%
<b>Group 3 Trust Assets</b> \$36,766,077	246	104	5.000%
Group 4 Trust Assets \$85,418,025	356	3	4.926%
<b>Group 5 Trust Assets</b> \$73,845,743 <sup>(3)</sup>	358	1	4.499%
<b>Group 6 Trust Assets</b> \$ 71,903,350 103,844,946	356 351	2 6	5.452% 5.423%
\$175,748,296	U		J. 1.
<b>Group 7 Trust Assets</b> \$100,000,000	358	1	4.984%
<b>Group 9 Trust Assets</b> \$200,000,000	358	1	5.468%
<b>Subgroup 11A Trust Assets</b> \$28,744,220	203	142	4.456%

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

The actual remaining terms to maturity, loan ages and, in the case of the Group 1, 2, 4, 5, 6, 7 and 9 and the Subgroup 11A Trust Assets, Mortgage Rates of many of the Mortgage Loans underlying the Group 1, 2, 3, 4, 5, 6, 7 and 9 and the Subgroup 11A Trust Assets will differ from the weighted averages shown above, perhaps significantly. See "The Trust Assets — The Mortgage Loans" in this Supplement.

<sup>&</sup>lt;sup>(2)</sup> The Mortgage Loans underlying the Group 1, 2, 4, 5, 6, 7 and 9 and the Subgroup 11A Trust Assets may bear interest at rates ranging from 0.25% to 1.50% per annum above the related Certificate Rate.

<sup>(3)</sup> More than 10% of the Mortgage Loans underlying the Group 5 Trust Assets may be higher balance Mortgage Loans. *See "Risk Factors" in this Supplement.* 

Characteristics of the Mortgage Loans Underlying the Group 8, 10 and 12 and the Subgroup 11B and 11C Trust Assets: See Exhibit A to this Supplement for certain information regarding the characteristics of the Mortgage Loans included in the related Underlying Trusts.

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

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

**Increased Minimum Denomination Classes:** Each Class that constitutes a Principal Only, Interest Only or Inverse Floating Rate Class. *See "Description of the Securities — Form of Securities" in this Supplement.* 

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

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

Class	Interest Rate Formula(1)	Initial Interest Rate(2)	Minimum Rate	Maximum Rate	Delay (in days)	LIBOR for Minimum Interest Rate
AF	LIBOR + 0.35%	2.86300%	0.35%	6.50000000%	0	0.000000%
AS	6.15% - LIBOR	3.63700%	0.00%	6.15000000%	0	6.150000%
EF	LIBOR + 1.00%	3.51400%	1.00%	5.500000000%	19	0.000000%
ES	20.24998097% - (LIBOR × 4.49999457)	8.93699%	0.00%	20.24998097%	19	4.500001%
FA	LIBOR + 0.40%	2.87900%	0.40%	6.500000000%	0	0.000000%
FB	LIBOR + 0.35%	2.86300%	0.35%	6.500000000%	0	0.000000%
FC	LIBOR + 0.35%	2.86300%	0.35%	6.500000000%	0	0.000000%
FH	LIBOR + 0.35%	2.86300%	0.35%	6.500000000%	0	0.000000%
FM	LIBOR + 0.40%	2.91400%	0.40%	6.500000000%	0	0.000000%
SA	6.10% - LIBOR	3.62100%	0.00%	6.10000000%	0	6.100000%
SB	6.15% — LIBOR	3.63700%	0.00%	6.150000000%	0	6.150000%
SC	6.15% — LIBOR	3.63700%	0.00%	6.150000000%	0	6.150000%
SH	6.15% - LIBOR	3.63700%	0.00%	6.15000000%	0	6.150000%
SM	6.10% - LIBOR	3.58600%	0.00%	6.10000000%	0	6.100000%
YF	LIBOR + 0.70%	3.21550%	0.70%	4.500000000%	0	0.000000%
YS	3.80% - LIBOR	1.28450%	0.00%	3.80000000%	0	3.800000%

<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.

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

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

#### **SECURITY GROUP 1**

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

- The CZ Accrual Amount, sequentially, to CA and CZ, in that order, until retired
- The Z Accrual Amount, sequentially, to P and Z, in that order, until retired
- The Group 1 Principal Distribution Amount, concurrently, as follows:
  - 1. 50% to FA, until retired
  - 2. 50% in the following order of priority:
  - a. Sequentially, to P and Z, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
    - b. To CD, until reduced to its Scheduled Principal Balance for that Distribution Date
    - c. Sequentially, to CA and CZ, in that order, until retired
    - d. To CD, without regard to its Scheduled Principal Balance, until retired
  - e. Sequentially, to P and Z, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired

#### **SECURITY GROUP 2**

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

#### **SECURITY GROUP 3**

The Group 3 Principal Distribution Amount and the ZB Accrual Amount will be allocated, sequentially, to A and ZB, in that order, until retired

#### **SECURITY GROUP 4**

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

- The VZ Accrual Amount, sequentially, to VA and VZ, in that order, until retired
- The Group 4 Principal Distribution Amount, concurrently, as follows:
  - 1. 33.3333333333% to FC, until retired
  - 2. 66.666666667% in the following order of priority:
    - a. Concurrently, to AC and AF, pro rata, until retired
    - b. Sequentially, to VA and VZ, in that order, until retired

#### **SECURITY GROUP 5**

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

- The ZA Accrual Amount, sequentially, to V and ZA, in that order, until retired
- The Group 5 Principal Distribution Amount in the following order of priority:
- 1. Sequentially, to PE, V and ZA, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
  - 2. Concurrently, to EA, EF, EJ and ES, pro rata, until retired
- 3. Sequentially, to PE, V and ZA, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired

#### **SECURITY GROUP 6**

The Group 6 Principal Distribution Amount, the KZ Accrual Amount and the ZP Accrual Amount will be allocated, as follows:

- The KZ Accrual Amount, sequentially, to KV and KZ, in that order, until retired
- The ZP Accrual Amount, sequentially, to PB and ZP, in that order, until retired
- The Group 6 Principal Distribution Amount, concurrently, as follows:
  - 1. 50% to FH, until retired
  - 2. 50% in the following order of priority:
  - a. Sequentially, to PB and ZP, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
    - b. To KD, until reduced to its Scheduled Principal Balance for that Distribution Date
    - c. Sequentially, to KV and KZ, in that order, until retired
    - d. To KD, without regard to its Scheduled Principal Balance, until retired
  - e. Sequentially, to PB and ZP, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired

#### **SECURITY GROUP 7**

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

#### **SECURITY GROUP 8**

The Subgroup 8A Principal Distribution Amount, the Subgroup 8B Principal Distribution Amount and the DZ Accrual Amount will be allocated, as follows:

- The DZ Accrual Amount, sequentially, to DA and DZ, in that order, until retired
- 30.7692307692% of the Subgroup 8A Principal Distribution Amount to DO, until retired
- The remainder of the Subgroup 8A Principal Distribution Amount and the Subgroup 8B Principal Distribution Amount, sequentially, to DA and DZ, in that order, until retired

#### **SECURITY GROUP 9**

The Group 9 Principal Distribution Amount will be allocated, concurrently, to AM and FM, pro rata, until retired

#### **SECURITY GROUP 11**

The Subgroup 11A Principal Distribution Amount, the Subgroup 11B Principal Distribution Amount, the Subgroup 11C Principal Distribution Amount and the EZ Accrual Amount will be allocated, as follows:

- The EZ Accrual Amount, sequentially, to EB and EZ, in that order, until retired
- 7.6922961348% of the Subgroup 11B Principal Distribution Amount to BO, until retired
- The Subgroup 11A Principal Distribution Amount, the remainder of the Subgroup 11B Principal Distribution Amount and the Subgroup 11C Principal Distribution Amount, to EB and EZ, in that order, until retired

#### **SECURITY GROUP 12**

The Group 12 Principal Distribution Amount and the ZC Accrual Amount will be allocated, sequentially, to VB and ZC, 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	
PE, V and ZA (in the aggregate)	250% PSA through 350% PSA
PAC I Classes	
P and Z (in the aggregate)	150% PSA through 300% PSA
PB and ZP (in the aggregate)	150% PSA through 250% PSA
PAC II Classes	
CD	195% PSA through 300% PSA
KD	180% 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 Balance or the outstanding principal or notional balance of the related Trust Asset Group, Subgroup or Subgroups indicated:

Class	Original Class Notional Balance	Represents Approximately
AI	\$ 10,212,799	27.77777778% of the Group 3 Trust Assets
AS	2,125,000	100% of AF (SEQ Class)
DI	11,642,074	27.777777778% of the Subgroup 8B Trust Assets
IO	14,251,309	22.222222222% of the Group 2 Trust Assets
JI	18,166,129	100% of the Group 10 Trust Assets
LI	\$ 14,251,309	22.222222222 % of the Group 2 Trust Assets
	11,642,074	27.77777778% of the Subgroup 8B Trust Assets
	\$ 25,983,383	
MI	\$ 5,389,541	18.75% of the Subgroup 11A Trust Assets
	1,658,544	6.25% of the Subgroup 11C Trust Assets
	\$ 7,048,085	
PI	\$ 6,250,000	12.5% of PE (PAC Class)
SA	53,264,776	100% of FA (PT Class)
SB	\$ 2,125,000	100% of AF (SEQ Class)
	28,472,675	100% of FC (PT Class)
	\$ 30,597,675	
SC	\$ 28,472,675	100% of FC (PT Class)
SH	87,874,148	100% of FH (PT Class)
SM	100,000,000	100% of FM (PT Class)
YS	100,000,000	100% of YF (PT Class)

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

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

#### **RISK FACTORS**

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

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

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

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

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

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

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

- you bought your securities at a premium (interest only securities, for example) and principal payments are faster than you expected, or
- you bought your securities at a discount (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 classes will not receive any principal distribution on that date (other than from any applicable accrual amount). If prepayments result in principal distributions on any distribution date greater than the amount needed to produce scheduled payments on the related PAC classes for that distribution date, this excess will be distributed to the related support classes.

The rate of payments on the underlying certificates will directly affect the rate of payments on the group 8, 10, 11 and 12 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, certain of the underlying certificates included in trust asset group 12 and subgroup 8B are not entitled to distributions of principal (other than from any applicable accrual amount) until certain classes of the related underlying series have been retired and, accord-

ingly, distributions of principal of the related mortgage loans for extended periods may be applied to the distribution of principal of such classes of certificates having priority over these underlying certificates. Accordingly, these underlying certificates may receive no principal distributions for extended periods of time.

In addition, the principal entitlements of and the reductions in notional balances of certain of the underlying certificates included in trust asset groups 8, 10 and 12 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 8, 10, 11 and 12 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 8, 10, 11 and 12 securities. You should read the related underlying certificate disclosure documents, including the risk factors contained therein, to understand the payments on and related risks of the previously issued certificates backing these underlying certificates.

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

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

Changes to, or elimination of, LIBOR could adversely affect your investment in the securities. On July 27, 2017, the U.K.-based Financial Conduct Authority (the 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 8, 10, 11 and 12 securities and, in particular, the support, interest only, principal only, inverse floating rate, accrual and residual classes, are not suitable investments for all investors.

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

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

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

been structured to meet the investment requirements of limited categories of investors.

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

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

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

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

#### THE TRUST ASSETS

#### General

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

#### The Trust MBS (Groups 1, 2, 3, 4, 5, 6, 7 and 9 and Subgroup 11A)

The Group 3 Trust Assets are either:

1. Ginnie Mae I MBS Certificates guaranteed by Ginnie Mae, or

2. Ginnie Mae Platinum Certificates backed by Ginnie Mae I MBS Certificates and guaranteed by Ginnie Mae.

Each Mortgage Loan underlying a Ginnie Mae I MBS Certificate bears interest at a Mortgage Rate 0.50% per annum greater than the related Certificate Rate. The difference between the Mortgage Rate and the Certificate Rate is used to pay the related servicers of the Mortgage Loans a monthly servicing fee and Ginnie Mae a fee for its guaranty of the Ginnie Mae I MBS Certificate of 0.44% per annum and 0.06% per annum, respectively, of the outstanding principal balance of the Mortgage Loan.

The Group 1, 2, 4, 5, 6, 7 and 9 and Subgroup 11A Trust Assets are either:

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

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 8, 10 and 12 and Subgroups 11B and 11C)

The Group 8, 10 and 12 and Subgroup 11B and 11C Trust Assets are Underlying Certificates that represent beneficial ownership interests in one or more separate trusts, the assets of which evidence direct or indirect beneficial ownership interests in certain Ginnie Mae Certificates. Each Underlying Certificate constitutes all or a portion of a class of a separate Series of certificates described in the related Underlying Certificate Disclosure Document. Each Underlying Certificate Disclosure Document may be obtained from the Information Agent as described under "Available Information" in this Supplement. Investors are cautioned that material changes in facts and circumstances may have occurred since the date of each Underlying Certificate Disclosure Document, including changes in prepayment rates, prevailing interest rates and other economic factors, which may limit the usefulness of, and be directly contrary to the assumptions used in preparing the information included in, the offering document. See "Underlying Certificates" in the Base Offering Circular.

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

#### The Mortgage Loans

The Mortgage Loans underlying the Group 1, 2, 3, 4, 5, 6, 7 and 9 and Subgroup 11A Trust Assets are expected to have, on a weighted average basis, the characteristics set forth in the Terms Sheet under "Assumed Characteristics of the Mortgage Loans Underlying the Group 1, 2, 3, 4, 5, 6, 7 and 9 and Subgroup 11A 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, in the case of the Group 1, 2, 4, 5, 6, 7 and 9 and Subgroup 11A Trust Assets, Mortgage Rates of the Mortgage Loans underlying the Trust MBS. However, the actual remaining terms to maturity, loan ages and, in the case of the Group 1, 2, 4, 5, 6, 7 and 9 and Subgroup 11A Trust Assets, 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 Certificated Securities will receive distributions by check or, subject to the restrictions set forth in the Base Offering Circular, by wire transfer. See "Description of the Securities — Distributions" and "— Method of Distributions" in the Base Offering Circular.

#### **Interest Distributions**

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

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

#### Categories of Classes

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

#### Accrual Periods

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

Class Accrual Period

Fixed Rate and Delay Classes Floating Rate and Inverse Floating Rate Classes other than Delay Classes The calendar month preceding the related Distribution Date From the 20th day of the month preceding the month of the related Distribution Date through the 19th day of the month of that Distribution Date

#### Fixed Rate Classes

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

#### Floating Rate and Inverse Floating Rate Classes

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

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

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

#### Accrual Classes

Each of Classes CZ, DZ, EZ, KZ, VZ, ZA, ZB, ZC and ZP is an Accrual Class. Interest will accrue on the Accrual Classes and be distributed as described under "Terms Sheet — Accrual Classes" in this Supplement.

#### **Principal Distributions**

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

#### Categories of Classes

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

#### Notional Classes

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

#### **Residual Securities**

The Class RR Securities will represent the beneficial ownership of the Residual Interest in the 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 e-Access.

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

#### **Termination**

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

Upon any termination of the Trust, the Holder of any outstanding Security (other than a Residual or Notional Class Security) will be entitled to receive that Holder's allocable share of the Class Principal Balance of that Class plus any accrued and unpaid interest thereon at the applicable Interest Rate, and any Holder of any outstanding Notional Class Security will be entitled to receive that Holder's allocable

share of any accrued and unpaid interest thereon at the applicable Interest Rate. The Residual Holders will be entitled to their pro rata share of any assets remaining in the Trust REMICs after payment in full of the amounts described in the foregoing sentence. However, any remaining assets are not likely to be significant.

#### **Modification and Exchange**

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

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

A Beneficial Owner proposing to effect an exchange must notify the Trustee through the Beneficial Owner's Book-Entry Depository participant. This notice must be received by the Trustee not later than two Business Days before the proposed exchange date. The exchange date can be any Business Day other than the last Business Day of the month. The notice must contain the outstanding principal 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 2019-005. The Trustee may be contacted by telephone at (617) 603-6451 and by fax at (617) 603-6644.

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

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

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

#### YIELD, MATURITY AND PREPAYMENT CONSIDERATIONS

#### General

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

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

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

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

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

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

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

Investors in the Group 8, 10, 11 and 12 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 8, 10, 11 and 12 securities*" in this Supplement.

#### **Accretion Directed Classes**

Classes A, CA, EB, KV, P, PB, V, VA and VB 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 the Accretion Directed Classes (other than VB) has the AD designation in the suffix position, rather than the prefix position, in its class principal type because it does not have principal payment stability through the applicable pricing prepayment assumption. Classes V, VA and VB will have principal payment stability only through the prepayment rate shown in the table below and within their Effective Ranges, if applicable. The remaining Accretion Directed Classes are not listed in the table below because, although they are entitled to receive payments from the related Accrual Amounts, they do not have principal payment stability through any constant prepayment rate significantly higher than 0% PSA, except within any applicable Effective Ranges.

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

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

#### **Accretion Directed Classes**

Class	Maximum Weighted Average Life (in years) <sup>(1)</sup>	Final Distribution Date	Prepayment Rate at or below
V	6.0	March 20, 2030	139% PSA
VA	6.0	April 20, 2030	197% PSA
VB	6.0	November 20, 2048	195% PSA

<sup>(1)</sup> The maximum Weighted Average Life for each Class shown in this table is based on the Modeling Assumptions and the assumption that the related Mortgage Loans prepay at any constant rate at or below the rate shown in the table for such Class. That Weighted Average Life could extend, perhaps significantly, under certain non-constant prepayment scenarios or if the actual Mortgage Loan characteristics differ from the Modeling Assumptions.

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 V, VA or VB, 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	
PE, V and ZA (in the aggregate)	250% PSA through 350% PSA
PAC I Classes	
P and Z (in the aggregate)	150% PSA through 300% PSA
PB and ZP (in the aggregate)	150% PSA through 250% PSA
PAC II Classes	
CD	195% PSA through 303% PSA
KD	180% PSA through 250% PSA

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

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

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

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

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

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

#### **Assumability**

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

#### **Final Distribution Date**

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

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

#### **Modeling Assumptions**

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

- 1. The Mortgage Loans underlying the Group 1, 2, 3, 4, 5, 6, 7 and 9 and Subgroup 11A Trust Assets have the assumed characteristics shown under "Assumed Characteristics of the Mortgage Loans Underlying the Group 1, 2, 3, 4, 5, 6, 7 and 9 and Subgroup 11A Trust Assets" in the Terms Sheet, except in the case of information set forth under the 0% PSA Prepayment Assumption Rate, for which each Mortgage Loan underlying a Group 1, 2, 3, 4, 5, 6, 7 or 9 or Subgroup 11A Trust Asset is assumed to have an original and a remaining term to maturity of 360 months and each Mortgage Loan underlying a Group 1, 2, 4, 5, 6, 7 or 9 or Subgroup 11A Trust Asset is assumed to have 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, 4, 5, 6, 7, 8, 9, 11 and 12 Securities are always received on the 20th day of the month, and distributions on the Group 3 and 10 Securities are always received on the 16th day of the month, in each case, whether or not a Business Day, commencing in February 2019.
  - 4. A termination of the Trust or the Underlying Trusts does not occur.
  - 5. The Closing Date for the Securities is January 30, 2019.
- 6. No expenses or fees are paid by the Trust other than the Trustee Fee, which is paid as described under "The Trust Assets The Trustee Fee" in this Supplement.
- 7. Distributions on the Underlying Certificates are made as described in the related Underlying Certificate Disclosure Documents.
  - 8. Each Class is held from the Closing Date and is not exchanged in whole or in part.

