

\$469,226,153 Government National Mortgage Association GINNIE MAE®

Guaranteed REMIC Pass-Through Securities and MX Securities Ginnie Mae REMIC Trust 2020-030

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.

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						
FY	\$10,560,142	(5)	PT	FLT	38382DYR4	March 2050
$SY \dots \dots$	10,560,142	(5)	$\mathcal{N}TL\left(PT\right)$	INV/IO	38382DYS2	March 2050
YA(1)	59,912,000	2.5%	PAC/AD	FIX	38382DYT0	May 2049
YB(1)	4,009,000	2.5	PAC/AD	FIX	38382DYU7	March 2050
ZY	10,000,000	2.5	SUP	FIX/Z	38382DYV5	March 2050
Security Group 2						
$QG \dots \dots$	160,770,026	1.0	PT	FIX	38382DYW3	March 2035
QI	114,835,732	3.5	$\mathcal{N}TL\left(PT\right)$	FIX/IO	38382DYX1	March 2035
Security Group 3						
PT	40,577,507	(5)	PT	WAC/DLY	38382DF20	March 2048
Security Group 4						,
F	32,572,799	(5)	PT	FLT/WAC/DLY	38382DYY9	April 2048
<i>IO</i>	32,572,799	(5)	$\mathcal{N}TL\left(PT\right)$	WAC/IO/DLY	38382DYZ6	April 2048
Security Group 5						
CI(1)	49,218,044	3.5	NTL (SC/PT)	FIX/IO	38382DZC6	February 2048
Security Group 6	.,,,,,,		. , ,	,		,
$DI(1) \dots \dots$	36,857,533	3.5	NTL (SC/PT)	FIX/IO	38382DZD4	September 2047
Security Group 7	,,		(00) (00)	2212/23	,	,
KA(1)	43,327,000	3.0	PAC/AD	FLX	38382DZE2	March 2049
KV(1)	2,412,000	3.0	PAC/AD	FLX	38382DZF9	December 2049
MV(1)	1,126,000	3.0	PAC/AD	FLX	38382DZG7	March 2050
MZ	10,481,490	3.0	SUP	FIX/Z	38382DZH5	March 2050
Security Group 8	7. 7.			,		
EA(1)	43,028,082	2.0	PAC/AD	FIX	38382DZJ1	January 2050
<i>EL(1)</i>	650,000	2.0	PAC/AD	FIX	38382DZK8	March 2050
FE	41,545,861	(5)	PT	FLT	38382DZL6	March 2050
SE	41,545,861	(5)	$\mathcal{N}TL\left(PT\right)$	INV/IO	38382DZM4	March 2050
ZE	8,254,246	2.0	SUP	FIX/Z	38382DZN2	March 2050
Residual						
RR	0	0.0	$\mathcal{N}PR$	$\mathcal{N}PR$	38382DZP7	March 2050

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

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-9 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 March 30, 2020.

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

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

Morgan Stanley

Ramirez & Co., Inc.

AVAILABLE INFORMATION

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

- this Offering Circular Supplement (this "Supplement"),
- the Base Offering Circular and
- in the case of the Group 5 and 6 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 ("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: Morgan Stanley & Co. LLC

Co-Sponsor: Samuel A. Ramirez & Co., Inc. **Trustee:** U.S. Bank National Association

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

Distribution Date: The 20th day of each month or, if the 20th day is not a Business Day, the first

Business Day thereafter, commencing in April 2020.

Trust Assets:

Trust Asset Group or Subgroup ⁽²⁾	Trust Asset Type	Certificate Rate	Original Term To Maturity (in years)
1	Ginnie Mae II	3.000%	30
2	Ginnie Mae II	3.500%	15
3A	Ginnie Mae I	4.438%(3)	30
3B	Ginnie Mae II	4.500%	20
3C	Ginnie Mae II	4.778%(4)	30
4	Ginnie Mae II ⁽⁵⁾	(6)	30
5	Underlying Certificates	(1)	(1)
6	Underlying Certificates	(1)	(1)
7	Ginnie Mae II	3.000%	30
8	Ginnie Mae II	4.000%	30

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

⁽²⁾ The Group 3 Trust Assets consist of the enumerated subgroups (each, a "Subgroup").