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

• For example, most of the Mortgage Loans will not have the characteristics assumed, many Distribution Dates will occur on a Business Day after the 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

			Class CA			Class CD			Class CZ						
Distribution Date	0%	150%	250%	300%	500%	0%	150%	250%	300%	500%	0%	150%	250%	300%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
January 2020	100	100	95	90	70	100	100	92	92	92	104	104	104	104	104
January 2021	100	100	82	66	3	100	100	71	71	71	107	107	107	107	107
January 2022	100	100	67	38	0	100	100	46	46	0	111	111	111	111	0
January 2023	100	100	56	19	0	100	100	26	26	0	115	115	115	115	0
January 2024	100	100	49	8	0	100	100	12	12	0	119	119	119	119	0
January 2025	100	100	46	3	0	100	100	2	2	0	123	123	123	123	0
January 2026	100	100	42	Ö	0	100	100	0	0	0	128	128	128	128	0
January 2027	100	100	40	0	0	100	98	0	0	0	132	132	132	8	0
January 2028	100	100	38	0	0	100	90	0	0	0	137	137	137	8	0
January 2029	100	100	35	0	0	100	78	0	0	0	142	142	142	8	0
January 2030	100	100	31	0	0	100	62	0	0	0	147	147	147	8	0
January 2031	100	100	28	0	0	100	44	0	0	0	152	152	152	8	0
January 2032	100	100	25	0	0	100	26	0	0	0	158	158	158	8	0
January 2033	100	100	22	0	0	100	6	0	0	0	163	163	163	8	0
January 2034	100	93	19	0	0	100	0	0	0	0	169	169	169	8	0
January 2035	100	84	16	0	0	100	0	0	0	0	175	175	175	8	0
January 2036	100	74	13	0	0	100	0	0	0	0	181	181	181	8	0
January 2037	100	65	11	0	0	100	0	0	0	0	188	188	188	8	0
January 2038	100	57	9	0	0	100	0	0	0	0	194	194	194	8	0
January 2039	100	49	8	0	0	100	0	0	0	0	201	201	201	8	0
January 2040	100	42	6	0	0	100	0	0	0	0	208	208	208	8	0
January 2041	100	35	5	0	0	100	0	0	0	0	216	216	216	8	0
January 2042	100	29	4	0	0	100	0	0	0	0	223	223	223	8	0
January 2043	100	23	3	0	0	100	0	0	0	0	231	231	231	8	0
January 2044	100	18	2	0	0	100	0	0	0	0	240	240	240	8	0
January 2045	100	14	2	0	0	100	0	0	0	0	248	248	248	8	0
January 2046	100	9	1	0	0	66	0	0	0	0	257	257	257	8	0
January 2047	92	6	1	0	0	0	0	0	0	0	266	266	266	8	0
January 2048	48	2	0	0	0	0	0	0	0	0	276	276	276	8	0
January 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average															
Life (years)	28.9	20.5	8.1	2.7	1.3	27.2	11.6	3.0	3.0	2.0	30.0	29.8	29.7	8.7	2.1

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

							<u>F</u> 7		P						
	Classes FA and SA							Class P					Class Z		
Distribution Date	0%	150%	250%	300%	500%	0%	150%	250%	300%	500%	0%	150%	250%	300%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
January 2020	99	96	95	94	91	98	95	95	95	95	104	104	104	104	104
January 2021	98	89	84	82	72	97	86	86	86	86	107	107	107	107	107
January 2022	96	80	71	67	50	95	74	74	74	65	111	111	111	111	111
January 2023	95	72	59	54	35	93	62	62	62	44	115	115	115	115	115
January 2024	94	64	49	43	24	91	52	52	52	29	119	119	119	119	119
January 2025	92	57	41	35	16	89	43	43	43	19	123	123	123	123	123
January 2026	90	51	34	28	11	87	35	35	35	12	128	128	128	128	128
January 2027	89	45	29	22	8	84	27	27	27	8	132	132	132	132	132
January 2028	87	40	24	18	5	82	21	21	21	4	137	137	137	137	137
January 2029	85	36	20	14	4	79	16	16	16	2	142	142	142	142	142
January 2030	83	32	16	11	2	76	12	12	12	0	147	147	147	147	147
January 2031	80	28	13	9	2	73	9	9	9	0	152	152	152	152	117
January 2032	78	24	11	7	1	70	7	7	7	0	158	158	158	158	79
January 2033	75	21	9	6	1	66	4	4	4	0	163	163	163	163	54
January 2034	73	19	7	4	1	62	3	3	3	0	169	169	169	169	36
January 2035	70	16	6	3	0	58	1	1	1	0	175	175	175	175	24
January 2036	66	14	5	3	0	54	0	0	0	0	181	181	181	181	16
January 2037	63	12	4	2	0	49	0	0	0	0	188	150	150	150	11
January 2038	59	10	3	2	0	45	0	0	0	0	194	115	115	115	7
January 2039	56	9	2	1	0	39	0	0	0	0	201	88	88	88	5
January 2040	52	7	2	1	0	34	0	0	0	0	208	66	66	66	3
January 2041	47	6	1	1	0	28	0	0	0	0	216	50	50	50	2
January 2042	43	5	1	1	0	22	0	0	0	0	223	36	36	36	1
January 2043	38	4	1	0	0	15	0	0	0	0	231	26	26	26	1
January 2044	32	3	1	0	0	8	0	0	0	0	240	18	18	18	0
January 2045	27	2	0	0	0	0	0	0	0	0	246	12	12	12	0
January 2046	21	2	0	0	0	0	0	0	0	0	8	8	8	8	0
January 2047	14	1	0	0	0	0	0	0	0	0	4	4	4	4	0
January 2048	7	0	0	0	0	0	0	0	0	0	2	2	2	2	0
January 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average															
Life (years)	19.6	9.0	6.4	5.6	3.7	16.5	6.0	6.0	6.0	4.2	26.4	20.7	20.7	20.7	13.9

Security Group 2 PSA Prepayment Assumption Rates

		Cla	asses AB and	Ю	
Distribution Date	0%	100%	192%	300%	400%
Initial Percent	100	100	100	100	100
January 2020	99	91	86	80	74
January 2021	97	83	73	63	54
January 2022	96	75	63	50	40
January 2023	95	68	53	39	29
January 2024	93	61	45	31	21
January 2025	91	55	38	24	15
January 2026	90	49	32	19	11
January 2027	88	44	27	15	8
January 2028	86	38	22	11	6
January 2029	84	34	18	9	4
January 2030	81	29	15	6	3
January 2031	79	25	12	5	2
January 2032	77	21	10	4	1
January 2033	74	17	7	3	1
January 2034	71	14	6	2	1
January 2035	68	11	4	1	0
January 2036	65	8	3	1	0
January 2037	61	5	2	0	0
January 2038	58	3	1	0	0
January 2039	54	Ō	0	0	0
January 2040	50	0	0	0	0
January 2041	46	0	0	0	0
January 2042	41	0	0	0	0
January 2043	36	0	0	0	0
January 2044	31	0	0	0	0
January 2045	26	0	0	0	0
January 2046	20	0	0	0	0
January 2047	14	0	0	0	0
January 2048	7	0	0	0	0
January 2049	0	0	0	0	0
Weighted Average					
Life (years)	19.3	7.8	5.7	4.1	3.2

Security Group 3
PSA Prepayment Assumption Rates

			Class A					Class AI					Class ZE	3	
Distribution Date	0%	100%	192%	300%	400%	0%	100%	192%	300%	400%	0%	100%	192%	300%	400%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
January 2020	98	91	85	79	73	99	91	86	80	74	103	103	103	103	103
January 2021	97	82	72	62	52	97	83	74	63	54	107	107	107	107	107
January 2022	95	74	61	48	37	95	76	63	50	40	110	110	110	110	110
January 2023	93	67	51	37	26	94	68	54	40	29	114	114	114	114	114
January 2024	91	60	43	28	18	92	62	46	31	21	118	118	118	118	118
January 2025	89	53	36	21	12	90	55	39	24	15	121	121	121	121	121
January 2026	87	47	29	15	7	88	50	32	19	11	126	126	126	126	126
January 2027	84	41	23	11	4	86	44	27	15	8	130	130	130	130	130
January 2028	82	36	19	7	1	84	39	23	11	6	134	134	134	134	134
January 2029	79	30	14	4	0	81	34	19	9	4	138	138	138	138	115
January 2030	77	26	11	2	0	79	30	15	7	3	143	143	143	143	81
January 2031	74	21	7	0	0	76	26	12	5	2	148	148	148	140	56
January 2032	71	17	5	0	0	74	22	10	4	1	152	152	152	104	39
January 2033	68	13	2	0	0	71	18	8	3	1	158	158	158	75	26
January 2034	64	9	0	0	0	68	15	6	2	1	163	163	163	54	17
January 2035	61	6	0	0	0	65	12	4	1	0	168	168	124	37	11
January 2036	57	3	0	0	0	61	9	3	1	0	174	174	88	24	7
January 2037	54	0	0	0	0	58	6	2	1	0	179	169	57	14	4
January 2038	50	0	0	0	0	54	3	1	0	0	185	98	31	7	2
January 2039	45	0	0	0	0	51	1	0	0	0	191	31	9	2	0
January 2040	41	0	0	0	0	47	0	0	0	0	198	0	0	0	0
January 2041	36	0	0	0	0	42	0	0	0	0	204	0	0	0	0
January 2042	32	0	0	0	0	38	0	0	0	0	211	0	0	0	0
January 2043	27	0	0	0	0	33	0	0	0	0	218	0	0	0	0
January 2044	21	0	0	0	0	28	0	0	0	0	225	0	0	0	0
January 2045	16	0	0	0	0	23	0	0	0	0	233	0	0	0	0
January 2046	10	0	0	0	0	18	0	0	0	0	240	0	0	0	0
January 2047	4	0	0	0	0	12	0	0	0	0	248	0	0	0	0
January 2048	0	0	0	0	0	6	0	0	0	0	176	0	0	0	0
January 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average															
Life (years)	17.5	7.2	5.1	3.6	2.8	18.6	7.9	5.7	4.1	3.2	29.3	19.1	17.4	14.6	12.1

Security Group 4
PSA Prepayment Assumption Rates

		Clas	ses AC,	AF and	l AS		Class AL							C	lasses F	B and S	B	
Distribution Date	0%	100%	250%	414%	650%	900%	0%	100%	250%	414%	650%	900%	0%	100%	250%	414%	650%	900%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
January 2020	98	96	92	88	82	76	100	100	100	100	100	100	99	97	94	91	86	81
January 2021	97	88	77	66	50	35	100	100	100	100	100	100	97	91	82	73	60	48
January 2022	95	80	60	42	19	í	100	100	100	100	100	100	96	84	68	53	36	21
January 2023	93	71	46	23	0	0	100	100	100	100	100	46	95	77	57	39	20	9
January 2024	91	64	33	10	Ŏ	Ő	100	100	100	100	61	21	93	71	47	28	12	4
January 2025	89	56	23	0	0	0	100	100	100	100	36	9	91	65	39	20	7	2
January 2026	87	49	15	0	0	0	100	100	100	74	22	4	89	60	32	15	4	1
January 2027	84	43	7	Ö	Ŏ	Õ	100	100	100	54	13	2	88	54	26	11	3	0
January 2028	82	37	1	0	0	Õ	100	100	100	39	8	1	86	50	21	8	2	Õ
January 2029	79	31	0	0	0	0	100	100	87	29	5	0	83	45	17	6	1	Õ
January 2030	76	26	Õ	Ö	Ö	Ŏ	100	100	71	21	3	Ŏ	81	41	14	4	1	Ö
January 2031	73	21	0	0	0	0	100	100	59	15	2	0	79	37	12	3	0	0
January 2032	70	17	Õ	0	0	0	100	100	48	11	1	0	76	33	10	2	Õ	Õ
January 2033	67	12	Õ	Ö	Ö	Ŏ	100	100	39	8	1	Ŏ	73	30	8	2	Ö	Ő
January 2034	63	8	0	0	0	0	100	100	32	6	0	0	70	27	6	1	0	0
January 2035	59	5	0	0	0	0	100	100	26	4	0	0	67	24	5	1	0	0
January 2036	55	ĺ	Õ	Ö	Ö	Ŏ	100	100	21	3	Õ	Ŏ	64	21	4	1	Ö	Ő
January 2037	51	0	0	0	0	0	100	92	17	2	0	0	61	18	3	0	0	0
January 2038	46	0	0	0	0	0	100	81	13	1	0	0	57	16	3	0	0	0
January 2039	41	0	0	0	0	0	100	70	10	1	0	0	53	14	2	0	0	0
January 2040	36	0	0	0	0	0	100	61	8	1	0	0	49	12	2	0	0	0
January 2041	31	0	0	0	0	0	100	52	6	0	0	0	45	10	1	0	0	0
January 2042	25	0	0	0	0	0	100	43	5	0	0	0	40	9	1	0	0	0
January 2043	19	0	0	0	0	0	100	35	3	0	0	0	35	7	1	0	0	0
January 2044	12	0	0	0	0	0	100	28	3	0	0	0	30	6	1	0	0	0
January 2045	5	0	0	0	0	0	100	21	2	0	0	0	24	4	0	0	0	0
January 2046	0	0	0	0	0	0	91	15	1	0	0	0	18	3	0	0	0	0
January 2047	0	0	0	0	0	0	63	9	1	0	0	0	13	2	0	0	0	0
January 2048	0	0	0	0	0	0	32	3	0	0	0	0	6	1	0	0	0	0
January 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average																		
Life (years)	16.8	7.6	4.1	2.8	2.0	1.6	28.4	22.6	14.0	9.2	6.0	4.3	19.1	10.6	6.1	4.1	2.8	2.2

PSA	Prepayment	Assumption	Rates
LOIL	repayment	rissumption	Ittites

	Classes FC and SC Class VA											Clas	s VZ					
Distribution Date	0%	100%	250%	414%	650%	900%	0%	100%	250%	414%	650%	900%	0%	100%	250%	414%	650%	900%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
January 2020	99	97	94	91	86	81	93	93	93	93	93	93	104	104	104	104	104	104
January 2021	97	91	82	73	61	49	85	85	85	85	85	85	107	107	107	107	107	107
January 2022	96	84	69	54	37	22	77	77	77	77	77	77	111	111	111	111	111	111
January 2023	95	78	57	40	22	10	69	69	69	69	69	0	115	115	115	115	115	69
January 2024	93	71	48	29	13	5	60	60	60	60	0	Õ	119	119	119	119	90	31
January 2025	91	66	40	22	8	2	51	51	51	51	0	0	123	123	123	123	54	14
January 2026	90	60	33	16	5	1	42	42	42	0	0	0	128	128	128	109	32	6
January 2027	88	55	27	12	3	0	33	33	33	Õ	Ŏ	Õ	132	132	132	80	19	3
January 2028	86	51	23	9	2	0	23	23	23	0	0	0	137	137	137	58	11	ĭ
January 2029	84	46	19	6	1	0	13	13	-0	0	0	0	142	142	128	43	7	1
January 2030	81	42	15	5	1	Ŏ	2	2	Ŏ	Ŏ	Ö	Ŏ	147	147	106	31	4	0
January 2031	79	38	13	3	0	0	0	0	0	0	0	0	148	148	87	23	2	0
January 2032	77	35	10	2	0	0	0	0	0	0	0	0	148	148	71	16	1	0
January 2033	74	31	8	2	0	0	0	0	0	0	0	0	148	148	58	12	1	0
January 2034	71	28	7	1	0	0	0	0	0	0	0	0	148	148	47	8	0	0
January 2035	68	25	6	1	0	0	0	0	0	0	0	0	148	148	38	6	0	0
January 2036	65	22	4	1	0	0	0	0	0	0	0	0	148	148	31	4	0	0
January 2037	61	20	4	0	0	0	0	0	0	0	0	0	148	136	25	3	0	0
January 2038	58	17	3	0	0	0	0	0	0	0	0	0	148	119	20	2	0	0
January 2039	54	15	2	0	0	0	0	0	0	0	0	0	148	104	15	1	0	0
January 2040	50	13	2	0	0	0	0	0	0	0	0	0	148	90	12	1	0	0
January 2041	46	11	1	0	0	0	0	0	0	0	0	0	148	76	9	1	0	0
January 2042	41	9	1	0	0	0	0	0	0	0	0	0	148	64	7	0	0	0
January 2043	36	8	1	0	0	0	0	0	0	0	0	0	148	52	5	0	0	0
January 2044	31	6	1	0	0	0	0	0	0	0	0	0	148	41	4	0	0	0
January 2045	26	5	0	0	0	0	0	0	0	0	0	0	148	31	3	0	0	0
January 2046	20	3	0	0	0	0	0	0	0	0	0	0	135	22	2	0	0	0
January 2047	14	2	0	0	0	0	0	0	0	0	0	0	93	13	1	0	0	0
January 2048	7	1	0	0	0	0	0	0	0	0	0	0	48	5	0	0	0	0
January 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average																		
Life (vears)	19.3	10.8	6.2	4.2	2.9	2.2	6.0	6.0	5.8	4.7	3.6	2.8	28.4	22.6	14.3	9.7	6.4	4.7

Security Group 5 PSA Prepayment Assumption Rates

		Classes 1	EA, EF, E	J and ES	,		Class	ses PE aı	nd PI				Class PI		
Distribution Date	0%	250%	310%	350%	700%	0%	250%	310%	350%	700%	0%	250%	310%	350%	700%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
January 2020	100	100	93	88	44	98	92	92	92	92	100	100	100	100	100
January 2021	100	100	75	59	0	96	76	76	76	63	100	100	100	100	100
January 2022	100	100	56	28	0	94	56	56	56	24	100	100	100	100	100
January 2023	100	100	44	10	0	91	39	39	39	1	100	100	100	100	100
January 2024	100	100	38	2	0	89	24	24	24	0	100	100	100	100	58
January 2025	100	100	37	0	0	86	12	12	12	0	100	100	100	100	33
January 2026	100	97	35	0	0	83	3	3	3	0	100	100	100	100	19
January 2027	100	91	32	0	0	81	0	0	0	0	100	84	84	84	11
January 2028	100	83	28	0	0	77	0	0	0	0	100	64	64	64	6
January 2029	100	75	25	0	0	74	0	0	0	0	100	49	49	49	3
January 2030	100	67	22	0	0	71	0	0	0	0	100	38	38	38	2
January 2031	100	58	18	0	0	67	0	0	0	0	100	29	29	29	1
January 2032	100	51	16	0	0	63	0	0	0	0	100	22	22	22	1
January 2033	100	43	13	0	0	59	0	0	0	0	100	17	17	17	0
January 2034	100	37	11	0	0	55	0	0	0	0	100	12	12	12	0
January 2035	100	31	9	0	0	50	0	0	0	0	100	9	9	9	0
January 2036	100	26	7	0	0	46	0	0	0	0	100	7	7	7	0
January 2037	100	21	6	0	0	41	0	0	0	0	100	5	5	5	0
January 2038	100	17	5	0	0	35	0	0	0	0	100	4	4	4	0
January 2039	100	14	4	0	0	30	0	0	0	0	100	3	3	3	0
January 2040	100	11	3	0	0	24	0	0	0	0	100	2	2	2	0
January 2041	100	9	2	0	0	17	0	0	0	0	100	1	1	1	0
January 2042	100	7	2	0	0	11	0	0	0	0	100	1	1	1	0
January 2043	100	5	1	0	0	4	0	0	0	0	100	1	1	1	0
January 2044	100	4	1	0	0	0	0	0	0	0	87	0	0	0	0
January 2045	100	3	1	0	0	0	0	0	0	0	61	0	0	0	0
January 2046	100	2	0	0	0	0	0	0	0	0	33	0	0	0	0
January 2047	100	1	0	0	0	0	0	0	0	0	4	0	0	0	0
January 2048	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0
January 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average															
Life (years)	29.1	14.0	6.3	2.4	0.9	14.9	3.5	3.5	3.5	2.3	26.4	11.0	11.0	11.0	5.8

#### PSA Prepayment Assumption Rates

			Class V					Class ZA		
Distribution Date	0%	250%	310%	350%	700%	0%	250%	310%	350%	700%
Initial Percent	100	100	100	100	100	100	100	100	100	100
January 2020	93	93	93	93	93	104	104	104	104	104
January 2021	85	85	85	85	85	108	108	108	108	108
January 2022	77	77	77	77	77	113	113	113	113	113
January 2023	69	69	69	69	69	117	117	117	117	117
January 2024	61	61	61	61	0	122	122	122	122	90
January 2025	52	52	52	52	0	127	127	127	127	51
January 2026	42	42	42	42	0	132	132	132	132	29
January 2027	33	0	0	0	0	138	130	130	130	16
January 2028	23	0	0	0	0	143	100	100	100	9
January 2029	12	0	0	0	0	149	77	77	77	5
January 2030	2	0	0	0	0	155	59	59	59	3
January 2031	0	0	0	0	0	156	45	45	45	2
January 2032	0	0	0	0	0	156	34	34	34	1
January 2033	0	0	0	0	0	156	26	26	26	1
January 2034	0	0	0	0	0	156	19	19	19	0
January 2035	0	0	0	0	0	156	15	15	15	0
January 2036	0	0	0	0	0	156	11	11	11	0
January 2037	0	0	0	0	0	156	8	8	8	0
January 2038	0	0	0	0	0	156	6	6	6	0
January 2039	0	0	0	0	0	156	4	4	4	0
January 2040	0	0	0	0	0	156	3	3	3	0
January 2041	0	0	0	0	0	156	2	2	2	0
January 2042	0	0	0	0	0	156	2	2	2	0
January 2043	0	0	0	0	0	156	1	1	1	0
January 2044	0	0	0	0	0	136	1	1	1	0
January 2045	0	0	0	0	0	95	0	0	0	0
January 2046	0	0	0	0	0	52	0	0	0	0
January 2047	0	0	0	0	0	7	0	0	0	0
January 2048	0	0	0	0	0	0	0	0	0	0
January 2049	0	0	0	0	0	0	0	0	0	0
Weighted Average										
Life (years)	6.0	5.3	5.3	5.3	3.6	26.4	11.5	11.5	11.5	6.3