⁽³⁾ The Ginnie Mae I MBS Certificates that constitute the Subgroup 3A Trust Assets have Certificate Rates ranging from 4.000% to 7.500%. The Weighted Average Certificate Rate shown for the Subgroup 3A Trust Assets represents the weighted average of the Certificate Rates of those Trust Assets, weighted on the basis of the respective principal balances of such Trust MBS as of the Closing Date.

⁽⁴⁾ The Ginnie Mae II MBS Certificates that constitute the Subgroup 3C Trust Assets have Certificate Rates ranging from 4.000% to 6.500%. The Weighted Average Certificate Rate shown for the Subgroup 3C Trust Assets represents the weighted average of the Certificate Rates of those Trust Assets, weighted on the basis of the respective principal balances of such Trust MBS as of the Closing Date.

⁽⁵⁾ The Group 4 Trust Assets consist of adjustable rate Ginnie Mae II MBS Certificates.

(6) Each Ginnie Mae Certificate included in Trust Asset Group 4 has an initial fixed rate period, after which it bears interest at a Certificate Rate, adjusted annually, equal to One Year Treasury Index ("CMT") or one-year LIBOR ("One-Year LIBOR"), as applicable (the "Index"), plus a margin indicated on Exhibit B (each, a "Certificate Margin"), subject to annual and lifetime adjustment caps and floors, which may limit whether the Certificate Rate for each Trust Asset remains at the Index plus the applicable Certificate Margin. The annual and lifetime adjustment caps and floors for the Group 4 Trust Assets are set forth in Exhibit B to this Supplement. The Group 4 Trust Assets have Certificate Rates ranging from 1.500% to 4.500% as of March 1, 2020, as identified in Exhibit B. For the Group 4 Trust Assets, most of the initial fixed rate periods have expired. See "The Trust Assets — The Trust MBS" in this Supplement.

Security Groups: This series of Securities consists of multiple Security Groups (each, a "Group"), as shown on the front cover of this Supplement and on Schedule I to this Supplement. Except in the case of a certain MX Class in Groups 5 and 6, 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, 7 and 8 Trust Assets⁽¹⁾:

Principal Balance	Weighted Average Remaining Term to Maturity (in months)	Weighted Average Loan Age (in months)	Weighted Average Mortgage Rate ⁽²⁾
Group 1 Trust Assets	250	2	2.52007
\$84,481,142	358	2	3.530%
Group 2 Trust Assets \$160,770,026	97	77	3.860%
Subgroup 3A Trust Assets \$2,110,507	284	64	4.938%
Subgroup 3B Trust Assets \$112,665	128	107	4.781%
Subgroup 3C Trust Assets \$38,354,335	240	112	5.229%
Group 7 Trust Assets \$57,346,490 ⁽³⁾	357	2	3.482%
Group 8 Trust Assets \$93,478,189	357	2	4.430%

⁽¹⁾ As of March 1, 2020.

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

⁽³⁾ More than 10% of the Mortgage Loans underlying the Group 7 Trust Assets may be higher balance Mortgage Loans. *See "Risk Factors" in this Supplement.*

The actual remaining terms to maturity, loan ages and Mortgage Rates of many of the Mortgage Loans underlying the Group 1, 2, 3, 7 and 8 Trust Assets will differ from the weighted averages shown above, perhaps significantly. See "The Trust Assets — The Mortgage Loans" in this Supplement.

Assumed Characteristics of the Mortgage Loans Underlying the Group 4 Trust Assets: The assumed characteristics of the Mortgage Loans underlying the Group 4 Trust Assets are identified in Exhibit B to this Supplement. There can be no assurance that the actual characteristics of the Mortgage Loans underlying the Group 4 Trust Assets will be the same as the assumed characteristics identified in Exhibit B to this Supplement. More than 10% of the Mortgage Loans underlying the Group 4 Trust Assets may be higher balance Mortgage Loans. *See "Risk Factors" in this Supplement.*

Characteristics of the Group 5 and 6 Trust Assets: See Exhibit A to this Supplement for certain information regarding the characteristics of the related Underlying Certificates.