Security Group 6 PSA Prepayment Assumption Rates

		Class	es FH an	nd SH				Class KD	)				Class KV	7	
Distribution Date	0%	150%	220%	250%	500%	0%	150%	220%	250%	500%	0%	150%	220%	250%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
January 2020	99	95	94	93	88	100	100	89	89	89	100	100	92	87	38
January 2021	98	87	83	81	67	100	100	67	67	0	100	100	78	62	0
January 2022	96	78	71	68	46	100	100	44	44	0	100	100	63	36	0
January 2023	95	70	61	57	32	100	100	27	27	0	100	100	53	19	0
January 2024	94	63	52	47	22	100	100	14	14	0	100	100	46	8	0
January 2025	92	56	44	39	15	100	100	6	6	0	100	100	42	2	0
January 2026	90	50	37	33	10	100	100	1	1	0	100	100	40	0	0
January 2027	89	44	32	27	7	100	99	0	0	0	100	100	39	0	0
January 2028	87	39	27	23	5	100	94	0	0	0	100	100	37	0	0
January 2029	85	35	23	19	3	100	84	0	0	0	100	100	35	0	0
January 2030	83	31	19	15	2	100	70	0	0	0	100	100	32	0	0
January 2031	80	27	16	13	1	100	54	0	0	0	100	100	29	0	0
January 2032	78	24	13	10	1	100	36	0	0	0	100	100	27	0	0
January 2033	75	21	11	8	1	100	18	0	0	0	100	100	24	0	0
January 2034	73	18	9	7	0	100	0	0	0	0	100	99	21	0	0
January 2035	70	16	8	6	0	100	0	0	0	0	100	90	19	0	0
January 2036	66	13	6	5	0	100	0	0	0	0	100	80	16	0	0
January 2037	63	12	5	4	0	100	0	0	0	0	100	71	14	0	0
January 2038	59	10	4	3	0	100	0	0	0	0	100	62	12	0	0
January 2039	56	8	3	2	0	100	0	0	0	0	100	54	10	0	0
January 2040	52	7	3	2	0	100	0	0	0	0	100	46	8	0	0
January 2041	47	6	2	1	0	100	0	0	0	0	100	39	7	0	0
January 2042	43	5	2	1	0	100	0	0	0	0	100	32	5	0	0
January 2043	38	4	1	1	0	100	0	0	0	0	100	26	4	0	0
January 2044	32	3	1	1	0	100	0	0	0	0	100	20	3	0	0
January 2045	27	2	1	0	0	100	0	0	0	0	100	15	2	0	0
January 2046	21	1	0	0	0	100	0	0	0	0	100	10	1	0	0
January 2047	14	1	0	0	0	51	0	0	0	0	100	5	1	0	0
January 2048	7	0	0	0	0	0	0	0	0	0	65	1	0	0	0
January 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average Life (years)	19.6	8.7	6.8	6.2	3.5	28.0	12.1	3.0	3.0	1.4	29.2	21.0	8.1	2.7	0.8

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

			Class KZ	:				Class PB	;				Class ZP	•	
Distribution Date	0%	150%	220%	250%	500%	0%	150%	220%	250%	500%	0%	150%	220%	250%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
January 2020	104	104	104	104	104	98	94	94	94	94	104	104	104	104	104
January 2021	107	107	107	107	0	97	84	84	84	79	107	107	107	107	107
January 2022	111	111	111	111	0	95	72	72	72	53	111	111	111	111	111
January 2023	115	115	115	115	0	93	62	62	62	35	115	115	115	115	115
January 2024	119	119	119	119	0	91	52	52	52	22	119	119	119	119	119
January 2025	123	123	123	123	0	89	44	44	44	14	123	123	123	123	123
January 2026	128	128	128	128	0	87	36	36	36	8	128	128	128	128	128
January 2027	132	132	132	83	0	85	29	29	29	3	132	132	132	132	132
January 2028	137	137	137	83	0	82	23	23	23	0	137	137	137	137	137
January 2029	142	142	142	83	0	79	18	18	18	0	142	142	142	142	101
January 2030	147	147	147	83	0	76	13	13	13	0	147	147	147	147	69
January 2031	152	152	152	83	0	73	10	10	10	0	152	152	152	152	47
January 2032	158	158	158	83	0	70	7	7	7	0	158	158	158	158	31
January 2033	163	163	163	83	0	67	4	4	4	0	163	163	163	163	21
January 2034	169	169	169	83	0	63	2	2	2	0	169	169	169	169	14
January 2035	175	175	175	83	0	59	0	0	0	0	175	174	174	174	9
January 2036	181	181	181	83	0	55	0	0	0	0	181	140	140	140	6
January 2037	188	188	188	83	0	50	0	0	0	0	188	112	112	112	4
January 2038	194	194	194	83	0	46	0	0	0	0	194	89	89	89	3
January 2039	201	201	201	83	0	40	0	0	0	0	201	70	70	70	2
January 2040	208	208	208	83	0	35	0	0	0	0	208	55	55	55	1
January 2041	216	216	216	83	0	29	0	0	0	0	216	42	42	42	1
January 2042	223	223	223	83	0	23	0	0	0	0	223	32	32	32	0
January 2043	231	231	231	83	0	17	0	0	0	0	231	23	23	23	0
January 2044	240	240	240	83	0	10	0	0	0	0	240	17	17	17	0
January 2045	248	248	248	83	0	2	0	0	0	0	248	11	11	11	0
January 2046	257	257	257	83	0	0	0	0	0	0	116	7	7	7	0
January 2047	266	266	266	83	0	0	0	0	0	0	3	3	3	3	0
January 2048	276	276	276	83	0	0	0	0	0	0	1	1	1	1	0
January 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average															
Life (years)	30.0	29.6	29.6	21.7	1.4	16.6	6.0	6.0	6.0	3.6	27.0	20.0	20.0	20.0	11.8

Security Group 7 PSA Prepayment Assumption Rates

		Cla	asses YF and	YS	
Distribution Date	0%	100%	371%	600%	800%
Initial Percent	100	100	100	100	100
January 2020	99	97	93	90	87
January 2021	97	92	78	67	58
January 2022	96	85	60	43	31
January 2023	95	78	46	27	16
January 2024	93	72	35	17	8
January 2025	91	66	27	11	4
January 2026	90	61	20	7	2
January 2027	88	56	15	4	1
January 2028	86	51	12	3	1
January 2029	84	47	9	2	0
January 2030	81	43	9 7	1	0
January 2031	79	39	5	1	0
January 2032	77	35	4	0	0
January 2033	74	32	3	0	0
January 2034	71	29	2	0	0
January 2035	68	26	2	0	0
January 2036	65	23	1	Ö	Ŏ
January 2037	61	20	1	0	0
January 2038	58	18	1	0	0
January 2039	54	16	0	Ö	Ŏ
January 2040	50	13	0	0	0
January 2041	46	11	0	0	0
January 2042	41	10	Ŏ	Ö	Ŏ
January 2043	36	8	0	0	0
January 2044	31	6	Õ	0	0
January 2045	26		Ŏ	Ö	Ŏ
January 2046	20	5 3	0	0	0
January 2047	14	2	Õ	0	0
January 2048	7	$\bar{1}$	ŏ	ŏ	ŏ
January 2049	0	0	Ö	Ö	0
Weighted Average	~	-	~	-	•
Life (years)	19.3	11.0	4.7	3.2	2.6
A	,				

Security Group 8 PSA Prepayment Assumption Rates

	Class DA						Class DI					Class DO						Class DZ					
Distribution Date	0%	100%	195%	300%	400%	0%	100%	195%	300%	400%	0%	100%	195%	300%	400%	0%	100%	195%	300%	400%			
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100			
January 2020	97	90	85	78	72	97	91	86	80	74	98	92	86	79	73	103	103	103	103	103			
January 2021	93	82	71	60	50	94	83	74	63	54	96	84	74	63	53	107	107	107	107	107			
January 2022	90	73	59	46	35	91	76	63	50	40	93	77	63	50	39	110	110	110	110	110			
January 2023	86	65	49	34	23	88	69	53	40	29	91	70	54	39	28	114	114	114	114	114			
January 2024	82	58	40	25	14	85	62	45	31	21	88	63	45	30	19	118	118	118	118	118			
January 2025	78	51	32	17	8	81	56	38	25	16	85	58	38	23	13	121	121	121	121	121			
January 2026	74	45	25	11	3	77	50	32	19	11	82	52	32	17	9	126	126	126	126	126			
January 2027	69	38	19	6	0	73	45	27	15	8	79	47	27	13	5	130	130	130	130	115			
January 2028	65	33	14	2	0	69	40	23	12	6	76	42	22	9	3	134	134	134	134	82			
January 2029	60	27	10	0	0	65	35	19	9	4	73	37	18	7	1	138	138	138	126	57			
January 2030	55	22	6	0	0	60	31	15	7	3	69	33	15	4	0	143	143	143	95	40			
January 2031	49	17	2	0	0	56	26	13	5	2	65	29	12	2	0	148	148	148	72	28			
January 2032	44	13	0	0	0	51	23	10	4	1	62	25	9	1	0	152	152	143	53	19			
January 2033	38	9	0	0	0	45	19	8	3	1	58	22	7	0	0	158	158	113	38	13			
January 2034	31	5	0	0	0	40	16	6	2	1	53	19	5	0	0	163	163	87	28	9			
January 2035	25	1	0	0	0	34	13	5	1	0	49	16	3	0	0	168	168	66	19	6			
January 2036	18	0	0	0	0	28	10	3	1	0	44	13	2	0	0	174	142	47	13	4			
January 2037	11	0	0	0	0	22	7	2	1	0	39	10	1	0	0	179	104	32	8	2			
January 2038	3	0	0	0	0	15	5	1	0	0	34	8	0	0	0	185	69	19	5	1			
January 2039	0	0	0	0	0	8	2	1	0	0	29	2	0	0	0	129	36	9	2	0			
January 2040	0	0	0	0	0	2	1	0	0	0	23	5	0	0	0	47	11	2	0	0			
January 2041	0	0	0	0	0	0	0	0	0	0	17	1	0	0	0	12	1	0	0	0			
January 2042	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	8	0	0	0	0			
January 2043	0	0	0	0	0	0	0	0	0	0	)	0	0	0	0	4	0	0	0	0			
January 2044	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
January 2045	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
January 2046	0	0	0	0	U	0	0	0	Ü	U	0	0	0	0	0	U	0	0	0	0			
Weighted Average Life (years)	11.2	6.8	4.6	3.3	2.5	12.3	8.1	5.7	4.2	3.2	14.7	8.6	56	3.9	2.9	20.6	18.7	15.9	12.9	10.5			
Liie (years)	11.4	0.0	4.0	5.5	4.)	14.9	0.1	)./	4.4	5.4	14./	0.0	5.6	5.9	4.9	20.0	10./	エフ.ソ	14.9	10.)			

Security Groups 2 and 8 PSA Prepayment Assumption Rates

		Class LI								
Distribution Date	0%	100%	192%	195%	300%	400%				
Initial Percent	100	100	100	100	100	100				
January 2020	98	91	86	86	80	74				
January 2021	96	83	74	73	63	54				
January 2022	94	75	63	63	50	40				
January 2023	92	68	54	53	40	29				
January 2024	89	62	46	45	31	21				
January 2025	87	55	39	38	24	15				
January 2026	84	50	32	32	19	11				
January 2027	81	44	27	27	15	8				
January 2028	78	39	23	22	11	6				
January 2029	75	34	19	18	9	4				
January 2030	72	30	15	15	7	3				
January 2031	69	26	12	12	5	2				
January 2032	65	22	10	10	4	1				
January 2033	61	18	8	8	3 2	1				
January 2034	57	15	6	6	2	1				
January 2035	53	12	4	4	1	0				
January 2036	48	9	3	3	1	0				
January 2037	44	6	2	2	1	0				
January 2038	39	3	1	1	0	0				
January 2039	33	1	0	0	0	0				
January 2040	29	0	0	0	0	0				
January 2041	25	0	0	0	0	0				
January 2042	23	0	0	0	0	0				
January 2043	20	0	0	0	0	0				
January 2044	17	0	0	0	0	0				
January 2045	14	0	0	0	0	0				
January 2046	11	0	0	0	0	0				
January 2047	7	0	0	0	0	0				
January 2048	4	0	0	0	0	0				
January 2049	0	0	0	0	0	0				
Weighted Average										
Life (years)	16.2	7.9	5.7	5.7	4.1	3.2				

Security Group 9 PSA Prepayment Assumption Rates

Distribution Date	0%	100%	250%	444%	650%	900%
Initial Percent	100	100	100	100	100	100
January 2020	99	97	95	92	89	85
January 2021	98	92	84	75	65	54
January 2022	96	85	71	55	40	25
January 2023	95	79	59	39	24	11
January 2024	94	73	49	28	14	5
January 2025	92	67	41	20	9	2
January 2026	90	62	34	15	5	1
January 2027	89	57	29	11	3	0
January 2028	87	52	24	8	2	0
January 2029	85	48	20	5	1	0
January 2030	83	43	16	4	1	0
January 2031	80	40	13	3	0	0
January 2032	78	36	11	2	0	0
January 2033	75	32	9	1	0	0
January 2034	73	29	7	1	0	0
January 2035	70	26	6	1	0	0
January 2036	66	23	5	0	0	0
January 2037	63	21	4	0	0	0
January 2038	59	18	3	0	0	0
January 2039	56	16	2	0	0	0
January 2040	52	14	2	0	0	0
January 2041	47	12	1	0	0	0
January 2042	43	10	1	0	0	0
January 2043	38	8	1	0	0	0
January 2044	32	7	1	0	0	0
January 2045	27	5	0	0	0	0
January 2046	21	4	0	0	0	0
January 2047	14	2	0	0	0	0
January 2048	7	1	0	0	0	0
January 2049	0	0	0	0	0	0
Weighted Average						
Life (years)	19.6	11.1	6.4	4.1	3.0	2.4

Security Group 10 PSA Prepayment Assumption Rates

		Class JI											
Distribution Date	0%	100%	195%	300%	400%								
Initial Percent	100	100	100	100	100								
January 2020	96	90	85	79	73								
January 2021	91	81	71	61	53								
January 2022	87	72	60	48	38								
January 2023	82	64	50	37	27								
January 2024	76	56	41	28	19								
January 2025	71	49	34	22	14								
January 2026	65	42	27	16	10								
January 2027	59	36	22	12	7								
January 2028	52	30	17	9	4								
January 2029	46	25	13	6	3 2 1								
January 2030	38	19	10	4	2								
January 2031	31	15	7	3									
January 2032	23	10	5 3	2	1								
January 2033	18	7	3	1	0								
January 2034	14	6	2	1	0								
January 2035	11	4	1	0	0								
January 2036	8	3	1	0	0								
January 2037	6	2	1	0	0								
January 2038	3	1	0	0	0								
January 2039	1	0	0	0	0								
January 2040	0	0	0	0	0								
January 2041	0	0	0	0	0								
January 2042	0	0	0	0	0								
January 2043	0	0	0	0	0								
January 2044	0	0	0	0	0								
January 2045	0	0	0	0	0								
Weighted Average					2.0								
Life (years)	9.3	6.6	5.0	3.8	3.0								

Security Group 11 PSA Prepayment Assumption Rates

	Class BO					Class EB						(	lass E2	<u>z</u>		Class MI				
Distribution Date	0%	100%	187%	300%	400%	0%	100%	187%	300%	400%	0%	100%	187%	300%	400%	0%	100%	187%	300%	400%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
January 2020	97	91	86	79	74	98	90	85	77	71	103	103	103	103	103	98	90	85	78	72
January 2021	93	83	74	63	54	95	81	71	59	50	107	107	107	107	107	96	81	72	61	52
January 2022	90	75	63	50	39	92	72	59	45	34	110	110	110	110	110	94	72	61	47	37
January 2023	86	67	54	39	29	90	64	49	33	22	114	114	114	114	114	92	64	51	36	26
January 2024	82	61	45	31	21	87	56	40	24	14	118	118	118	118	118	90	57	42	27	18
January 2025	78	54	38	24	15	83	49	32	17	7	121	121	121	121	121	88	50	35	20	12
January 2026	74	48	32	19	11	80	42	25	11	3	126	126	126	126	126	85	44	28	15	8
January 2027	70	43	27	14	8	77	36	19	6	1	130	130	130	130	130	83	38	23	10	5
January 2028	65	37	22	11	6	73	30	14	3	0	134	134	134	134	131	80	32	18	7	4
January 2029	61	33	18	8	4	70	25	10	1	0	138	138	138	138	89	77	27	14	5	2
January 2030	56	28	15	6	3	66	20	6	0	0	143	143	143	138	60	74	22	10	4	2
January 2031	50	24	12	5	2	62	15	3	0	0	148	148	148	97	39	71	17	7	3	1
January 2032	45	20	10	3	1	57	11	1	0	0	152	152	152	66	25	68	13	5	2	1
January 2033	39	17	7	2	1	53	7	0	0	0	158	158	130	43	15	65	9	3	1	0
January 2034	33	13	6	2	1	48	3	0	0	0	163	163	83	25	8	61	6	2	1	0
January 2035	27	10	4	1	0	43	0	0	0	0	168	132	43	12	4	57	2	1	0	0
January 2036	21	7	3	1	0	38	0	0	0	0	174	31	12	3	1	53	0	0	0	0
January 2037	14	5	2	0	0	32	0	0	0	0	179	20	7	2	0	49	0	0	0	0
January 2038	7	2	1	0	0	27	0	0	0	0	185	9	3	1	0	44	0	0	0	0
January 2039	0	0	0	0	0	21	0	0	0	0	191	0	0	0	0	40	0	0	0	0
January 2040	0	0	0	0	0	19	0	0	0	0	198	0	0	0	0	37	0	0	0	0
January 2041	0	0	0	0	0	17	0	0	0	0	204	0	0	0	0	34	0	0	0	0
January 2042	0	0	0	0	0	15	0	0	0	0	211	0	0	0	0	30	0	0	0	0
January 2043	0	0	0	0	0	12	0	0	0	0	218	0	0	0	0	27	0	0	0	0
January 2044	0	0	0	0	0	10	0	0	0	0	225	0	0	0	0	23	0	0	0	0
January 2045	0	0	0	0	0	7	0	0	0	0	233	0	0	0	0	19	0	0	0	0
January 2046	0	0	0	0	0	4	0	0	0	0	240	0	0	0	0	14	0	0	0	0
January 2047	0	0	0	0	0	1	0	0	0	0	248	0	0	0	0	10	0	0	0	0
January 2048	0	0	0	0	0	0	0	0	0	0	149	0	0	0	0	5	0	0	0	0
January 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average	/			/ -		4/0	/-	, ,		0.5	20.0			40.0	44.0	4				2.0
Life (years)	11.4	7.7	5.7	4.1	3.2	14.3	6.5	4.6	3.3	2.5	29.2	16.7	15.3	13.2	11.3	17.2	6.8	5.1	3.7	2.9

Security Group 12 PSA Prepayment Assumption Rates

			Class L					Class VB	В		Class ZC						
Distribution Date	0%	100%	195%	300%	400%	0%	100%	195%	300%	400%	0%	100%	195%	300%	400%		
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
January 2020	100	100	100	100	100	93	93	93	93	93	104	104	104	104	104		
January 2021	100	100	100	100	100	85	85	85	85	85	107	107	107	107	107		
January 2022	100	100	100	100	100	77	77	77	77	77	111	111	111	111	111		
January 2023	100	100	100	100	100	69	69	69	69	69	115	115	115	115	115		
January 2024	100	100	100	100	100	60	60	60	60	60	119	119	119	119	119		
January 2025	100	100	100	100	100	51	51	51	51	51	123	123	123	123	123		
January 2026	100	100	100	100	70	42	42	42	42	0	128	128	128	128	104		
January 2027	100	100	100	96	36	33	33	33	20	0	132	132	132	132	53		
January 2028	100	100	100	71	21	23	23	23	0	0	137	137	137	105	31		
January 2029	100	100	100	43	16	13	13	13	0	0	142	142	142	64	23		
January 2030	100	100	100	26	12	2	2	2	0	0	147	147	147	38	17		
January 2031	100	100	86	20	8	0	0	0	0	0	148	148	127	29	13		
January 2032	100	100	64	16	6	0	0	0	0	0	148	148	95	23	9		
January 2033	100	100	43	12	5	0	0	0	0	0	148	148	64	18	7		
January 2034	100	100	27	10	3	0	0	0	0	0	148	148	40	14	5		
January 2035	100	97	23	7	2	0	0	0	0	0	148	144	33	11	4		
January 2036	100	95	19	6	2	0	0	0	0	0	148	140	28	9	3		
January 2037	100	81	16	4	1	0	0	0	0	0	148	120	23	7	2		
January 2038	100	59	13	3	1	0	0	0	0	0	148	88	19	5	1		
January 2039	100	39	10	3	1	0	0	0	0	0	148	58	16	4	1		
January 2040	100	24	8	2	0	0	0	0	0	0	148	35	12	3	1		
January 2041	100	18	7	1	0	0	0	0	0	0	148	27	10	2	0		
January 2042	100	15	5	1	0	0	0	0	0	0	148	22	8	2	0		
January 2043	100	12	4	1	0	0	0	0	0	0	148	18	6	1	0		
January 2044	98	9	3	1	0	0	0	0	0	0	145	14	4	1	0		
January 2045	75	Ź	2	0	0	0	0	0	0	0	111	10	3	0	0		
January 2046	32	5	1	0	0	0	0	0	0	0	47	7	2	0	0		
January 2047	13	3	1	0	0	0	0	0	0	0	19	4	1	0	0		
January 2048	4	ĭ	0	Ŏ	Õ	Ö	Õ	Õ	Õ	Õ	6	1	0	Ŏ	Ŏ		
January 2049	0	0	0	0	Õ	0	Õ	Õ	Õ	Õ	Õ	0	0	0	Õ		
Weighted Average	-	~	~	-	~		~	~	~	-	V	~	~	~	-		
Life (years)	26.7	20.2	14.8	10.7	8.3	6.0	6.0	6.0	5.5	4.8	26.7	20.2	14.8	11.0	8.7		

#### **Yield Considerations**

An investor seeking to maximize yield should make a decision whether to invest in any Regular or MX Class based on the anticipated yield of that Class resulting from its purchase price, the investor's own projection of Mortgage Loan prepayment rates under a variety of scenarios, in the case of the Group 8, 10, 11 and 12 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 significantly reduce the yield of the Inverse Floating Rate Classes. In addition, the Floating Rate Classes will not necessarily benefit from a higher yield at high levels of LIBOR because the rate on such Classes is capped at a maximum rate described under "Terms Sheet — Interest Rates."