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

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

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

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

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

Class	Interest Rate Formula(1)	Initial Interest Rate(2)	Minimum Rate	Maximum Rate	Delay (in days)	One-Month LIBOR for Minimum Interest Rate
Security Group 1						
FY	One-Month LIBOR + 0.45%	1.15463%	0.45%	6.50%	0	0.0000%
SY	6.05% – One-Month LIBOR	5.34537%	0.00%	6.05%	0	6.0500%
Security Group 4						
F	One-Month LIBOR + 0.40%	1.10463%	0.40%	(3)	19	0.0000%
Security Group 8						
FE	One-Month LIBOR + 0.45%	1.15463%	0.45%	6.50%	0	0.0000%
SE	6.05% – One-Month LIBOR	5.34537%	0.00%	6.05%	0	6.0500%

⁽¹⁾ One-Month LIBOR will be established as described under "Description of the Securities — Interest Distributions — Floating Rate and Inverse Floating Rate Classes" in this Supplement.

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

(3) The maximum rate for Class F for any Accrual Period is the Weighted Average Certificate Rate ("WACR") of the Group 4 Trust Assets.

Each of Classes IO and PT is a Weighted Average Coupon Class. Class IO will accrue interest during each Accrual Period at a per annum Interest Rate equal to the WACR of the Group 4 Trust Assets less the Interest Rate for Class F for the Accrual Period. The approximate initial Interest Rate for Class IO is 2.27753%.

Class PT will accrue interest during each Accrual Period at a per annum Interest Rate equal to the WACR of the Group 3 Trust Assets for that Accrual Period. The approximate initial Interest Rate for Class PT is 4.75954%.

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

SECURITY GROUP 1

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

- The ZY Accrual Amount in the following order of priority:
- 1. Sequentially, to YA and YB, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
 - 2. To ZY, until retired
- The Group 1 Principal Distribution Amount, concurrently, as follows:
 - 1. 12.4999991122% to FY, until retired
 - 2. 87.5000008878% in the following order of priority:
 - a. Sequentially, to YA and YB, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
 - b. To ZY, until retired
 - c. Sequentially, to YA and YB, 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 QG, until retired

SECURITY GROUP 3

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

SECURITY GROUP 4

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

SECURITY GROUP 7

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

- 1. Sequentially, to KA, KV and MV, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
 - 2. To MZ, until retired
- 3. Sequentially, to KA, KV and MV, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired

SECURITY GROUP 8

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

- The ZE Accrual Amount in the following order of priority:
- 1. Sequentially, to EA and EL, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
 - 2. To ZE, until retired
- The Group 8 Principal Distribution Amount, concurrently, as follows:
 - 1. 44.444436124% to FE, until retired
 - 2. 55.555563876% in the following order of priority:
 - a. Sequentially, to EA and EL, in that order, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
 - b. To ZE, until retired
 - c. Sequentially, to EA and EL, in that order, without regard to their Aggregate Scheduled Principal Balance, until retired

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

Group	PAC Classes	Structuring Ranges
1	YA and YB (in the aggregate)	150% PSA through 250% PSA
7	KA, KV and MV (in the aggregate)	150% PSA through 300% PSA
8	EA and EL (in the aggregate)	175% PSA through 300% PSA