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

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

#### **Yield Tables**

The following tables show the pre-tax yields to maturity on a corporate bond equivalent basis of specified Classes at various constant percentages of PSA 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 1**

## Sensitivity of Class SA to Prepayments Assumed Price 12.73046875%\*

	PSA Prepayment Assumption Rates			
LIBOR	150%	250%	300%	500%
1.0000%	34.2%	29.4%	26.9%	17.0%
2.4790%	20.6%	15.5%	12.9%	2.3%
4.2895%	4.0%	(1.6)%	(4.4)%	(16.0)%
6.1000% and above	**	**	**	**

#### **SECURITY GROUP 2**

## Sensitivity of Class IO to Prepayments Assumed Price 19.125%\*

PSA Prepayment Assumption Rates				
100%	192%	284%	300%	400%
12.7%	6.5%	0.0%	(1.1)%	(8.4)%

#### **SECURITY GROUP 3**

## Sensitivity of Class AI to Prepayments Assumed Price 19.625%\*

PSA Prepayment Assumption Rates				
100%	192%	277%	300%	400%
12.3%	6.0%	0.1%	(1.6)%	(8.9)%

## SECURITY GROUP 4

## Sensitivity of Class AS to Prepayments Assumed Price 15.5%\*

	PSA Prepayment Assumption Rates				
LIBOR	100%	250%	414%	650%	900%
1.0000%	25.3%	12.0%	(4.0)%	(26.0)%	(46.3)%
2.5130%	13.5%	(1.7)%	(19.5)%	(43.3)%	(64.3)%
4.3315%	(2.1)%	(21.2)%	(42.5)%	(69.0)%	(91.0)%
6.1500% and above	**	**	**	**	**

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

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

## Sensitivity of Class SB to Prepayments Assumed Price 15.5%\*

	PSA Prepayment Assumption Rates				
LIBOR	100%	250%	414%	650%	900%
1.0000%	27.9%	19.8%	10.6%	(2.9)%	(17.9)%
2.5130%	16.8%	8.3%	(1.2)%	(15.4)%	(31.2)%
4.3315%	3.0%	(5.7)%	(15.6)%	(30.7)%	(48.0)%
6.1500% and above	skojk	**	**	**	2[42]4

## Sensitivity of Class SC to Prepayments Assumed Price 15.5%\*

	PSA Prepayment Assumption Rates				
LIBOR	100%	250%	414%	650%	900%
1.0000%	28.1%	20.2%	11.3%	(2.0)%	(16.8)%
2.5130%	17.0%	8.8%	(0.5)%	(14.5)%	(30.2)%
4.3315%	3.3%	(5.3)%	(15.0)%	(30.0)%	(47.2)%
6.1500% and above	**	**	**	1/4:1/4	**

#### **SECURITY GROUP 5**

## Sensitivity of Class ES to Prepayments Assumed Price 100.1875%\*

	PSA Prepayment Assumption Rates			
LIBOR	250%	310%	350%	700%
1.000000%	16.1%	15.9%	15.7%	14.9%
2.514000%	9.0%	8.9%	8.8%	8.3%
3.507001%	4.5%	4.4%	4.3%	4.0%
4.500001% and above	0.0%	0.0%	(0.1)%	(0.2)%

## Sensitivity of Class PI to Prepayments Assumed Price 9.71875%\*

PSA Prepayment Assumption Rates				
250%	310%	350%	628%	700%
17.8%	17.8%	17.8%	0.0%	(4.8)%

<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 6**

# Sensitivity of Class SH to Prepayments Assumed Price 16.6875%\*

	PSA Prepayment Assumption Rates			
LIBOR	150%	220%	250%	500%
1.0000%	22.6%	18.8%	17.1%	2.8%
2.5130%	12.3%	8.3%	6.6%	(8.2)%
4.3315%	(0.6)%	(4.7)%	(6.4)%	(21.8)%
6.1500% and above	**	**	**	**

#### **SECURITY GROUP 7**

## Sensitivity of Class YS to Prepayments Assumed Price 5.0%\*

	PSA Prepayment Assumption Rates				
LIBOR	100%	371%	600%	800%	
1.00000%	55.3%	43.0%	32.4%	22.9%	
2.51550%	19.8%	5.6%	(6.9)%	(18.3)%	
3.15775%	4.9%	(10.4)%	(24.2)%	(36.9)%	
3.80000% and above	**	**	***	**	

#### **SECURITY GROUP 8**

## Sensitivity of Class DI to Prepayments Assumed Price 20.62109%\*

PSA	Prepayment	Assumption	Rates
-----	------------	------------	-------

100%	195%	263%	300%	400%
11.2%	4.8%	0.1%	(2.6)%	(9.8)%

## Sensitivity of Class DO to Prepayments Assumed Price 84.0%

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

100%	195%	300%	400%
2.1%	3.3%	4.9%	6.5%

#### **SECURITY GROUPS 2 AND 8**

## Sensitivity of Class LI to Prepayments Assumed Price 19.43125%\*

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

100%	192%	195%	280%	300%	400%
12.5%	6.2%	6.0%	0.1%	(1.4)%	(8.7)%

<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 SM to Prepayments Assumed Price 14.59375%\*

		PSA Prej	payment Assun	nption Rates	
LIBOR	100%	250%	444%	650%	900%
1.000%	30.6%	23.1%	13.3%	2.6%	(10.8)%
2.514%	18.7%	10.8%	0.4%	(11.1)%	(25.7)%
4.307%	4.3%	(4.0)%	(15.3)%	(28.0)%	(44.4)%
6.100% and above	**	**	**	**	**

#### **SECURITY GROUP 10**

#### Sensitivity of Class JI to Prepayments Assumed Price 21.21875%\*

	PSA Pre	payment Assun	iption Rates	
100%	195%	250%	300%	400%
10.2%	3.8%	0.0%	(3.5)%	(10.7)%

#### **SECURITY GROUP 11**

## Sensitivity of Class BO to Prepayments Assumed Price 81.00%

	PSA Prepayment	Assumption Rates	
100%	187%	300%	400%
2.9%	4.0%	5.7%	7.5%

## Sensitivity of Class MI to Prepayments Assumed Price 15.25%\*

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

100%	187%	279%	300%	400%
13.7%	7.2%	0.1%	(1.6)%	(9.6)%

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

## CERTAIN UNITED STATES FEDERAL INCOME TAX CONSEQUENCES

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

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

#### **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.

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

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

Groups	PSA PSA
1	250%
2 and 3	192%
4	414%
5	310%
6	220%
7	371%
8, 10 and 12	195%
9	444%
11	187%

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

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

A Holder of Regular Securities that uses an accrual method of accounting for tax purposes generally will be required to include certain amounts in income no later than the time such amounts are reflected on certain financial statements. The application of this rule thus may require the accrual of income earlier than would be the case under the general tax rules described under "Certain United States Federal Income Tax Consequences — Tax Treatment of Regular Securities" in the Base Offering Circular, although the precise application of this rule is unclear at this time. This rule generally will be effective

for tax years beginning after December 31, 2017 or, for Regular Securities issued with original issue discount, for tax years beginning after December 31, 2018. The Service issued Notice 2018-80 stating its intention to issue regulations that would exclude market discount from this rule effective January 1, 2018. Prospective investors in Regular Securities that use an accrual method of accounting for tax purposes are urged to consult with their tax advisors regarding the potential applicability of this legislation to their particular situation.

#### **Residual Securities**

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

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

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

An individual, trust or estate that holds Residual Securities (directly or indirectly through a grantor trust, a partnership, an S corporation, a common trust fund, or a 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 after December 31, 2017, and 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) January 1, 2019 on the Fixed Rate and Delay Classes and (2) January 20, 2019 on the Floating Rate and Inverse Floating Rate Classes other than the Delay Classes. The Sponsor may effect these transactions by sales to or through certain securities dealers. These dealers may receive compensation in the form of discounts, concessions or commissions from the Sponsor and/or commissions from any purchasers for which they act as agents. Some of the Securities may be sold through dealers in relatively small sales. In the usual case, the commission charged on a relatively small sale of securities will be a higher percentage of the sales price than that charged on a large sale of securities.

#### **INCREASE IN SIZE**

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

Securities  Security Group 4 Combination 1 AF FC Combination 2 AS SC Combination 3 VA VZ VZ Security Group 5 Combination 4 V ZA Security Groups 2 and 8 Combination 5(6) DI IO Security Group 12	Original Class Principal Balance or Class Notional Balance \$ 2,125,000 28,472,675 \$ 2,125,000 28,472,675 \$ 3,999,000 8,321,350 \$ 5,377,000 9,598,861 \$ 11,642,074 14,251,309	Related MX Class FB SB AL LI	Maximum Original Class Principal Balance or Class Notional Balance(2)  \$30,597,675  \$30,597,675  \$12,320,350  \$14,975,861	Principal Type(3)  SEQ  NTL(SEQ)  SEQ  PAC  PAC	Interest   Rate	Interest Type(3) FLT INV/IO FIX FIX FIX	CUSIP Number 38381BE75 38381BE91 38381BF25 38381BF25	Final Date(4) January 2049 January 2049 January 2049 January 2049 January 2049
VB ZC	\$ 4,425,479 9,209,647	П	\$13,635,126	SC/PT	3.5%	FIX	38381BF41	November 2048

All exchanges must comply with minimum denomination restrictions.

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

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.  $\odot$ 

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

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

Derived from REMIC Classes relating to separate Groups. 6 6

## Schedule II

## SCHEDULED PRINCIPAL BALANCES

Distribution Date	Class CD	Classes P and Z (in the aggregate)	Classes PE, V and ZA (in the aggregate)
Initial Balance	\$4,218,000.00	\$40,901,000.00	\$64,975,861.00
February 2019	4,209,968.34	40,815,180.86	64,815,869.65
March 2019	4,197,918.73	40,715,792.51	64,624,709.69
April 2019	4,181,857.63	40,602,868.86	64,402,465.11
May 2019	4,161,798.57	40,476,454.22	64,149,259.50
June 2019	4,137,762.12	40,336,603.35	63,865,256.14
July 2019	4,109,775.96	40,183,381.43	63,550,657.95
August 2019	4,077,874.85	40,016,863.99	63,205,707.47
September 2019	4,042,100.60	39,837,136.93	62,830,686.60
October 2019	4,002,502.04	39,644,296.40	62,425,916.41
November 2019	3,959,134.94	39,438,448.81	61,991,756.75
December 2019	3,912,061.99	39,219,710.65	61,528,605.84
January 2020	3,861,352.66	38,988,208.48	61,036,899.75
February 2020	3,807,083.12	38,744,078.78	60,517,111.79
March 2020	3,749,336.15	38,487,467.82	59,969,751.88
April 2020	3,688,200.95	38,218,531.56	59,395,365.69
May 2020	3,623,773.04	37,937,435.46	58,794,533.91
June 2020	3,556,154.05	37,644,354.36	58,167,871.22
July 2020	3,485,451.62	37,339,472.26	57,516,025.39
August 2020	3,411,779.12	37,022,982.18	56,839,676.11
September 2020	3,335,255.49	36,695,085.95	56,139,533.91
October 2020	3,256,005.01	36,355,993.98	55,416,338.91
November 2020	3,174,157.08	36,005,925.06	54,670,859.53
December 2020	3,089,845.97	35,645,106.11	53,903,891.15
January 2021	3,003,210.54	35,273,771.95	53,116,254.70
February 2021	2,914,394.00	34,892,165.07	52,308,795.15
March 2021	2,823,543.60	34,500,535.32	51,482,380.05
April 2021	2,730,810.39	34,099,139.66	50,637,897.89
May 2021	2,636,348.90	33,688,241.87	49,776,256.49
June 2021	2,540,316.78	33,268,112.27	48,898,381.35
July 2021	2,446,456.48	32,851,468.02	48,033,183.09
August 2021	2,354,735.65	32,438,281.16	47,180,482.72
September 2021	2,265,122.35	32,028,524.00	46,340,103.73
October 2021	2,177,585.04	31,622,169.04	45,511,872.07
November 2021	2,092,092.60	31,219,189.00	44,695,616.14
December 2021	2,008,614.29	30,819,556.83	43,891,166.68
January 2022	1,927,119.77	30,423,245.69	43,098,356.82
February 2022	1,847,579.10	30,030,228.93	42,317,022.01
March 2022	1,769,962.70	29,640,480.15	41,546,999.98
April 2022	1,694,241.40	29,253,973.11	40,788,130.72
May 2022	1,620,386.37	28,870,681.83	40,040,256.47
June 2022	1,548,369.18	28,490,580.49	39,303,221.65
July 2022	1,478,161.75	28,113,643.51	38,576,872.84
August 2022	1,409,736.35	27,739,845.49	37,861,058.77

Distribution Date	Class CD	Classes P and Z (in the aggregate)	Classes PE, V and ZA (in the aggregate)
September 2022	\$1,343,065.65	\$27,369,161.23	\$37,155,630.29
October 2022	1,278,122.64	27,001,565.74	36,460,440.30
November 2022	1,214,880.64	26,637,034.24	35,775,343.77
December 2022	1,153,313.37	26,275,542.10	35,100,197.69
January 2023	1,093,394.85	25,917,064.94	34,434,861.04
February 2023	1,035,099.45	25,561,578.54	33,779,194.77
March 2023	978,401.86	25,209,058.88	33,133,061.78
April 2023	923,277.11	24,859,482.13	32,496,326.86
May 2023	869,700.56	24,512,824.65	31,868,856.70
June 2023	817,647.90	24,169,062.97	31,250,519.85
July 2023	767,095.10	23,828,173.84	30,641,186.70
August 2023	718,018.46	23,490,134.17	30,040,729.44
September 2023	670,394.61	23,154,921.05	29,449,022.04
October 2023	624,200.48	22,822,511.76	28,865,940.25
November 2023	579,413.26	22,492,883.77	28,291,361.53
December 2023	536,010.51	22,166,014.70	27,725,165.08
January 2024	493,970.01	21,841,882.38	27,167,231.76
February 2024	453,269.89	21,520,464.80	26,617,444.11
March 2024	413,888.54	21,201,740.11	26,075,686.32
April 2024	375,804.64	20,885,686.65	25,541,844.17
May 2024	338,997.15	20,572,282.94	25,015,805.07
June 2024	303,445.32	20,261,507.64	24,497,457.99
July 2024	269,128.64	19,953,339.62	23,986,693.44
August 2024	236,026.93	19,647,757.87	23,483,403.47
September 2024	204,120.22	19,344,741.59	22,987,481.66
October 2024	173,388.82	19,044,270.12	22,498,823.05
November 2024	143,813.32	18,746,322.97	22,018,738.84
December 2024	115,374.58	18,450,879.80	21,548,662.63
January 2025	88,053.64	18,157,920.47	21,088,389.18
February 2025	61,831.89	17,867,424.94	20,637,717.41
March 2025	36,690.91	17,579,373.38	20,196,450.33
April 2025	12,612.54	17,293,746.10	19,764,394.91
May 2025	0.00	17,010,523.55	19,341,362.08
June 2025	0.00	16,729,686.36	18,927,166.57
July 2025	0.00	16,451,215.30	18,521,626.87
August 2025	0.00	16,175,091.30	18,124,565.17
September 2025	0.00	15,901,295.42	17,735,807.26
October 2025	0.00	15,629,808.91	17,355,182.45
November 2025	0.00	15,360,613.12	16,982,523.54
December 2025	0.00	15,093,689.58	16,617,666.71
January 2026	0.00	14,829,019.97	16,260,451.46
February 2026	0.00	14,566,586.09	15,910,720.56
March 2026	0.00	14,306,369.91	15,568,319.98
April 2026	0.00	14,048,353.52	15,233,098.80
May 2026	0.00	13,792,519.17	14,904,909.20
June 2026	0.00	13,540,729.17	14,583,606.32
July 2026	0.00	13,293,373.35	14,269,048.28
J,	0.00	±0, <b>-</b> /0,0/0.00	1 1,207,0 10.20

Distribution Date	Class CD	Classes P and Z (in the aggregate)	Classes PE, V and ZA (in the aggregate)
August 2026	\$ 0.00	\$13,050,375.33	\$13,961,096.06
September 2026	0.00	12,811,660.08	13,659,613.50
October 2026	0.00	12,577,153.81	13,364,467.18
November 2026	0.00	12,346,783.99	13,075,526.40
December 2026	0.00	12,120,479.32	12,792,663.14
January 2027	0.00	11,898,169.70	12,515,751.95
February 2027	0.00	11,679,786.25	12,244,669.97
March 2027	0.00	11,465,261.23	11,979,296.82
April 2027	0.00	11,254,528.07	11,719,514.57
May 2027	0.00	11,047,521.31	11,465,207.72
June 2027	0.00	10,844,176.63	11,216,263.09
July 2027	0.00	10,644,430.78	10,972,569.82
August 2027	0.00	10,448,221.60	10,734,019.31
September 2027	0.00	10,255,487.98	10,500,505.18
October 2027	0.00	10,066,169.85	10,271,923.22
November 2027	0.00	9,880,208.17	10,048,171.32
December 2027	0.00	9,697,544.87	9,829,149.49
January 2028	0.00	9,518,122.93	9,614,759.75
February 2028	0.00	9,341,886.24	9,404,906.15
March 2028	0.00	9,168,779.67	9,199,494.67
April 2028	0.00	8,998,749.04	8,998,433.22
May 2028	0.00	8,831,741.09	8,801,631.60
June 2028	0.00	8,667,703.43	8,609,001.44
July 2028	0.00	8,506,584.61	8,420,456.19
August 2028	0.00	8,348,334.04	8,235,911.05
September 2028	0.00	8,192,901.98	8,055,282.98
October 2028	0.00	8,040,239.56	7,878,490.60
November 2028	0.00	7,890,298.71	7,705,454.23
December 2028	0.00	7,743,032.21	7,536,095.81
January 2029	0.00	7,598,393.65	7,370,338.87
February 2029	0.00	7,456,337.37	7,208,108.50
March 2029	0.00	7,316,818.54	7,049,331.35
April 2029	0.00	7,179,793.06	6,893,935.54
May 2029	0.00	7,045,217.60	6,741,850.68
June 2029	0.00	6,913,049.55	6,593,007.82
July 2029	0.00	6,783,247.06	6,447,339.43
August 2029	0.00	6,655,768.96	6,304,779.35
September 2029	0.00	6,530,574.81	6,165,262.78
October 2029	0.00	6,407,624.85	6,028,726.26
November 2029	0.00	6,286,880.00	5,895,107.61
December 2029	0.00	6,168,301.84	5,764,345.95
January 2030	0.00	6,051,852.62	5,636,381.63
February 2030	0.00	5,937,495.23	5,511,156.24
March 2030	0.00	5,825,193.19	5,388,612.56
April 2030	0.00	5,714,910.66	5,268,694.55
May 2030	0.00	5,606,612.39	5,151,347.31
June 2030	0.00	5,500,263.76	5,036,517.08
		•	

Distribution Date	_	Class CD	Classes P and Z (in the aggregate)	Classes PE, V and ZA (in the aggregate)
July 2030	\$	0.00	\$ 5,395,830.72	\$ 4,924,151.21
August 2030		0.00	5,293,279.82	4,814,198.12
September 2030		0.00	5,192,578.16	4,706,607.30
October 2030		0.00	5,093,693.42	4,601,329.26
November 2030		0.00	4,996,593.85	4,498,315.55
December 2030		0.00	4,901,248.21	4,397,518.71
January 2031		0.00	4,807,625.81	4,298,892.26
February 2031		0.00	4,715,696.50	4,202,390.66
March 2031		0.00	4,625,430.63	4,107,969.34
April 2031		0.00	4,536,799.05	4,015,584.62
May 2031		0.00	4,449,773.15	3,925,193.74
June 2031		0.00	4,364,324.77	3,836,754.80
July 2031		0.00	4,280,426.24	3,750,226.77
August 2031		0.00	4,198,050.39	3,665,569.49
September 2031		0.00	4,117,170.49	3,582,743.61
October 2031		0.00	4,037,760.28	3,501,710.57
November 2031		0.00	3,959,793.96	3,422,432.66
December 2031		0.00	3,883,246.15	3,344,872.89
January 2032		0.00	3,808,091.93	3,268,995.08
February 2032		0.00	3,734,306.79	3,194,763.77
March 2032		0.00	3,661,866.66	3,122,144.25
April 2032		0.00	3,590,747.87	3,051,102.51
May 2032		0.00	3,520,927.17	2,981,605.26
June 2032		0.00	3,452,381.69	2,913,619.89
July 2032		0.00	3,385,088.97	2,847,114.47
August 2032		0.00	3,319,026.93	2,782,057.72
September 2032		0.00	3,254,173.88	2,718,419.03
October 2032		0.00	3,190,508.49	2,656,168.38
November 2032		0.00	3,128,009.81	2,595,276.43
December 2032		0.00	3,066,657.24	2,535,714.41
January 2033		0.00	3,006,430.55	2,477,454.15
February 2033		0.00	2,947,309.84	2,420,468.08
March 2033		0.00	2,889,275.57	2,364,729.18
		0.00	2,832,308.52	2,310,211.01
April 2033		0.00	2,776,389.83	2,256,887.67
May 2033		0.00	2,721,500.93	2,204,733.79
June 2033		0.00	2,667,623.60	2,153,724.55
July 2033		0.00	2,614,739.92	2,103,835.63
August 2033          September 2033			2,562,832.28	2,055,043.20
1		0.00	2,511,883.38	2,007,323.96
October 2033		0.00	2,461,876.22	1,960,655.08
			2,412,794.09	1,915,014.18
December 2033		0.00		
January 2034		0.00	2,364,620.56	1,870,379.39 1,826,729.26
February 2034		0.00	2,317,339.51	1,820,729.20
March 2034		0.00	2,270,935.07	
April 2034		0.00	2,225,391.66	1,742,299.48
May 2034		0.00	2,180,693.98	1,701,479.14

Distribution Date	_	Class CD	Classes P and Z (in the aggregate)	Classes PE, V and ZA (in the aggregate)
June 2034	\$	0.00	\$ 2,136,826.97	\$ 1,661,562.09
July 2034		0.00	2,093,775.84	1,622,529.05
August 2034		0.00	2,051,526.08	1,584,361.10
September 2034		0.00	2,010,063.40	1,547,039.76
October 2034		0.00	1,969,373.77	1,510,546.92
November 2034		0.00	1,929,443.40	1,474,864.84
December 2034		0.00	1,890,258.75	1,439,976.16
January 2035		0.00	1,851,806.51	1,405,863.88
February 2035		0.00	1,814,073.59	1,372,511.36
March 2035		0.00	1,777,047.14	1,339,902.29
April 2035		0.00	1,740,714.53	1,308,020.73
May 2035		0.00	1,705,063.35	1,276,851.05
June 2035		0.00	1,670,081.41	1,246,377.96
July 2035		0.00	1,635,756.72	1,216,586.48
August 2035		0.00	1,602,077.51	1,187,461.95
September 2035		0.00	1,569,032.21	1,158,990.03
October 2035		0.00	1,536,609.45	1,131,156.65
November 2035		0.00	1,504,798.06	1,103,948.06
December 2035		0.00	1,473,587.07	1,077,350.79
January 2036		0.00	1,442,965.69	1,051,351.66
February 2036		0.00	1,412,923.34	1,025,937.76
March 2036		0.00	1,383,449.58	1,001,096.45
April 2036		0.00	1,354,534.21	976,815.35
May 2036		0.00	1,326,167.16	953,082.35
June 2036		0.00	1,298,338.56	929,885.61
July 2036		0.00	1,271,038.71	907,213.50
August 2036		0.00	1,244,258.07	885,054.67
September 2036		0.00	1,217,987.29	863,397.99
October 2036		0.00	1,192,217.14	842,232.57
November 2036		0.00	1,166,938.60	821,547.76
December 2036		0.00	1,142,142.79	801,333.11
January 2037		0.00	1,117,820.96	781,578.41
February 2037		0.00	1,093,964.54	762,273.67
March 2037		0.00	1,070,565.12	743,409.08
			1,047,614.41	, , , , , , , , , , , , , , , , , , ,
April 2037		0.00	1,025,104.28	724,975.08 706,962.28
May 2037		0.00		· · · · · · · · · · · · · · · · · · ·
June 2037		0.00	1,003,026.74	689,361.50 672,163.75
July 2037		0.00	981,373.94	, -
August 2037		0.00	960,138.17	655,360.24
September 2037		0.00	939,311.85	638,942.35
October 2037		0.00	918,887.53	622,901.67
November 2037		0.00	898,857.91	607,229.93
December 2037		0.00	879,215.80	591,919.06
January 2038		0.00	859,954.15	576,961.17
February 2038		0.00	841,066.00	562,348.50
March 2038		0.00	822,544.57	548,073.50
April 2038		0.00	804,383.15	534,128.76

May 2038   \$ 0.00 \$ 786,575.17 \$ 520,507.01   June 2038   0.00 769,114.16 507,201.15   July 2038   0.00 751,993.80 494,204.25   August 2038   0.00 735,207.83 481,509.50   Cotober 2038   0.00 718,750.15 469,110.25   Cotober 2038   0.00 702,614.73 465,099.97   November 2038   0.00 686,795.67 445,172.30   May 2040   0.00 686,795.67 445,172.30   May 2040   0.00 668,795.67 445,172.30   May 2040   0.00 668,795.67 445,172.30   May 2040   0.00 664,795.67 445,172.30   May 2040   0.00 671,827.16 435,620.99   January 2039   0.00 664,179.09 411,323.19   March 2039   0.00 641,179.09 411,323.19   March 2039   0.00 626,568.43 400,564.86   April 2039   0.00 612,246.10 390,059.54   May 2039   0.00 588,206.81 379,800.75   June 2039   0.00 588,206.81 379,800.75   June 2039   0.00 584,445.34 369,783.88   July 2039   0.00 570,956.57 560,003.25   May 2039   0.00 570,956.57 360,003.25   May 2040   0.00 483,758.94 297,727.41   May 2040   0.00 483,758.94 297,727.41   March 2040   0.00 472,277.86 289,657.11   May 2040   0.00 483,758.94 297,727.41   March 2040   0.00 483,758.94 297,727.41   March 2040   0.00 483,758.94 297,727.41   March 2040   0.00 488,758.95   238,330.20   May 2040   0.00 388,376.67 288,779.69   May 2041   0.00 398,376.67 288,779.69   May 2041   0.00 398,376.67 288,779.69	Distribution Date	Class CD	asses P and Z the aggregate)	(in	Classes PE, V and ZA the aggregate)
June 2038   0.00   769,114.16   507,201.15   July 2038   0.00   751,993.80   494,204.25   August 2038   0.00   735,207.83   481,509.50   September 2038   0.00   718,750.15   469,110.25   October 2038   0.00   686,795.67   445,172.30   December 2038   0.00   686,795.67   445,172.30   December 2038   0.00   671,287.16   433,629.99   70.00   671,287.16   433,629.99   671,237.19	May 2038	\$ 0.00	\$ 786,575.17	\$	520,507.01
August 2038         0.00         735,207,83         481,509.50           September 2038         0.00         718,750.15         469,110.25           October 2038         0.00         702,614.73         456,999.97           November 2038         0.00         686,795.67         445,172.30           December 2038         0.00         671,287.16         433,620.99           January 2039         0.00         665,083.50         422,339.95           February 2039         0.00         662,568.43         400,564.86           April 2039         0.00         612,246.10         390,095.25           May 2039         0.00         598,206.81         379,800.75           June 2039         0.00         584,445.34         597,838.89           July 2039         0.00         570,956.57         360,003.27           August 2039         0.00         570,956.57         360,003.27           August 2039         0.00         571,956.57         360,003.27           August 2039         0.00         574,770.63         332,027.11           November 2039         0.00         574,757.65         350,455.68           September 2039         0.00         577,355.45         350,455.68 <td< td=""><td>June 2038</td><td>0.00</td><td>769,114.16</td><td></td><td>507,201.15</td></td<>	June 2038	0.00	769,114.16		507,201.15
September 2038         0.00         718,750.15         469,110.25           October 2038         0.00         702,614.73         456,999.97           November 2038         0.00         660,795.67         441,717.23           December 2038         0.00         671,287.16         433,620.99           January 2039         0.00         661,1287.16         433,620.99           January 2039         0.00         661,179.09         422,339.95           February 2039         0.00         626,568.43         400,564.86           April 2039         0.00         598,206.81         379,800.75           June 2039         0.00         598,206.81         379,800.75           June 2039         0.00         570,956.57         360,003.27           August 2039         0.00         570,956.57         350,435.68           September 2039         0.00         557,735.45         350,435.68           September 2039         0.00         532,076.53         332,207.11           November 2039         0.00         597,430.07         314,464.39           January 2040         0.00         483,758.94         297,727.41           March 2040         0.00         483,758.94         297,727.41	July 2038	0.00	751,993.80		494,204.25
October 2038         0.00         702,614,73         456,999,97           November 2038         0.00         687,955,67         443,723,0           December 2038         0.00         671,287,16         433,620,99           January 2039         0.00         656,083,50         422,339,95           February 2039         0.00         62,568,43         400,564,86           April 2039         0.00         62,568,43         400,564,86           April 2039         0.00         598,206,81         379,800,75           June 2039         0.00         570,956,57         360,003,27           Jugust 2039         0.00         570,956,57         360,003,27           August 2039         0.00         570,956,57         360,003,27           August 2039         0.00         570,755,3         350,453,68           September 2039         0.00         544,777,66         341,129,97           October 2039         0.00         574,300,7         314,464,39           January 2040         0.00         495,474,86         305,995.00           February 2040         0.00         472,777,86         289,657.11           March 2040         0.00         472,277.86         289,657.11           Ma	August 2038	0.00	735,207.83		481,509.50
October 2038         0.00         702,614.73         456,999.97           November 2038         0.00         687,95.67         445,72.30           December 2038         0.00         671,287.16         433,620.99           January 2039         0.00         66,083.50         422,339.95           February 2039         0.00         66,568.43         400,564.86           April 2039         0.00         62,568.43         300,69.25           May 2039         0.00         598,206.81         379,800.75           June 2039         0.00         570,956.57         360,003.27           August 2039         0.00         570,956.57         360,003.27           August 2039         0.00         570,956.57         360,003.27           August 2039         0.00         574,757.65         350,455.68           September 2039         0.00         574,757.65         350,455.68           September 2039         0.00         574,300.73         341,129.97           October 2039         0.00         574,300.73         341,464.39           January 2040         0.00         475,471.06         305,995.00           February 2040         0.00         472,777.86         365,856.31           J		0.00			469,110.25
November 2038         0.00         686,795.67         443,172.30           December 2038         0.00         671,287.16         433,620.99           January 2039         0.00         660,883.50         422,339.95           February 2039         0.00         641,179.09         411,323.19           March 2039         0.00         612,246.10         300,059.25           May 2039         0.00         598,206.81         379,800.75           June 2039         0.00         584,445.34         369,783.88           July 2039         0.00         570,956.57         360,003.27           August 2039         0.00         570,956.57         360,003.27           August 2039         0.00         577,755.45         350,453.68           September 2039         0.00         544,777.06         341,129.97           October 2039         0.00         519,629.09         323,140.19           December 2039         0.00         507,430.07         314,464.39           January 2040         0.00         495,474.86         359,550.0           February 2040         0.00         472,277.86         289,675.11           April 2040         0.00         472,277.86         289,675.11           M	*	0.00	702,614.73		456,999.97
December 2038         0.00         671,287.16         433,620.99           January 2039         0.00         656,083.50         422,339.95           February 2039         0.00         641,179.09         411,323.19           March 2039         0.00         612,246.10         390,059.25           May 2039         0.00         598,206.81         379,800.75           June 2039         0.00         584,445.34         369,783.88           July 2039         0.00         557,735.45         350,453.68           September 2039         0.00         544,777.06         341,129.97           October 2039         0.00         544,777.06         341,129.97           October 2039         0.00         57,735.45         332,476.13           November 2039         0.00         598,206.53         332,140.19           December 2039         0.00         598,474.86         305,995.00           February 2040         0.00         483,758.94         296,657.11           Agril 2040         0.00         485,758.42         289,657.11           April 2040         0.00         472,277.86         289,657.11           April 2040         0.00         482,616.04         259,261.98           Aug	November 2038	0.00			445,172.30
January 2039   0.00   656,083.50   422,339.95   February 2039   0.00   641,179.09   411,323.19   0.00   626,568.43   400,564.86   April 2039   0.00   612,246.10   390,059.25   May 2039   0.00   598,206.81   379,800.75   June 2039   0.00   584,445.34   369,783.88   July 2039   0.00   570,956.57   360,003.27   August 2039   0.00   570,956.57   360,003.27   August 2039   0.00   577,735.45   350,453.68   September 2039   0.00   532,076.53   332,027.11   November 2039   0.00   532,076.53   332,027.11   November 2039   0.00   519,629.09   323,140.19   December 2039   0.00   507,430.07   314,464.39   January 2040   0.00   495,474.86   305,995.00   February 2040   0.00   483,758.94   297,727.41   March 2040   0.00   483,758.94   297,727.41   March 2040   0.00   472,277.86   289,657.11   April 2040   0.00   450,002.91   274,090.83   June 2040   0.00   450,002.91   274,090.83   June 2040   0.00   450,002.91   274,090.83   June 2040   0.00   483,005.63   352,113.82   September 2040   0.00   488,616.04   259,261.98   August 2040   0.00   388,376.67   231,687.09   December 2040   0.00   388,376.67   231,687.09   December 2040   0.00   378,822.08   252,048.81   January 2041   0.00   369,462.07   218,879.74   February 2041   0.00   352,513.45   200,812.61   May 2041   0.00   378,822.08   225,048.81   January 2041   0.00   378,822.08   235,048.81   January 2041   0.00   378,822.08   235,048.81   January 2041   0.00   378,822.08   2	December 2038	0.00			
February 2039         0.00         641,179.09         411,323.19           March 2039         0.00         626,568.43         400,056.86           April 2039         0.00         598,206.81         379,800.75           May 2039         0.00         598,206.81         379,800.75           June 2039         0.00         584,445.34         369,783.88           July 2039         0.00         570,956.57         360,003.27           August 2039         0.00         557,735.45         50,453.68           September 2039         0.00         544,777.06         341,129.97           October 2039         0.00         519,629.09         323,140.19           December 2039         0.00         50,447.486         305,995.00           December 2039         0.00         495,474.86         305,995.00           January 2040         0.00         495,474.86         305,995.00           March 2040         0.00         497,277.86         289,657.11           April 2040         0.00         472,277.86         289,657.11           April 2040         0.00         472,277.86         289,657.11           April 2040         0.00         488,616.04         259,261.98           August 204		0.00	,		*
March 2039         0.00         626,568.43         400,564.86           April 2039         0.00         612,246.10         390,059.25           May 2039         0.00         598,206.81         379,800.75           June 2039         0.00         584,445.34         369,783.88           July 2039         0.00         570,956.57         360,003.27           August 2039         0.00         557,735.45         350,453.68           September 2039         0.00         544,777.06         341,129.97           October 2039         0.00         519,629.09         323,140.19           December 2039         0.00         507,430.07         314,464.39           January 2040         0.00         483,758.94         297,727.41           March 2040         0.00         483,758.94         297,727.41           March 2040         0.00         472,277.86         289,657.11           April 2040         0.00         472,277.86         289,657.11           April 2040         0.00         450,002.91         274,090.83           June 2040         0.00         428,616.04         259,261.98           August 2040         0.00         488,645.36         252,113.82           September 2040<	•	0.00	*		· · · · · · · · · · · · · · · · · · ·
April 2039         0.00         612,246.10         390,059.25           May 2039         0.00         598,206.81         379,800.75           June 2039         0.00         584,445.34         369,783.88           July 2039         0.00         570,755.45         360,003.27           August 2039         0.00         557,735.45         350,453.68           September 2039         0.00         532,076.53         332,027.11           November 2039         0.00         519,629.09         323,140.19           December 2039         0.00         507,430.07         314,464.39           January 2040         0.00         495,474.86         305,995.00           February 2040         0.00         472,277.86         289,657.11           April 2040         0.00         472,277.86         289,657.11           April 2040         0.00         450,002.91         274,090.83           June 2040         0.00         450,002.91         274,090.83           July 2040         0.00         488,616.04         259,261.98           August 2046         0.00         488,060.04         259,261.98           August 2040         0.00         488,060.04         259,261.98           August 2040	•		*		
May 2039         0.00         598,206.81         379,800.75           June 2039         0.00         584,445,34         369,783.88           July 2039         0.00         570,956.57         360,003.27           August 2039         0.00         577,735.45         350,453.68           September 2039         0.00         532,076.53         332,027.11           November 2039         0.00         519,629.09         323,140.19           December 2039         0.00         507,430.07         314,464.39           January 2040         0.00         495,474.86         305,995.00           February 2040         0.00         483,758.94         297,727.41           Agril 2040         0.00         472,277.86         289,657.11           April 2040         0.00         461,027.28         281,779.69           May 2040         0.00         439,200.54         266,586.31           July 2040         0.00         439,200.54         266,586.31           July 2040         0.00         488,616.04         259,261.98           August 2040         0.00         488,616.04         259,261.98           August 2040         0.00         488,616.04         259,261.98           August 2041 </td <td></td> <td>0.00</td> <td></td> <td></td> <td></td>		0.00			
June 2039         0.00         584,445.34         369,783.88           July 2039         0.00         570,956.57         360,003.27           August 2039         0.00         557,735.45         350,453.68           September 2039         0.00         544,777.06         341,129.97           October 2039         0.00         519,629.09         323,140.19           December 2039         0.00         507,430.07         314,464.39           January 2040         0.00         495,474.86         305,995.00           February 2040         0.00         472,277.86         289,657.11           April 2040         0.00         472,277.86         289,657.11           April 2040         0.00         461,027.28         281,779.69           May 2040         0.00         459,002.91         274,090.83           June 2040         0.00         439,200.54         266,586.31           July 2040         0.00         439,200.54         266,586.31           July 2040         0.00         488,616.04         259,261.98           August 2040         0.00         488,616.04         259,261.98           August 2040         0.00         408,084.50         2451,378.85           October 2040	_	0.00	*		· · · · · · · · · · · · · · · · · · ·
July 2039         0.00         570,956.57         360,003.27           August 2039         0.00         557,735.45         350,453.68           September 2039         0.00         544,777.06         341,129.97           October 2039         0.00         532,076.53         332,027.11           November 2039         0.00         507,430.07         314,464.39           January 2040         0.00         495,474.86         305,995.00           February 2040         0.00         483,758.94         297,727.41           March 2040         0.00         472,277.86         289,657.11           April 2040         0.00         461,027.28         281,779.69           May 2040         0.00         450,002.91         274,090.83           July 2040         0.00         488,768.6         252,113.82           September 2040         0.00         488,766.6         259,261.98           August 2040         0.00         488,245.6         252,113.82           September 2040         0.00         408,084.50         245,137.85           October 2040         0.00         398,129.55         238,330.20           November 2040         0.00         378,822.08         225,204.81           J	•	0.00	*		