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

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

Class	Original Class Notional Balance	Represents Approximately
Security Group 1		
SY	\$ 10,560,142	100% of FY (PT Class)
WI	31,960,500	50% of YA and YB (in the aggregate) (PAC/AD Classes)
YI	29,956,000	50% of YA (PAC/AD Class)
Security Group 2		
QI	\$114,835,732	71.4285714286% of QG (PT Class)
Security Group 4		
IO	\$ 32,572,799	100% of F (PT Class)
Security Group 5		
CI	\$ 49,218,044	100% of the Group 5 Trust Assets
Security Group 6		
DI	, ,	100% of the Group 6 Trust Assets
Security Groups 5 and 6		
GI		100% of the Group 5 Trust Assets
	36,857,533	100% of the Group 6 Trust Assets
	\$ 86,075,577	
Security Group 7		
IM	\$ 15,621,666	33.3333333333% of KA, KV and MV (in the aggregate) (PAC/AD Classes)
KI	14,442,333	33.33333333333% of KA (PAC/AD Class)
MI	15,246,333	33.3333333333% of KA and KV (in the aggregate) (PAC/AD Classes)
Security Group 8		
EI	\$ 10,757,020	25% of EA (PAC/AD Class)
SE	41,545,861	100% of FE (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, pandemic 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 or may lead to a general economic downturn in the affected regions, including job losses and declines in real estate values. A general economic downturn may increase the rate of defaults on the mortgage loans in such areas resulting in prepayments on the related securities due to governmental mortgage insurance claim payments, loss mitigation arrangements, repurchases or liquidations of defaulted mortgage loans. Insurance payments on damaged or destroyed homes may also lead to prepayments on the underlying mortgage loans. Further, in connection with presidentially declared major disasters, Ginnie Mae may authorize optional special assistance to issuers, including expanded buyout authority which allows issuers, upon receiving written approval from Ginnie Mae, to repurchase eligible loans from the related pool underlying a Ginnie Mae MBS certificate, even if such loans are not delinquent or do not otherwise meet the standard conditions for removal or repurchase.

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

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

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

 you bought your securities at a discount and principal payments are slower than you expected.

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

The adjustable rate mortgage loans have features of fixed rate mortgage loans and adjustable rate mortgage loans. The adjustable rate mortgage loans underlying the group 4 trust assets have initial fixed rate periods, most of which have expired. During this period, these mortgage loans may exhibit general payment characteristics associated with fixed rate mortgages. After the initial fixed rate period expires, these mortgage loans will adjust annually, subject to annual and lifetime adjustment caps and floors. During this period, these mortgage loans may exhibit general payment characteristics associated with adjustable rate mortgage loans.

Adjustable rate mortgage loans may exhibit general prepayment characteristics that are different than those of fixed rate mortgage loans. In general, as prevailing mortgage interest rates decline, borrowers with fixed rate mortgage loans are more likely to refinance their current, higher rate mortgages, which may result in faster prepayment rates. Additionally, as prevailing mortgage interest rates rise, borrowers with fixed rate mortgage loans are less likely to refinance their current, lower rate mortgages, which may result in slower prepayment rates. In contrast, as prevailing mortgage interest rates decline, borrowers with adjustable rate mortgage loans are less likely to refinance their current mortgages, which may result in slower prepayment rates. Additionally, as prevailing mortgage interest rates rise, borrowers with adjustable rate mortgage loans are more likely to refinance their current mortgages, which may result in faster prepayment rates. Finally, increases in prevailing mortgage interest rates may result in increases in the required monthly payments on adjustable rate mortgage loans. This may result in higher default rates on adjustable rate mortgage loans which

could lead to faster prepayment rates and reduce the yield on the related securities.

Adjustable rate mortgages with initial fixed rate periods may be more likely to be refinanced or become delinquent than other mortgage loans. The adjustable rate mortgage loans underlying the group 4 trust assets have initial fixed rate periods, most of which have expired. After the fixed rate period, the mortgage rates may increase at the first interest rate change date and on each annual reset date thereafter, subject to annual and lifetime adjustment caps and floors. Borrowers may be more likely to refinance these mortgage loans before a rate increase becomes effective. If a borrower is unable to refinance such a mortgage loan and interest rates rise, particularly after the initial fixed rate period, the borrower may find it increasingly difficult to remain current in its scheduled monthly payments following the increase in the monthly payment amount. This may result in higher default rates on adjustable rate mortgage loans which could lead to faster prepayment rates and reduce the yield on the related securities.

After the initial fixed rate period of the mortgage loans underlying the group 4 trust assets, the mortgage rates on such mortgage loans adjust annually based on CMT or one-year LIBOR, as applicable, the level of which will affect the yield on the related securities. After any applicable initial fixed rate period of the mortgage loans underlying the group 4 trust assets, the yield on the related securities depends, in part, on the levels of CMT and one-year LIBOR, as applicable. The index applicable to each mortgage loan underlying a group 4 trust asset will be determined annually and the rate of such index used with respect to the mortgage loans underlying the group 4 trust assets will not necessarily reflect current levels of such index. If the indices perform differently from what you expect, the yield on your securities may be lower than you expect. Lower levels of the indices will generally reduce the weighted average certificate rate on the group 4 trust assets, which will reduce or cap the interest rate on the related securities. You should bear in

mind that the timing of changes in the level of the indices may affect your yield: generally, the earlier a change, the greater the effect on your yield. It is doubtful that the indices will remain constant.