August 2039         0.00         557,735.45         350,453.68           September 2039         0.00         544,777.06         341,129.97           October 2039         0.00         532,076.53         332,027.11           November 2039         0.00         519,629.09         323,140.19           December 2039         0.00         507,430.07         314,464.39           January 2040         0.00         495,474.86         305,995.00           February 2040         0.00         483,758.94         297,727.41           Agril 2040         0.00         472,277.86         289,657.11           April 2040         0.00         461,027.28         281,779.69           May 2040         0.00         450,002.91         274,090.83           Jule 2040         0.00         428,616.04         259,261.98           August 2040         0.00         428,616.04         259,261.98           August 2040         0.00         480,845.0         245,137.85           October 2040         0.00         398,129.55         238,330.20           November 2040         0.00         388,376.67         231,687.09           December 2040         0.00         378,822.08         225,204.81 <td< td=""><td></td><td>0.00</td><td></td><td></td><td></td></td<>		0.00			
September 2039         0.00         544,777.06         341,129.97           October 2039         0.00         532,076.53         332,027.11           November 2039         0.00         519,629.09         323,140.19           December 2039         0.00         507,430.07         314,464.39           January 2040         0.00         495,474.86         305,995.00           February 2040         0.00         483,758.94         297,727.41           March 2040         0.00         472,277.86         289,657.11           April 2040         0.00         461,027.28         281,779.69           May 2040         0.00         450,002.91         274,090.83           June 2040         0.00         450,002.91         274,090.83           July 2040         0.00         450,002.91         274,090.83           July 2040         0.00         485,616.04         259,261.98           August 2040         0.00         418,245.36         252,113.82           September 2040         0.00         488,616.04         259,261.98           August 2041         0.00         398,129.55         238,330.20           November 2040         0.00         378,822.08         225,204.81           Ja	August 2039	0.00	*		
October 2039         0.00         532,076.53         332,027.11           November 2039         0.00         519,629.09         323,140.19           December 2039         0.00         507,430.07         314,464.39           January 2040         0.00         495,474.86         305,995.00           February 2040         0.00         483,758.94         297,727.41           March 2040         0.00         472,277.86         289,657.11           April 2040         0.00         461,027.28         281,779.69           May 2040         0.00         450,002.91         274,090.83           June 2040         0.00         439,200.54         266,586.31           July 2040         0.00         428,616.04         259,261.98           August 2040         0.00         428,616.04         259,261.98           August 2040         0.00         488,084.50         245,137.85           October 2040         0.00         498,084.50         245,137.85           October 2040         0.00         388,376.67         231,687.09           December 2040         0.00         378,822.08         225,204.81           January 2041         0.00         360,293.01         212,708.31           Mar	e e e e e e e e e e e e e e e e e e e		*		
November 2039         0.00         519,629.09         323,140.19           December 2039         0.00         507,430.07         314,464.39           January 2040         0.00         495,474.86         305,995.00           February 2040         0.00         483,758.94         297,727.41           March 2040         0.00         461,027.28         281,779.69           May 2040         0.00         450,002.91         274,090.83           June 2040         0.00         439,200.54         266,586.31           July 2040         0.00         428,616.04         259,261.98           August 2040         0.00         428,616.04         259,261.98           August 2040         0.00         408,084.50         251,137.85           October 2040         0.00         398,129.55         238,330.20           November 2040         0.00         388,376.67         231,687.09           December 2040         0.00         378,822.08         225,204.81           January 2041         0.00         360,293.01         212,708.31           March 2041         0.00         360,293.01         212,708.31           March 2041         0.00         332,896.00         195,081.62           June	•	0.00			
December 2039         0.00         507,430.07         314,464.39           January 2040         0.00         495,474.86         305,995.00           February 2040         0.00         483,758.94         297,727.41           March 2040         0.00         472,277.86         289,657.11           April 2040         0.00         461,027.28         281,779.69           May 2040         0.00         450,002.91         274,090.83           June 2040         0.00         439,200.54         266,586.31           July 2040         0.00         428,616.04         259,261.98           August 2040         0.00         418,245.36         252,113.82           September 2040         0.00         408,084.50         245,137.85           October 2040         0.00         398,129.55         238,330.20           November 2040         0.00         378,822.08         225,204.81           January 2041         0.00         369,462.07         218,879.74           February 2041         0.00         360,293.01         212,708.31           March 2041         0.00         351,311.30         206,687.07           April 2041         0.00         352,455.55         189,490.83           July			,		
January 2040         0.00         495,474.86         305,995.00           February 2040         0.00         483,758.94         297,727.41           March 2040         0.00         472,277.86         289,657.11           April 2040         0.00         461,027.28         281,779.69           May 2040         0.00         450,002.91         274,090.83           June 2040         0.00         439,200.54         266,586,31           July 2040         0.00         428,616.04         259,261.98           August 2040         0.00         418,245.36         252,113.82           September 2040         0.00         408,084.50         245,137.85           October 2040         0.00         388,376.67         231,687.09           December 2040         0.00         388,376.67         231,687.09           December 2040         0.00         378,822.08         225,204.81           January 2041         0.00         369,462.07         218,879.74           February 2041         0.00         360,293.01         212,708.31           March 2041         0.00         351,311.30         206,687.07           April 2041         0.00         325,455.55         189,490.83           July					
February 2040         0.00         483,758.94         297,727.41           March 2040         0.00         472,277.86         289,657.11           April 2040         0.00         461,027.28         281,779.69           May 2040         0.00         450,002.91         274,090.83           June 2040         0.00         439,200.54         266,586.31           July 2040         0.00         418,245.36         252,113.82           September 2040         0.00         408,084.50         245,137.85           October 2040         0.00         398,129.55         238,330.20           November 2040         0.00         388,376.67         231,687.09           December 2040         0.00         378,822.08         225,204.81           January 2041         0.00         369,462.07         218,879.74           February 2041         0.00         351,311.30         206,687.07           April 2041         0.00         342,513.45         200,812.61           May 2041         0.00         325,455.55         189,490.83           July 2041         0.00         333,896.00         195,081.62           June 2041         0.00         309,092.45         178,717.24           September 2					
March 2040         0.00         472,277.86         289,657.11           April 2040         0.00         461,027.28         281,779.69           May 2040         0.00         450,002.91         274,090.83           June 2040         0.00         439,200.54         266,586.31           July 2040         0.00         428,616.04         259,261.98           August 2040         0.00         418,245.36         252,113.82           September 2040         0.00         408,084.50         245,137.85           October 2040         0.00         398,129.55         238,330.20           November 2040         0.00         378,822.08         225,204.81           January 2041         0.00         369,462.07         218,879.74           February 2041         0.00         360,293.01         212,708.31           March 2041         0.00         342,513.45         206,687.07           April 2041         0.00         342,513.45         206,887.07           April 2041         0.00         333,896.00         195,081.62           June 2041         0.00         333,896.00         195,081.62           June 2041         0.00         333,896.00         195,081.62           June 2041	· ·	0.00	*		
April 20400.00461,027.28281,779.69May 20400.00450,002.91274,090.83June 20400.00439,200.54266,586.31July 20400.00428,616.04259,261.98August 20400.00418,245.36252,113.82September 20400.00408,084.50245,137.85October 20400.00398,129.55238,330.20November 20400.00378,822.08225,204.81January 20410.00369,462.07218,879.74February 20410.00360,293.01212,708.31March 20410.00360,293.01212,708.31May 20410.00351,311.30206,687.07April 20410.00333,896.00195,081.62June 20410.00325,455.55189,490.83July 20410.00317,188.79184,037.08August 20410.00309,092.45178,717.24September 20410.00301,163.31173,528.28October 20410.00293,398.22168,467.21November 20410.00293,398.22168,467.21November 20410.00285,794.09163,531.13December 20410.00278,347.87158,717.18January 20420.00271,056.59154,022.57February 20420.00263,917.30149,444.59	•		· · · · · · · · · · · · · · · · · · ·		
May 2040         0.00         450,002.91         274,090.83           June 2040         0.00         439,200.54         266,586.31           July 2040         0.00         428,616.04         259,261.98           August 2040         0.00         418,245.36         252,113.82           September 2040         0.00         408,084.50         245,137.85           October 2040         0.00         398,129.55         238,330.20           November 2040         0.00         378,822.08         225,204.81           January 2041         0.00         369,462.07         218,879.74           February 2041         0.00         360,293.01         212,708.31           March 2041         0.00         362,930.01         212,708.31           May 2041         0.00         333,896.00         195,081.62           June 2041         0.00         333,896.00         195,081.62           June 2041         0.00         337,188.79         184,037.08           August 2041         0.00         309,092.45         178,717.24           September 2041         0.00         301,163.31         173,528.28           October 2041         0.00         293,398.22         168,467.21           November		0.00			· · · · · · · · · · · · · · · · · · ·
June 2040         0.00         439,200.54         266,586.31           July 2040         0.00         428,616.04         259,261.98           August 2040         0.00         418,245.36         252,113.82           September 2040         0.00         408,084.50         245,137.85           October 2040         0.00         398,129.55         238,330.20           November 2040         0.00         388,376.67         231,687.09           December 2040         0.00         378,822.08         225,204.81           January 2041         0.00         369,462.07         218,879.74           February 2041         0.00         360,293.01         212,708.31           March 2041         0.00         351,311.30         206,687.07           April 2041         0.00         342,513.45         200,812.61           May 2041         0.00         333,896.00         195,081.62           June 2041         0.00         325,455.55         189,490.83           July 2041         0.00         301,163.31         173,528.28           October 2041         0.00         301,163.31         173,528.28           October 2041         0.00         293,398.22         168,467.21           Novembe	*	0.00	*		· · · · · · · · · · · · · · · · · · ·
July 2040         0.00         428,616.04         259,261.98           August 2040         0.00         418,245.36         252,113.82           September 2040         0.00         408,084.50         245,137.85           October 2040         0.00         398,129.55         238,330.20           November 2040         0.00         378,822.08         225,204.81           January 2041         0.00         369,462.07         218,879.74           February 2041         0.00         360,293.01         212,708.31           March 2041         0.00         351,311.30         206,687.07           April 2041         0.00         342,513.45         200,812.61           May 2041         0.00         333,896.00         195,081.62           June 2041         0.00         325,455.55         189,490.83           July 2041         0.00         317,188.79         184,037.08           August 2041         0.00         309,092.45         178,717.24           September 2041         0.00         301,163.31         173,528.28           October 2041         0.00         293,398.22         168,467.21           November 2041         0.00         278,347.87         158,717.18           Jan	•		· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·
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October 2040         0.00         398,129.55         238,330.20           November 2040         0.00         388,376.67         231,687.09           December 2040         0.00         378,822.08         225,204.81           January 2041         0.00         369,462.07         218,879.74           February 2041         0.00         360,293.01         212,708.31           March 2041         0.00         351,311.30         206,687.07           April 2041         0.00         342,513.45         200,812.61           May 2041         0.00         333,896.00         195,081.62           June 2041         0.00         325,455.55         189,490.83           July 2041         0.00         317,188.79         184,037.08           August 2041         0.00         309,092.45         178,717.24           September 2041         0.00         301,163.31         173,528.28           October 2041         0.00         293,398.22         168,467.21           November 2041         0.00         278,347.87         158,717.18           January 2042         0.00         271,056.59         154,022.57           February 2042         0.00         263,917.30         149,444.59			· · · · · · · · · · · · · · · · · · ·		
November 2040       0.00       388,376.67       231,687.09         December 2040       0.00       378,822.08       225,204.81         January 2041       0.00       369,462.07       218,879.74         February 2041       0.00       360,293.01       212,708.31         March 2041       0.00       351,311.30       206,687.07         April 2041       0.00       342,513.45       200,812.61         May 2041       0.00       333,896.00       195,081.62         June 2041       0.00       325,455.55       189,490.83         July 2041       0.00       317,188.79       184,037.08         August 2041       0.00       309,092.45       178,717.24         September 2041       0.00       301,163.31       173,528.28         October 2041       0.00       293,398.22       168,467.21         November 2041       0.00       278,347.87       158,717.18         January 2042       0.00       271,056.59       154,022.57         February 2042       0.00       263,917.30       149,444.59	1				
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September 2041       0.00       301,163.31       173,528.28         October 2041       0.00       293,398.22       168,467.21         November 2041       0.00       285,794.09       163,531.13         December 2041       0.00       278,347.87       158,717.18         January 2042       0.00       271,056.59       154,022.57         February 2042       0.00       263,917.30       149,444.59	•		*		
October 2041       0.00       293,398.22       168,467.21         November 2041       0.00       285,794.09       163,531.13         December 2041       0.00       278,347.87       158,717.18         January 2042       0.00       271,056.59       154,022.57         February 2042       0.00       263,917.30       149,444.59	e				*
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December 2041       0.00       278,347.87       158,717.18         January 2042       0.00       271,056.59       154,022.57         February 2042       0.00       263,917.30       149,444.59					
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February 2042					
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Distribution Date	Class CD	Classes P and Z (in the aggregate)	Classes PE, V and ZA (in the aggregate)
April 2042	\$ 0.00	\$ 250,083.27	\$ 140,627.86
May 2042	0.00	243,382.92	136,383.96
June 2042	0.00	236,823.36	132,246.35
July 2042	0.00	230,401.92	128,212.58
August 2042	0.00	224,115.96	124,280.29
September 2042	0.00	217,962.90	120,447.11
October 2042	0.00	211,940.22	116,710.78
November 2042	0.00	206,045.41	113,069.05
December 2042	0.00	200,276.05	109,519.74
January 2043	0.00	194,629.71	106,060.71
February 2043	0.00	189,104.06	102,689.87
March 2043	0.00	183,696.78	99,405.18
April 2043	0.00	178,405.59	96,204.63
May 2043	0.00	173,228.27	93,086.26
June 2043	0.00	168,162.62	90,048.18
July 2043	0.00	163,206.50	87,088.49
August 2043	0.00	158,357.79	84,205.38
September 2043	0.00	153,614.42	81,397.05
October 2043	0.00	148,974.36	78,661.76
November 2043	0.00	144,435.60	75,997.79
December 2043	0.00	139,996.19	73,403.48
January 2044	0.00	135,654.20	70,877.17
February 2044	0.00	131,407.74	68,417.29
March 2044	0.00	127,254.96	66,022.25
April 2044	0.00	123,194.02	63,690.53
May 2044	0.00	119,223.14	61,420.64
June 2044	0.00	115,340.57	59,211.11
July 2044	0.00	111,544.58	57,060.52
August 2044	0.00	107,833.48	54,967.45
September 2044	0.00	104,205.60	52,930.56
October 2044	0.00	100,659.32	50,948.50
November 2044	0.00	97,193.03	49,019.96
December 2044	0.00	93,805.17	47,143.67
January 2045	0.00	90,494.18	45,318.38
February 2045	0.00	87,258.55	43,542.86
March 2045	0.00	84,096.81	41,815.93
April 2045	0.00	81,007.48	40,136.42
May 2045	0.00	77,989.13	38,503.19
June 2045	0.00	75,040.37	36,915.12
July 2045	0.00	72,159.80	35,371.12
August 2045	0.00	69,346.08	33,870.13
September 2045	0.00	66,597.87	32,411.11
October 2045	0.00	63,913.87	30,993.03
November 2045	0.00	61,292.80	29,614.91
December 2045	0.00	58,733.40	28,275.77
January 2046	0.00	56,234.43	26,974.66
February 2046	0.00	53,794.70	25,710.65
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Distribution Date	Class CD	sses P and Z he aggregate)	Classes PE, V and ZA he aggregate)
March 2046	\$ 0.00	\$ 51,413.00	\$ 24,482.84
April 2046	0.00	49,088.17	23,290.34
May 2046	0.00	46,819.06	22,132.27
June 2046	0.00	44,604.56	21,007.80
July 2046	0.00	42,443.56	19,916.10
August 2046	0.00	40,334.98	18,856.35
September 2046	0.00	38,277.76	17,827.76
October 2046	0.00	36,270.85	16,829.57
November 2046	0.00	34,313.23	15,861.01
December 2046	0.00	32,403.89	14,921.36
January 2047	0.00	30,541.87	14,009.88
February 2047	0.00	28,726.18	13,125.88
March 2047	0.00	26,955.87	12,268.66
April 2047	0.00	25,230.03	11,437.56
May 2047	0.00	23,547.74	10,631.92
June 2047	0.00	21,908.09	9,851.09
July 2047	0.00	20,310.21	9,094.45
August 2047	0.00	18,753.25	8,361.38
September 2047	0.00	17,236.35	7,651.30
October 2047	0.00	15,758.68	6,963.60
November 2047	0.00	14,319.43	6,297.73
December 2047	0.00	12,917.80	5,653.12
January 2048	0.00	11,553.01	5,029.24
February 2048	0.00	10,224.28	4,425.54
March 2048	0.00	8,930.87	3,841.50
April 2048	0.00	7,672.02	3,276.63
May 2048	0.00	6,447.03	2,730.43
June 2048	0.00	5,255.17	2,202.40
July 2048	0.00	4,095.74	1,692.08
August 2048	0.00	2,968.06	1,199.01
September 2048	0.00	1,871.46	722.73
October 2048	0.00	805.28	262.81
November 2048 and thereafter	0.00	0.00	0.00

Initial Balance	
	00
February 2019 5,000,019.27 72,799,332.0	52
March 2019	59
April 2019	19
May 2019 4,901,856.16 72,006,420.2	28
June 2019	22
July 2019	28
August 2019	50
September 2019	03
October 2019	98
November 2019	24
December 2019	75
January 2020	35
February 2020	56
March 2020	29
April 2020	53
May 2020	)5
June 2020	)5
July 2020 3,969,492.72 65,802,092.8	34
August 2020	40
September 2020	)5
October 2020	00
November 2020	96
December 2020	55
January 2021 3,378,872.13 62,010,650.3	37
February 2021	)2
March 2021 3,171,783.87 60,654,158.9	92
April 2021	
May 2021	
June 2021	
July 2021	98
August 2021	
September 2021	
October 2021	
November 2021	
December 2021	
January 2022	
February 2022	
March 2022	
April 2022	
May 2022	
June 2022	
July 2022	
August 2022	
September 2022	
October 2022	
November 2022	
December 2022	23

January 2025         \$1,355,598,26         \$46,709,760,55           February 2023         1,294,462,53         46,134,629,00           March 2023         1,177,130,50         44,998,766,51           April 2023         1,1120,884,97         44,479,584,75           June 2023         1,066,220,79         43,881,848,26           July 2023         1,013,114,09         43,330,398,14           August 2023         961,541,28         42,835,570,60           September 2023         911,479,10         42,241,328,42           October 2023         770,127,90         40,641,746,41           November 2023         770,127,90         40,641,746,41           January 2024         683,033,03         39,597,616,26           March 2024         683,033,03         39,597,616,26           March 2024         614,614         385,799,593,33           May 2024         562,665,06         38,064,095,51           June 2024         562,665,06         38,064,095,51           June 2024         525,197,76         37,561,493,18           August 2024         480,023,69         37,661,123,98           August 2024         480,023,69         37,661,213,98           August 2024         480,023,69         37,661,913,19	Distribution Date	Class KD	Classes PB and ZP (in the aggregate)
March 2023         1,234,981,53         45,564,310,56           April 2023         1,120,884,97         44,437,988,45           June 2023         1,066,220,79         43,881,848,26           July 2023         1,013,114,09         43,330,398,14           August 2023         961,541,28         42,788,570,60           September 2023         911,479,10         42,241,328,42           October 2023         862,994,57         41,70,452,80           November 2023         815,794,97         41,170,452,80           November 2023         770,127,90         40,641,746,41           January 2024         683,033,03         39,597,616,26           March 2024         683,033,03         39,597,616,26           March 2024         681,646,46         38,570,959,33           May 2024         562,665,06         38,64,995,51           June 2024         562,665,06         38,64,995,51           June 2024         552,197,76         37,561,495,18           June 2024         562,665,06         38,64,995,51           June 2024         562,665,06         38,604,995,51           June 2024         489,023,69         37,063,123,98           August 2024         489,023,69         37,063,123,98 <t< td=""><td>January 2023</td><td>\$1,355,598.26</td><td>\$46,709,760.55</td></t<>	January 2023	\$1,355,598.26	\$46,709,760.55
April 2023         1,177,130.50         44,998,766.51           June 2023         1,160,6220.79         43,881,848.26           July 2023         1,013,114.09         43,330,398.14           August 2025         961,541.28         42,783,570.60           September 2023         961,541.28         42,783,570.60           November 2023         862,904.57         41,703,634.69           November 2023         770,127.90         40,641,746.41           January 2024         683,033.03         39,597,616.26           March 2024         683,033.03         39,597,616.26           March 2024         681,033.03         39,597,616.26           March 2024         601,446.14         38,570,959.31           May 2024         525,197.6         36,669.60         38,664,095.51           June 2024         525,197.6         37,661,425.80           August 2024         489,023.69         37,063,123.83           August 2024         489,023.69         37,063,123.83           September 2024         489,023.69         37,063,123.83           September 2024         489,023.69         37,063,123.83           September 2024         326,851.45         34,633,521.20           June 2025         298,020.02         34,159	February 2023	1,294,462.53	46,134,629.00
May 2023         1,120,884.97         44,437,958.45           June 2023         1,066,220.79         43,881,848.26           July 2023         1,013,114.09         43,330,398.14           August 2023         991,541.28         42,783,570.60           September 2023         862,904.57         41,703,634.69           November 2023         815,794.97         41,170,452.80           December 2023         770,127.90         40,641,746.41           January 2024         683,033.03         39,597,616.26           March 2024         681,353.03         39,597,616.26           March 2024         681,561.78         39,082,121.27           April 2024         661,561.78         39,082,121.27           April 2024         562,665.06         38,064.095.51           June 2024         525,197.76         35,561.495.18           July 2024         489,023.69         37,063,123.98           August 2024         489,023.69         37,063,123.98           August 2024         489,023.69         37,063,123.98           August 2024         489,023.69         37,063,123.98           August 2025         388,095.52         35,593,045.62           November 2024         388,095.2         35,593,045.62	March 2023	1,234,981.53	45,564,310.56
June 2023         1,066,220.79         43,881,848.26           July 2023         1,013,114.09         43,330,398.14           August 2023         961,541.28         278,783,750.60           September 2023         911,479.10         42,241,328.42           October 2023         862,904.57         41,703,654.69           November 2023         770,127.90         40,641,746.41           January 2024         725,881.21         40,117,479.48           February 2024         683,033.03         39,597,616.26           March 2024         661,561.78         39,082,121.27           April 2024         601,446.14         38,570,959.33           May 2024         562,665.00         38,064,095.51           June 2024         552,197.76         37,561,495.18           July 2024         489,023.69         37,063,123.98           August 2024         489,023.69         37,063,123.98           August 2024         489,023.69         37,063,123.98           August 2024         489,023.69         37,063,123.98           November 2024         38,685,28         38,511.12,52.73           December 2024         38,685,28         38,511.12,52.73           December 2025         29,802.00         34,159,818.28	April 2023	1,177,130.50	44,998,766.51
July 2023         1,013,114.09         43,330,398.14           August 2023         961,541.28         42,783,570.60           September 2023         911,479.10         41,703,634.69           November 2023         862,904.57         41,703,634.69           November 2023         770,127.90         41,170,452.80           December 2023         770,127.90         40,641,746.41           January 2024         683,033.03         39,597,616.26           March 2024         683,033.03         39,597,616.26           March 2024         661,446.14         38,570,959.33           May 2024         50,665.06         38,064.095.51           June 2024         525,197.76         37,561,495.18           July 2024         489,023.69         37,063,123.98           August 2024         388,095.2         35,593,015.2           September 2024         388,095.2         35,593,015.2           November 2024         388,095.2         35,593,015.2	May 2023	1,120,884.97	44,437,958.45
August 2023         961,541,28         42,783,7060           September 2023         911,479,10         42,241,328,42           October 2023         862,904,57         41,170,363469           November 2023         770,127,90         40,641,746,41           January 2024         725,881,21         41,171,479,48           February 2024         683,033,03         39,597,616,26           March 2024         661,561,78         39,082,121,27           April 2024         601,461,41         38,570,959,33           May 2024         526,665.06         38,064,095,51           June 2024         525,197,76         37,561,495,18           July 2024         489,023,69         357,514,951,8           July 2024         489,023,69         37,561,495,18           August 2024         489,023,69         37,561,495,18           July 2024         489,023,69         37,561,495,18           August 2024         489,023,69         37,561,495,18           September 2024         388,059,52         35,559,045,62           November 2024         388,059,52         35,559,045,62           November 2024         356,858,28         35,111,252,73           December 2025         29,80,200,2         314,199,818,28 <t< td=""><td>June 2023</td><td>1,066,220.79</td><td>43,881,848.26</td></t<>	June 2023	1,066,220.79	43,881,848.26
September 2023         911,479.10         42,241,328.42           October 2023         862,904.57         41,703,634.69           November 2023         770,127.90         40,641,746.41           January 2024         725,881.21         40,117,479.48           February 2024         683,033.30         39,597,616.28           March 2024         61,561.78         39,082,121.27           April 2024         601,446.14         38,570,959.33           May 2024         562,665.00         88,064,095.51           June 2024         489,023.69         37,051,495.18           July 2024         489,023.69         37,051,495.18           August 2024         450,474.46         36,678,947.82           September 2024         420,474.46         36,078,932.89           October 2024         388,059.52         35,593,045.62           November 2024         388,059.52         35,593,045.62           November 2024         356,858.28         35,111,252.73           January 2025         298,020.02         34,159,818.28           February 2025         270,345.21         33,011,459.818.28           February 2025         270,345.21         33,011,459.818.28           February 2025         194,076.23         32,046.64.43	July 2023	1,013,114.09	43,330,398.14
October 2023         862,904.57         41,703,634.69           November 2023         815,794.97         41,170,452.80           December 2023         770,127.94         40,641,746.41           January 2024         725,881.21         40,117,479.48           February 2024         683,033.03         39,597,616.26           March 2024         601,446.14         38,570,599.33           May 2024         562,665.00         38,064,095.51           June 2024         525,197.76         37,561,495.18           July 2024         489,023.69         37,063,123.98           August 2024         489,023.69         37,063,123.98           August 2024         420,474.46         36,788,932.89           October 2024         326,851.45         36,788,932.89           October 2024         356,858.28         35,111,252.73           December 2024         326,851.45         34,633,521.20           January 2025         298,020.02         34,159,818.28           February 2025         298,020.02         34,159,818.28           February 2025         218,391.51         32,762,557.39           May 2025         121,859.11         32,762,557.39           May 2025         128,891.51         32,764.64         31,400,399	August 2023	961,541.28	42,783,570.60
November 2023         815,794.97         41,170,452.80           December 2023         770,127.90         40,617,464.11           January 2024         725,881.21         40,117,479,48           February 2024         683,033.03         39,597,616.26           March 2024         641,561.78         39,082,121.27           April 2024         601,446.14         38,570,959.33           May 2024         562,665.06         38,064,095.51           June 2024         489,023.69         37,061,495.18           July 2024         489,023.69         37,063,123.98           September 2024         489,023.69         37,063,123.98           September 2024         388,059.52         35,593,045.62           January 2025         298,020.02         34,159,818.28           February 2025         298,020.02         34,159,818.28           February 2025         123,021,464.43         33,224,368.49	September 2023	911,479.10	42,241,328.42
December 2023         770,127.90         40,641,746.41           January 2024         725,881.21         40,117,479.48           February 2024         683,033.03         39,597,616.26           March 2024         641,561.78         39,082,121.27           April 2024         601,446.14         38,570,959.33           May 2024         562,665.06         38,064,095.51           June 2024         525,197.76         37,561,495.18           July 2024         489,023.69         37,063,123.98           August 2024         494,122.60         36,568,947.82           September 2024         420,474.46         36,078,932.89           October 2024         388,059.52         35,593,045.62           November 2024         356,858.28         35,111,252.73           December 2024         356,858.28         35,111,252.73           December 2025         298,020.02         34,159,818.28           February 2025         298,020.02         34,159,818.28           February 2025         270,345.21         33,690,111.45           March 2025         243,808.47         33,224,368.49           April 2025         194,076.23         32,304,646.43           July 2025         194,076.23         32,304,646.43      <	October 2023	862,904.57	41,703,634.69
January 2024         725,881.21         40,117,479.48           February 2024         683,033.03         39,597.616.26           March 2024         611,541.78         39,082,121.27           April 2024         601,446.14         38,570,959.33           May 2024         562,665.06         38,064,095.51           June 2024         525,197.76         37,614,95.18           July 2024         489,023.69         37,631,495.18           August 2024         484,122.60         36,568,947.82           September 2024         420,474.46         36,078,932.89           October 2024         356,858.28         35,111,252.73           December 2024         326,851.45         34,633,521.20           January 2025         298,020.02         34,159,818.28           February 2025         273,345.21         33,690,111.45           March 2025         243,808.47         33,224,368.49           April 2025         218,391.51         32,762,557.39           May 2025         194,076.23         32,304,661.43           July 2025         194,676.23         32,304,661.43           July 2025         194,776.23         33,090,111.45           May 2025         197,844.81         31,400,399.25	November 2023	815,794.97	
February 2024         683,033.03         39,597,616.26           March 2024         641,561.78         39,082,121.27           April 2024         601,446.14         38,570,959.33           May 2024         562,665.06         38,064,095.51           June 2024         525,197.76         37,561,495.18           July 2024         489,023.69         37,063,123.98           August 2024         454,122.60         36,688,947.82           September 2024         420,474.46         36,078,932.89           October 2024         388,059.52         35,593,045.62           November 2024         326,851.45         34,633,521.20           December 2024         326,851.45         34,633,521.20           January 2025         298,020.02         34,159,818.28           February 2025         270,345.21         33,690,111.45           March 2025         243,808.47         33,224,368.49           April 2025         218,391.51         32,762,557.39           May 2025         194,076.23         32,304,646.43           July 2025         148,679.61         31,400,339.25           August 2025         127,563.27         30,954,000.85           September 2025         107,478.58         30,511,378.06	December 2023	770,127.90	40,641,746.41
March 2024         641,561.78         39,082,121.27           April 2024         601,4461.4         38,570,959.33           May 2024         562,665.06         38,064,095.51           June 2024         525,197.76         37,561,495.18           July 2024         489,023.69         37,063,123.98           August 2024         454,122.60         36,568,947.82           September 2024         420,474.6         36,078,932.89           October 2024         388,695.52         355,93,045.62           November 2024         356,858.28         35,111,252.73           December 2024         326,851.45         34,633,521.20           January 2025         298,020.02         34,159,818.28           February 2025         270,345.21         33,690,111.45           March 2025         243,808.47         33,224,368.49           April 2025         218,391.51         32,702,557.39           May 2025         194,076.23         32,304,646.43           June 2025         170,844.81         31,850,604.13           July 2025         148,679.61         31,400,399.25           August 2025         127,563.27         30,954,000.80           September 2025         127,563.27         30,954,000.80	January 2024	725,881.21	40,117,479.48
April 2024         601,446.14         38,570,959.33           May 2024         562,665.06         38,064,095.51           June 2024         525,197.76         37,561,495.18           July 2024         489,023.69         37,063,123.98           August 2024         454,122.60         36,568,947.82           September 2024         420,474.46         36,078,932.89           October 2024         356,858.28         35,111,252.73           December 2024         326,851.45         34,633,521.20           January 2025         298,020.02         31,59,818.28           February 2025         270,345.21         33,690,111.45           March 2025         218,391.51         32,762,557.39           May 2025         194,076.23         32,304,664.43           June 2025         194,076.23         32,304,664.43           June 2025         170,844.81         31,850,604.13           July 2025         148,679.61         31,400,399.25           August 2025         127,563.27         30,954,000.80           September 2025         107,478.8         30,511,378.06           October 2025         88,408.62         30,072,500.52           November 2025         53,246.14         29,205,800.28           <	February 2024	683,033.03	
May 2024         562,665.06         38,064,095.51           June 2024         525,197.76         37,561,495.18           July 2024         489,023.69         37,063,123.98           August 2024         454,122.00         36,568,947.82           September 2024         420,474.46         36,078,932.89           October 2024         388,059.52         35,593,045.62           November 2024         326,851.45         34,633,521.20           December 2024         326,851.45         34,633,521.20           January 2025         298,020.02         34,159,818.28           February 2025         270,345.21         33,690,111.45           March 2025         243,808.47         33,224,368.49           April 2025         218,391.51         32,762,557.39           May 2025         194,076.23         32,304,646.43           June 2025         170,844.81         31,850,604.13           July 2025         148,679.61         31,400,399.25           August 2025         127,563.27         30,954,000.80           September 2025         127,563.27         30,954,000.80           October 2025         88,408.62         30,072,500.52           November 2025         70,336.65         29,637,337.93	March 2024		39,082,121.27
June 2024         525,197.76         37,561,495.18           July 2024         489,023,69         37,063,123,98           August 2024         454,122.60         36,568,947.82           September 2024         420,474.46         36,078,932.89           October 2024         388,059.52         35,593,045.62           November 2024         356,858.28         35,111,252.73           December 2024         326,851.45         34,633,521.20           January 2025         298,020.2         34,159,818.28           February 2025         298,020.2         34,159,818.24           March 2025         243,808.47         33,224,368.49           April 2025         218,391.51         32,762,557.39           May 2025         194,076.23         32,304,646.43           June 2025         170,484.81         31,850,604.13           July 2025         148,679.61         31,400,399.25           August 2025         127,563.27         30,954,000.80           September 2025         127,563.27         30,954,000.80           September 2025         188,408.62         30,072,500.52           November 2025         88,408.62         30,072,500.52           November 2025         53,246.14         29,205,860.28 <tr< td=""><td>April 2024</td><td>601,446.14</td><td>38,570,959.33</td></tr<>	April 2024	601,446.14	38,570,959.33
July 2024         489,023.69         37,063,123.98           August 2024         454,122.60         36,568,947.82           September 2024         420,474.46         36,078,932.89           October 2024         388,059.52         35,593,045.62           November 2024         356,858.28         35,111,252.73           December 2024         326,851.45         34,633,521.20           January 2025         298,020.02         34,159,818.28           February 2025         270,345.21         33,690,111.45           March 2025         243,808.47         33,224,368.49           April 2025         218,391.51         32,762,557.39           May 2025         194,076.23         32,304,646.43           Jule 2025         170,844.81         31,850,604.13           July 2025         148,679.61         31,400,399.25           August 2025         127,563.27         30,954,000.80           September 2025         107,478.58         30,511,378.06           October 2025         88,408.62         30,072,500.52           November 2025         70,336.65         29,673,337.38           Pebruary 2026         37,120.82         28,778,037.78           February 2026         77,01.46         27,933,240.36 <t< td=""><td>May 2024</td><td>562,665.06</td><td>38,064,095.51</td></t<>	May 2024	562,665.06	38,064,095.51
August 2024       454,122.60       36,568,947.82         September 2024       420,474.46       36,078,932.89         October 2024       388,059.52       35,593,045.62         November 2024       356,858.28       35,111,252.73         December 2024       326,851.45       34,633,521.20         January 2025       298,020.02       34,159,818.28         February 2025       270,345.21       33,690,111.45         March 2025       243,808.47       32,224,368.49         April 2025       218,391.51       32,762,557.39         May 2025       194,076.23       32,304,646.43         June 2025       170,844.81       31,850,604.13         July 2025       148,679.61       31,400,399.25         August 2025       127,563.27       30,954,000.80         September 2025       127,563.27       30,954,000.80         September 2025       88,408.62       30,072,500.52         November 2025       88,408.62       30,072,500.52         November 2025       53,246.14       29,205,860.28         January 2026       37,120.82       28,778,037.78         February 2026       21,944.54       28,353,840.92         March 2026       7,001.46       27,933,240.36 <tr< td=""><td>June 2024</td><td>525,197.76</td><td>37,561,495.18</td></tr<>	June 2024	525,197.76	37,561,495.18
September 2024         420,474.46         36,078,932.89           October 2024         388,059.52         35,593,045.62           November 2024         356,858.28         35,111,252.73           December 2024         36,6851.45         34,633,521.20           January 2025         298,020.02         34,159,818.28           February 2025         270,345.21         33,690,111.45           March 2025         243,808.47         33,224,368.49           April 2025         218,391.51         32,762,557.39           May 2025         194,076.23         32,304,646.43           Jule 2025         170,844.81         31,850,604.13           July 2025         148,679.61         31,400,399.25           August 2025         127,563.27         30,954,000.80           September 2025         107,478.58         30,511,378.06           October 2025         88,408.62         30,072,500.52           November 2025         70,336.65         29,637,337.93           December 2025         53,246.14         29,205,860.28           January 2026         21,944.54         28,353,840.92           March 2026         7,014.6         27,933,240.36           April 2026         0.00         27,102,712.16	July 2024	489,023.69	37,063,123.98
October 2024         388,059.52         35,593,045.62           November 2024         356,858.28         35,111,252.73           December 2024         326,851.45         34,633,521.20           January 2025         298,020.02         34,159,818.28           February 2025         270,345.21         33,690,111.45           March 2025         243,808.47         33,224,368.49           April 2025         218,391.51         32,762,557.39           May 2025         194,076.23         32,304,646.43           June 2025         170,844.81         31,850,604.13           July 2025         148,679.61         31,400,399.25           August 2025         127,563.27         30,954,000.80           September 2025         107,478.58         30,511,378.06           October 2025         88,408.62         30,072,500.52           November 2025         70,336.65         29,637,337.93           December 2025         53,246.14         29,205,860.28           January 2026         21,944.54         28,353,840.92           March 2026         7,01.46         27,933,240.36           April 2026         0.00         27,102,712.16           June 2026         0.00         27,102,712.16           June	August 2024	454,122.60	36,568,947.82
November 2024         356,858.28         35,111,252.73           December 2024         326,851.45         34,633,521.20           January 2025         298,020.02         34,159,818.28           February 2025         270,345.21         33,690,111.45           March 2025         243,808.47         33,224,368.49           April 2025         218,391.51         32,762,557.39           May 2025         194,076.23         32,304,646.43           June 2025         170,844.81         31,850,604.13           July 2025         148,679.61         31,400,399.25           August 2025         127,563.27         30,954,000.80           September 2025         107,478.58         30,511,378.06           October 2025         88,408.62         30,072,500.52           November 2025         70,336.65         29,637,337.93           December 2025         53,246.14         29,205,860.28           January 2026         37,120.82         28,778,037.78           February 2026         7,701.46         27,933,240.36           April 2026         0.00         27,516,207.06           May 2026         0.00         27,102,712.16           July 2026         0.00         26,286,223.34           August 2026	September 2024	420,474.46	36,078,932.89
December 2024         326,851.45         34,633,521.20           January 2025         298,020.02         34,159,818.28           February 2025         270,345.21         33,690,111.45           March 2025         243,808.47         33,224,368.49           April 2025         218,391.51         32,762,557.39           May 2025         194,076.23         32,304,646.43           June 2025         170,844.81         31,850,604.13           July 2025         148,679.61         31,400,399.25           August 2025         127,563.27         30,954,000.80           September 2025         107,478.58         30,511,378.06           October 2025         88,408.62         30,072,500.52           November 2025         70,336.65         29,637,337.93           February 2026         37,120.82         28,778,037.78           February 2026         21,944.54         28,353,840.92           March 2026         7,701.46         27,933,240.36           April 2026         0.00         27,516,207.06           May 2026         0.00         27,516,207.06           May 2026         0.00         25,883,274.16           July 2026         0.00         25,883,274.28           September 2026	October 2024	388,059.52	35,593,045.62
January 2025         298,020.02         34,159,818.28           February 2025         270,345.21         33,690,111.45           March 2025         243,808.47         33,224,368.49           April 2025         218,391.51         32,762,557.39           May 2025         194,076.23         32,304,646.43           Jule 2025         170,844.81         31,850,604.13           July 2025         148,679.61         31,400,399.25           August 2025         127,563.27         30,954,000.80           September 2025         107,478.58         30,511,378.06           October 2025         88,408.62         30,072,500.52           November 2025         70,336.65         29,637,337.93           December 2025         53,246.14         29,205,860.28           January 2026         37,120.82         28,778,037.78           February 2026         21,944.54         28,353,840.92           March 2026         7,701.46         27,933,240.36           April 2026         0.00         27,102,712.16           June 2026         0.00         26,692,727.04           July 2026         0.00         26,823.34           August 2026         0.00         25,883,172.88           September 2026	November 2024	356,858.28	35,111,252.73
February 2025         270,345.21         33,690,111.45           March 2025         243,808.47         33,224,368.49           April 2025         218,391.51         32,762,557.39           May 2025         194,076.23         32,304,646.43           June 2025         170,844.81         31,850,604.13           July 2025         148,679.61         31,400,399.25           August 2025         127,563.27         30,954,000.80           September 2025         107,478.58         30,511,378.06           October 2025         88,408.62         30,072,500.52           November 2025         70,336.65         29,637,337.93           December 2025         53,246.14         29,205,860.28           January 2026         37,120.82         28,778,037.78           February 2026         21,944.54         28,353,840.92           March 2026         7,701.46         27,933,240.36           April 2026         0.00         27,516,207.06           May 2026         0.00         27,102,712.16           June 2026         0.00         26,692,727.04           July 2026         0.00         25,883,172.88           September 2026         0.00         25,883,172.88           September 2026         <	December 2024	326,851.45	34,633,521.20
March 2025       243,808.47       33,224,368.49         April 2025       218,391.51       32,762,557.39         May 2025       194,076.23       32,304,646.43         June 2025       170,844.81       31,850,604.13         July 2025       148,679.61       31,400,399.25         August 2025       127,563.27       30,954,000.80         September 2025       107,478.58       30,511,378.06         October 2025       88,408.62       30,072,500.52         November 2025       70,336.65       29,637,337.93         December 2025       53,246.14       29,205,860.28         January 2026       37,120.82       28,778,037.78         February 2026       21,944.54       28,353,840.92         March 2026       7,701.46       27,933,240.36         April 2026       0.00       27,510,207.06         May 2026       0.00       27,102,712.16         July 2026       0.00       27,102,712.16         July 2026       0.00       25,883,172.88         September 2026       0.00       25,883,172.88         September 2026       0.00       25,483,976.70         October 2026       0.00       25,990,608.52         November 2026       0.00	January 2025	298,020.02	34,159,818.28
April 2025218,391.5132,762,557.39May 2025194,076.2332,304,646.43June 2025170,844.8131,850,604.13July 2025148,679.6131,400,399.25August 2025127,563.2730,954,000.80September 2025107,478.5830,511,378.06October 202588,408.6230,072,500.52November 202570,336.6529,637,337.93December 202553,246.1429,205,860.28January 202637,120.8228,778,037.78February 202621,944.5428,353,840.92March 202621,944.5428,353,840.92March 20260.0027,516,207.06May 20260.0027,516,207.06May 20260.0027,102,712.16June 20260.0026,692,727.04July 20260.0025,883,172.88September 20260.0025,883,172.88September 20260.0025,483,976.70October 20260.0025,090,608.52November 20260.0025,090,608.52November 20260.0025,090,608.52	February 2025	270,345.21	33,690,111.45
May 2025194,076.2332,304,646.43June 2025170,844.8131,850,604.13July 2025148,679.6131,400,399.25August 2025127,563.2730,954,000.80September 2025107,478.5830,511,378.06October 202588,408.6230,072,500.52November 202570,336.6529,637,337.93December 202553,246.1429,205,860.28January 202637,120.8228,778,037.78February 202621,944.5428,353,840.92March 20267,701.4627,933,240.36April 20260.0027,516,207.06May 20260.0027,102,712.16June 20260.0026,692,727.04July 20260.0026,286,223.34August 20260.0025,883,172.88September 20260.0025,483,976.70October 20260.0025,483,976.70October 20260.0025,990,608.52November 20260.0025,990,608.52November 20260.0025,990,608.52		243,808.47	33,224,368.49
June 2025170,844.8131,850,604.13July 2025148,679.6131,400,399.25August 2025127,563.2730,954,000.80September 2025107,478.5830,511,378.06October 202588,408.6230,072,500.52November 202570,336.6529,637,337.93December 202553,246.1429,205,860.28January 202637,120.8228,778,037.78February 202621,944.5428,353,840.92March 20267,701.4627,933,240.36April 20260.0027,516,207.06May 20260.0027,102,712.16June 20260.0026,692,727.04July 20260.0026,286,223.34August 20260.0025,883,172.88September 20260.0025,483,976.70October 20260.0025,483,976.70October 20260.0025,090,608.52November 20260.0025,090,608.52November 20260.0024,702,985.84	April 2025	218,391.51	32,762,557.39
July 2025       148,679.61       31,400,399.25         August 2025       30,954,000.80         September 2025       107,478.58       30,511,378.06         October 2025       88,408.62       30,072,500.52         November 2025       70,336.65       29,637,337.93         December 2025       53,246.14       29,205,860.28         January 2026       37,120.82       28,778,037.78         February 2026       21,944.54       28,353,840.92         March 2026       7,701.46       27,933,240.36         April 2026       0.00       27,516,207.06         May 2026       0.00       27,102,712.16         June 2026       0.00       26,692,727.04         July 2026       0.00       26,286,223.34         August 2026       0.00       25,883,172.88         September 2026       0.00       25,483,976.70         October 2026       0.00       25,090,608.52         November 2026       0.00       24,702,985.84	•	194,076.23	
August 2025       127,563.27       30,954,000.80         September 2025       107,478.58       30,511,378.06         October 2025       88,408.62       30,072,500.52         November 2025       70,336.65       29,637,337.93         December 2025       53,246.14       29,205,860.28         January 2026       37,120.82       28,778,037.78         February 2026       21,944.54       28,353,840.92         March 2026       7,701.46       27,933,240.36         April 2026       0.00       27,516,207.06         May 2026       0.00       27,102,712.16         June 2026       0.00       26,692,727.04         July 2026       0.00       26,286,223.34         August 2026       0.00       25,883,172.88         September 2026       0.00       25,483,976.70         October 2026       0.00       25,090,608.52         November 2026       0.00       24,702,985.84	· ·	170,844.81	, ,
September 2025       107,478.58       30,511,378.06         October 2025       88,408.62       30,072,500.52         November 2025       70,336.65       29,637,337.93         December 2025       53,246.14       29,205,860.28         January 2026       37,120.82       28,778,037.78         February 2026       21,944.54       28,353,840.92         March 2026       7,701.46       27,933,240.36         April 2026       0.00       27,516,207.06         May 2026       0.00       27,102,712.16         June 2026       0.00       26,692,727.04         July 2026       0.00       26,286,223.34         August 2026       0.00       25,883,172.88         September 2026       0.00       25,483,976.70         October 2026       0.00       25,090,608.52         November 2026       0.00       24,702,985.84	July 2025	148,679.61	31,400,399.25
October 2025       88,408.62       30,072,500.52         November 2025       70,336.65       29,637,337.93         December 2025       53,246.14       29,205,860.28         January 2026       37,120.82       28,778,037.78         February 2026       21,944.54       28,353,840.92         March 2026       7,701.46       27,933,240.36         April 2026       0.00       27,516,207.06         May 2026       0.00       27,102,712.16         June 2026       0.00       26,692,727.04         July 2026       0.00       26,286,223.34         August 2026       0.00       25,883,172.88         September 2026       0.00       25,483,976.70         October 2026       0.00       25,090,608.52         November 2026       0.00       24,702,985.84	August 2025	127,563.27	30,954,000.80
November 2025       70,336.65       29,637,337.93         December 2025       53,246.14       29,205,860.28         January 2026       37,120.82       28,778,037.78         February 2026       21,944.54       28,353,840.92         March 2026       7,701.46       27,933,240.36         April 2026       0.00       27,516,207.06         May 2026       0.00       27,102,712.16         June 2026       0.00       26,692,727.04         July 2026       0.00       26,286,223.34         August 2026       0.00       25,883,172.88         September 2026       0.00       25,483,976.70         October 2026       0.00       25,090,608.52         November 2026       0.00       24,702,985.84	September 2025	107,478.58	30,511,378.06
December 202553,246.1429,205,860.28January 202637,120.8228,778,037.78February 202621,944.5428,353,840.92March 20267,701.4627,933,240.36April 20260.0027,516,207.06May 20260.0027,102,712.16June 20260.0026,692,727.04July 20260.0026,286,223.34August 20260.0025,883,172.88September 20260.0025,483,976.70October 20260.0025,090,608.52November 20260.0024,702,985.84	October 2025	,	30,072,500.52
January 202637,120.8228,778,037.78February 202621,944.5428,353,840.92March 20267,701.4627,933,240.36April 20260.0027,516,207.06May 20260.0027,102,712.16June 20260.0026,692,727.04July 20260.0026,286,223.34August 20260.0025,883,172.88September 20260.0025,483,976.70October 20260.0025,090,608.52November 20260.0024,702,985.84	November 2025	/	
February 202621,944.5428,353,840.92March 20267,701.4627,933,240.36April 20260.0027,516,207.06May 20260.0027,102,712.16June 20260.0026,692,727.04July 20260.0026,286,223.34August 20260.0025,883,172.88September 20260.0025,483,976.70October 20260.0025,090,608.52November 20260.0024,702,985.84	December 2025	53,246.14	29,205,860.28
March 20267,701.4627,933,240.36April 20260.0027,516,207.06May 20260.0027,102,712.16June 20260.0026,692,727.04July 20260.0026,286,223.34August 20260.0025,883,172.88September 20260.0025,483,976.70October 20260.0025,090,608.52November 20260.0024,702,985.84	January 2026		28,778,037.78
April 20260.0027,516,207.06May 20260.0027,102,712.16June 20260.0026,692,727.04July 20260.0026,286,223.34August 20260.0025,883,172.88September 20260.0025,483,976.70October 20260.0025,090,608.52November 20260.0024,702,985.84	•	21,944.54	28,353,840.92
May 20260.0027,102,712.16June 20260.0026,692,727.04July 20260.0026,286,223.34August 20260.0025,883,172.88September 20260.0025,483,976.70October 20260.0025,090,608.52November 20260.0024,702,985.84		7,701.46	
June 20260.0026,692,727.04July 20260.0026,286,223.34August 20260.0025,883,172.88September 20260.0025,483,976.70October 20260.0025,090,608.52November 20260.0024,702,985.84	April 2026	0.00	27,516,207.06
July 20260.0026,286,223.34August 20260.0025,883,172.88September 20260.0025,483,976.70October 20260.0025,090,608.52November 20260.0024,702,985.84	May 2026	0.00	
August 20260.0025,883,172.88September 20260.0025,483,976.70October 20260.0025,090,608.52November 20260.0024,702,985.84	June 2026	0.00	26,692,727.04
September 2026       0.00       25,483,976.70         October 2026       0.00       25,090,608.52         November 2026       0.00       24,702,985.84	July 2026	0.00	26,286,223.34
October 2026       0.00       25,090,608.52         November 2026       0.00       24,702,985.84	August 2026	0.00	25,883,172.88
November 2026	September 2026	0.00	25,483,976.70
	October 2026	0.00	25,090,608.52
December 2026	November 2026	0.00	24,702,985.84
	December 2026	0.00	24,321,027.28

Distribution Date	Cla	uss KD	Classes PB and ZP (in the aggregate)
January 2027	\$	0.00	\$23,944,652.61
February 2027		0.00	23,573,782.72
March 2027		0.00	23,208,339.57
April 2027		0.00	22,848,246.25
May 2027		0.00	22,493,426.88
June 2027		0.00	22,143,806.65
July 2027		0.00	21,799,311.81
August 2027		0.00	21,459,869.61
September 2027		0.00	21,125,408.32
October 2027		0.00	20,795,857.21
November 2027		0.00	20,471,146.55
December 2027		0.00	20,151,207.55
January 2028		0.00	19,835,972.40
February 2028		0.00	19,525,374.23
March 2028		0.00	19,219,347.11
April 2028		0.00	18,917,826.01
May 2028		0.00	18,620,746.82
June 2028		0.00	18,328,046.33
July 2028		0.00	18,039,662.19
August 2028		0.00	17,755,532.94
September 2028		0.00	17,475,597.97
October 2028		0.00	17,199,797.51
November 2028		0.00	16,928,072.63
December 2028		0.00	16,660,365.23
January 2029		0.00	16,396,618.00
February 2029		0.00	16,136,774.45
March 2029		0.00	15,880,778.88
April 2029		0.00	15,628,576.34
May 2029		0.00	15,380,112.68
June 2029		0.00	15,135,334.49
July 2029		0.00	14,894,189.12
August 2029		0.00	14,656,624.63
September 2029		0.00	14,422,589.84
October 2029		0.00	14,192,034.26
November 2029		0.00	13,964,908.11
December 2029		0.00	13,741,162.31
January 2030		0.00	13,520,748.48
February 2030		0.00	13,303,618.90
March 2030		0.00	13,089,726.51
April 2030		0.00	12,879,024.93
May 2030		0.00	12,671,468.43
June 2030		0.00	12,467,011.90
July 2030		0.00	12,265,610.87
August 2030		0.00	12,067,221.50
September 2030		0.00	11,871,800.56
October 2030		0.00	11,679,305.44
November 2030		0.00	11,489,694.09
December 2030		0.00	11,302,925.09

Distribution Date	Class KD	Classes PB and ZP (in the aggregate)
January 2031	\$ 0.00	\$11,118,957.58
February 2031	0.00	10,937,751.27
March 2031	0.00	10,759,266.45
April 2031	0.00	10,583,463.97
May 2031	0.00	10,410,305.20
June 2031	0.00	10,239,752.08
July 2031	0.00	10,071,767.08
August 2031	0.00	9,906,313.19
September 2031	0.00	9,743,353.93
October 2031	0.00	9,582,853.32
November 2031	0.00	9,424,775.89
December 2031	0.00	9,269,086.67
January 2032	0.00	9,115,751.19
February 2032	0.00	8,964,735.45
March 2032	0.00	8,816,005.94
April 2032	0.00	8,669,529.61
May 2032	0.00	8,525,273.90
June 2032	0.00	8,383,206.67
July 2032	0.00	8,243,296.26
August 2032	0.00	8,105,511.45
September 2032	0.00	7,969,821.46
October 2032	0.00	7,836,195.94
November 2032	0.00	7,704,604.97
December 2032	0.00	7,575,019.05
January 2033	0.00	7,447,409.11
February 2033	0.00	7,321,746.46
March 2033	0.00	7,198,002.84
April 2033	0.00	7,076,150.39
May 2033	0.00	6,956,161.63
June 2033	0.00	6,838,009.46
July 2033	0.00	6,721,667.19
August 2033	0.00	6,607,108.49
September 2033	0.00	6,494,307.40
October 2033	0.00	6,383,238.33
November 2033	0.00	6,273,876.06
December 2033	0.00	6,166,195.71
January 2034	0.00	6,060,172.77
February 2034	0.00	5,955,783.06
March 2034	0.00	5,853,002.76
April 2034	0.00	5,751,808.37
May 2034	0.00	5,652,176.73
June 2034	0.00	5,554,085.01
July 2034	0.00	5,457,510.70
August 2034	0.00	5,362,431.61
September 2034	0.00	5,268,825.86
October 2034	0.00	5,176,671.90
November 2034	0.00	5,085,948.45
December 2034	0.00	4,996,634.57

Distribution Date	Class KD	Classes PB and ZP (in the aggregate)
January 2035	\$ 0.00	\$ 4,908,709.59
February 2035	0.00	4,822,153.14
March 2035	0.00	4,736,945.15
April 2035	0.00	4,653,065.82
May 2035	0.00	4,570,495.64
June 2035	0.00	4,489,215.38
July 2035	0.00	4,409,206.07
August 2035	0.00	4,330,449.02
September 2035	0.00	4,252,925.81
October 2035	0.00	4,176,618.27
November 2035	0.00	4,101,508.49
December 2035	0.00	4,027,578.83
January 2036	0.00	3,954,811.88
February 2036	0.00	3,883,190.49
March 2036	0.00	3,812,697.76
April 2036	0.00	3,743,317.02
May 2036	0.00	3,675,031.83
June 2036	0.00	3,607,826.01
July 2036	0.00	3,541,683.59
August 2036	0.00	3,476,588.83
September 2036	0.00	3,412,526.23
October 2036	0.00	3,349,480.48
November 2036	0.00	3,287,436.52
December 2036	0.00	3,226,379.50
January 2037	0.00	3,166,294.76
February 2037	0.00	3,107,167.88
March 2037	0.00	3,048,984.62
April 2037	0.00	2,991,730.95
May 2037	0.00	2,935,393.06
June 2037	0.00	2,879,957.32
July 2037	0.00	2,825,410.29
August 2037	0.00	2,771,738.73
September 2037	0.00	2,718,929.60
October 2037	0.00	2,666,970.04
November 2037	0.00	2,615,847.35
December 2037	0.00	2,565,549.05
January 2038	0.00	2,516,062.82
February 2038	0.00	2,467,376.52
March 2038	0.00	2,419,478.18
April 2038	0.00	2,372,356.01
May 2038	0.00	2,325,998.38
June 2038	0.00	2,280,393.83
July 2038	0.00	2,235,531.07
August 2038	0.00	2,191,398.96
September 2038	0.00	2,147,986.55
October 2038	0.00	2,105,283.01
November 2038	0.00	2,063,277.68
December 2038	0.00	2,021,960.07

Distribution Date	Class KD	Classes PB and ZP (in the aggregate)
January 2039	\$ 0.00	\$ 1,981,319.81
February 2039	0.00	1,941,346.71
March 2039	0.00	1,902,030.71
April 2039	0.00	1,863,361.89
May 2039	0.00	1,825,330.49
June 2039	0.00	1,787,926.88
July 2039	0.00	1,751,141.57
August 2039	0.00	1,714,965.21
September 2039	0.00	1,679,388.59
October 2039	0.00	1,644,402.61
November 2039	0.00	1,609,998.32
December 2039	0.00	1,576,166.91
January 2040	0.00	1,542,899.68
February 2040	0.00	1,510,188.06
March 2040	0.00	1,478,023.61
April 2040	0.00	1,446,397.99
May 2040	0.00	1,415,303.01
June 2040	0.00	1,384,730.59
July 2040	0.00	1,354,672.76
August 2040	0.00	1,325,121.67
September 2040	0.00	1,296,069.58
October 2040	0.00	1,267,508.87
November 2040	0.00	1,239,432.02
December 2040	0.00	1,211,831.64
January 2041	0.00	1,184,700.42
February 2041	0.00	1,158,031.17
March 2041	0.00	1,131,816.81
April 2041	0.00	1,106,050.35
May 2041	0.00	1,080,724.92
June 2041	0.00	1,055,833.73
July 2041	0.00	1,031,370.10
August 2041	0.00	1,007,327.44
September 2041	0.00	983,699.28
October 2041	0.00	960,479.21
November 2041	0.00	937,660.93
December 2041	0.00	915,238.24
January 2042	0.00	893,205.01
February 2042	0.00	871,555.22
March 2042	0.00	850,282.94
April 2042	0.00	829,382.30
May 2042	0.00	808,847.53
June 2042	0.00	788,672.97
July 2042	0.00	768,853.00
August 2042	0.00	749,382.10
September 2042	0.00	730,254.86
October 2042	0.00	711,465.89
November 2042	0.00	693,009.93
December 2042	0.00	674,881.78

Distribution Date	 Class KD	sses PB and ZP the aggregate)
January 2043	\$ 0.00	\$ 657,076.31
February 2043	0.00	639,588.48
March 2043	0.00	622,413.30
April 2043	0.00	605,545.88
May 2043	0.00	588,981.39
June 2043	0.00	572,715.07
July 2043	0.00	556,742.23
August 2043	0.00	541,058.26
September 2043	0.00	525,658.60
October 2043	0.00	510,538.77
November 2043	0.00	495,694.35
December 2043	0.00	481,120.99
January 2044	0.00	466,814.41
February 2044	0.00	452,770.37
March 2044	0.00	438,984.73
April 2044	0.00	425,453.37
May 2044	0.00	412,172.26
June 2044	0.00	399,137.42
July 2044	0.00	386,344.92
August 2044	0.00	373,790.92
September 2044	0.00	361,471.60
October 2044	0.00	349,383.21
November 2044	0.00	337,522.06
December 2044	0.00	325,884.52
January 2045	0.00	314,467.00
February 2045	0.00	303,265.98
March 2045	0.00	292,277.96
April 2045	0.00	281,499.54
May 2045	0.00	270,927.32
June 2045	0.00	260,558.00
July 2045	0.00	250,388.30
August 2045	0.00	240,414.98
September 2045	0.00	230,634.88
October 2045	0.00	221,044.86
November 2045	0.00	211,641.84
December 2045	0.00	202,422.79
January 2046	0.00	193,384.71
February 2046	0.00	184,524.66
March 2046	0.00	175,839.73
April 2046	0.00	167,327.07
May 2046	0.00	158,983.86
June 2046	0.00	150,807.33
July 2046	0.00	142,794.75
August 2046	0.00	134,943.42
September 2046	0.00	127,250.70
October 2046	0.00	119,713.98
November 2046	0.00	112,330.69
December 2046	0.00	105,098.29
Determor #010	0.00	200,000.20

Distribution Date	Class KD	Classes PB and ZP (in the aggregate)
January 2047	\$ 0.00	\$ 98,014.30
February 2047	0.00	91,076.25
March 2047	0.00	84,281.74
April 2047	0.00	77,628.37
May 2047	0.00	71,113.80
June 2047	0.00	64,735.72
July 2047	0.00	58,491.86
August 2047	0.00	52,379.98
September 2047	0.00	46,397.87
October 2047	0.00	40,543.35
November 2047	0.00	34,814.29
December 2047	0.00	29,208.58
January 2048	0.00	23,724.15
February 2048	0.00	18,358.94
March 2048	0.00	13,110.96
April 2048	0.00	7,978.21
May 2048	0.00	5,817.17
June 2048	0.00	3,703.34
July 2048	0.00	1,635.91
August 2048 and thereafter	0.00	0.00

**Underlying Certificates** 

Ginnie	Mae I or II	=	П	П	П	П	П	П	П	П	П	П	П	п	П	П
Weighted Average Loan Age of Mortgage	Loans (in months)(3)	49	101	9	178	(8)	182	110	8	(11)	9	9	9	9	9	9
Remaining Term to Maturity of Mortgage	Loans (in months)(3)	303	248	9	167	(8)	159	239	261	(11)	353	353	353	353	353	351
Approximate Weighted Average Coupon of																
Percentage of	Class in Trust	13.9965848333%	29.2454014848	100.0000000000	42.1342724891	100.0000000000	100.0000000000	57.2151140726	100.0000000000	100.0000000000	26.1598894417	26.1599121706	32.6086600883	31.2814041746	26.1598976109	7.6338211238
Principal or Notional	Balance in Trust	\$ 3,017,573	16,082,306	25,829,162	5,258,211	9,255,115	3,652,803	5,990,097	26,536,716	2,639,343	2,366,162	833,978	2,511,519	2,637,648	919,782	1,726,694
Underlying	Certificate Factor(2)	0.60351461	0.88349758	0.84404614	0.17756653	0.34092823	0.46164195	0.19869959	0.96451625	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.000000000
Original Principal or Notional	Balance of Class	\$35,723,000	62,242,264	30,601,600	70,281,560	27,146,814	7,912,632	52,689,756	27,512,980	2,639,343	9,045,000	3,188,000	7,702,000	8,432,000	3,516,000	22,619,000
	Principal Type(1)	PAC I/AD	SEQ	SC/PT	NTL(SC/PAC)	NTL(PT)	NTL(SC/PT)	PT	SC/PT	SC/SEQ	SEQ	SEQ	SEQ	SEQ	SEQ	PAČ
Final	Distribution Date	February 2045	September 2040	May 2041	July 2040	July 2044	March 2035	December 2039	June 2043	February 2046	October 2048	January 2047	January 2047	May 2046	May 2046	November 2048
	Interest Type(1)	FIX	FIX	FIX	FIX/10	FIX/10	FIX/10	FIX	FIX	FIX	FIX	FIX	FIX	FIX	FIX	FIX
	Interest Interest Rate Type(1)	2.25%	4.50	4.50	5.00	5.00	5.00	3.00	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
	CUSIP	38379PQL4	38377J4R1	38380VBP5	38377LHM3	38379C4L7	38379JKB6	38375AVD3	38381AJE7	38381AJM9	38381AKN5	38381AKA3	38381AJQ0	38381AJR8	38381AKB1	38381AE36
	Issue Date	May 29, 2015	September 30, 2010	February 28, 2018	September 30, 2010	July 30, 2014	February 27, 2015	December 30, 2009	October 30, 2018	November 30, 2018						
	Class	BC(4)(5)	KE	(9)H	IA(4)(7)	HI(4)(5)(8)	(6)IH	MA(4)(5)	B(10)	AM(5)(11)	HL(4)(5)	HM(5)	MA(5)	MB(5)	MH(5)	PL(4)(5)
	Series	2015-072	2010-113	2018-033	2010-116	2014-096	2015-017	2009-121	2018-135	2018-135	2018-135	2018-135	2018-135	2018-135	2018-135	2018-151
	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
Trust	Asset Group or Subgroup	88	8B	8B	10	10	10	11B	110	12	12	12	12	12	12	12

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

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

(3) Based on information as of January 2019.

MX Class.

More than 10% of the Mortgage Loans underlying this Underlying Certificate may be higher balance Mortgage Loans. See "Risk Factors" in this Supplement. (3)

Ginnie Mae 2018-033 Class H is backed by previously issued REMIC Certificates, Class ZA from Ginnie Mae 2010-003 and Class ZV from Ginnie Mae 2011-073. These previously issued certificates are backed by certain mortgage loans whose approximate weighted average characteristics are as follows: 9

Approximate Weighted Average Loan Age of Mortgage Loans (in months)(3)	109
Approximate Weighted Average Remaining Tern to Maurity of Mortgage Loans (in months)(3)	242 259
Approxinate Weighted Average Coupon of Mortgage Loans(3)	4.900% 4.825
Class	ZA
Series	2010-003 2011-073

(7) Ginnie Mae 2010-116 Class IA is backed by a previously issued MX Certificate, Class KP from Ginnie Mae 2010-087.

Ginnie Mae 2014-096 Class HI is an MX Class that is derived from REMIC Classes of separate Security Groups that are backed by certain mortgage loans whose approximate weighted average characteristics are as follows: 8

Approximate Weighted Average Loan Age of Mortgage Loans (in months)(3)	174	112	114
Weighted Average Remaining Term to Maturity of Mortgage Loans (in months)(3)	173	240	236
Approximate Weighted Average Coupon of Mortgage Loans(3)	5.500%	5.500	5.500
Group	2	8	4
Series	2014-096	2014-096	2014-096

- (9) Ginnie Mae 2015-017 Class HI is backed by a previously issued REMIC Certificate, Class Z from Ginnie Mae 2005-025.
  - (10) Ginnie Mae 2018-135 Class B is backed by a previously issued MX Certificate, Class PC from Ginnie Mae 2014-006.
- rate Trust Asset Subgroups, which are backed by certain mortgage loans whose approximate weighted average characteristics are as fol-(11) Ginnie Mae 2018-135 Class AM is backed by a previously issued MX Certificate, Class A from Ginnie Mae 2018-113 that is related to sepalows:

Approximate Weighted Average Loan Age of Mortgage Loans (in months)(3)	9	∞
Weighted Average Remaining Term to Maturity of Mortgage Loans (in months)(3)	352	350
Approximate Weighted Average Coupon of Morrgage Loans(3)	4.923%	4.924
Trust Asset Subgroup	11A	11B
Series	2018-113	2018-113



\$962,273,785

**Government National Mortgage Association** 

## **GINNIE MAE®**

Guaranteed REMIC
Pass-Through Securities
and MX Securities
Ginnie Mae REMIC Trust 2019-005

OFFERING CIRCULAR SUPPLEMENT January 23, 2019

J.P. Morgan Mischler Financial Group, Inc.