Adjustable rate mortgage loans are subject to certain caps, which may limit the amount of interest payable on such mortgage loans and may limit the WACR on the group 4 trust assets and the interest rates on the related securities after any applicable initial fixed rate period of the related mortgage loans. After any applicable initial fixed rate period of the mortgage loans underlying the group 4 trust assets, if the applicable index increases to a sufficiently high level, the mortgage rates on such mortgage loans may be limited by annual and lifetime adjustment caps. As a result, the WACR on the group 4 trust assets, as well as the interest rates on the related securities, may be limited. The application of any caps on the mortgage loans may significantly impact the interest rate on class IO because the interest entitlement of such class of securities is entirely dependent on the excess of the WACR of the group 4 trust assets over the interest rate applicable to the related floating rate class.

The mortgage rate index for the mortgage loans underlying the group 4 trust assets is different than the interest rate index for the related securities, which may impact, perbaps significantly, the amount of interest distributable to the related securities after any applicable initial fixed rate period of the related mortgage loans. CMT or one-year LIBOR is the mortgage rate index for the mortgage loans underlying the group 4 trust assets and one-month LIBOR is the interest rate index for the related securities. Because these indices are determined in a different manner and at different times, and because the certificate rates on the group 4 trust assets adjust annually after any applicable initial fixed rate period of the related mortgage loans and the interest rates on the related securities adjust monthly, there may be a mismatch between the certificate rates on the group 4 trust assets and the interest rates on the

related securities. If the indices for the group 4 trust assets are lower than one-month LIBOR for the related securities for any accrual period, interest accruals with respect to the related notional class will be reduced because such class is entitled to receive the excess of interest accrued in respect of the group 4 trust assets over the interest distributable to the related floating rate class. In addition, if the indices for the group 4 trust assets are significantly lower than one-month LIBOR for the related securities for any accrual period, interest accruing on the related floating rate class will be reduced because the interest rate on such class is capped at a rate equal to the WACR of the group 4 trust assets. In the event that the indices for the group 4 trust assets are higher than one-month LIBOR for the related securities, interest accruing on the related floating rate class will not be affected but interest accruals with respect to the related notional class will be increased. Because the indices on the group 4 trust assets adjust annually after the initial fixed rate period of the related mortgage loans but the index on the related securities will adjust monthly, this effect could be magnified during periods of significant volatility of short-term interest rates.

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

has been made on such mortgage loan for three consecutive months. Any such repurchase will result in prepayment of the principal balance or reduction in the notional balance of the securities ultimately backed by such mortgage loan. No assurances can be given as to the timing or frequency of any such repurchases.

The levels of one-month LIBOR will affect the yields on the floating rate and inverse floating rate securities and the class IO securities. If one-month LIBOR performs differently from what you expect, the yield on the floating rate and inverse floating rate securities may be lower than you expect. Lower levels of one-month LIBOR will generally reduce the yield on floating rate securities; higher levels of onemonth LIBOR will generally reduce the yield on the inverse floating rate securities and the class IO securities. You should bear in mind that the timing of changes in the level of one-month LIBOR may affect your yield: generally, the earlier a change, the greater the effect on your yield. It is doubtful that one-month LIBOR will remain constant.

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

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

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

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

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

As described in the related underlying certificate disclosure documents, the reductions in notional balances of certain of the underlying certificates included in trust asset groups 5 and 6 on any payment date are calculated, directly or indirectly, on the basis of schedules; no assurance can be given that the underlying certificates will adhere to their schedules. Further, prepayments on the related mortgage loans may have occurred at rates faster or slower than those initially assumed.

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

Changes to, the elimination of, and uncertainty with respect to, LIBOR could adversely affect your investment in LIBOR Classes. On July 27, 2017, the U.K.-based Financial Conduct Authority (the "FCA") announced its intention to cease sustaining LIBOR after 2021. The FCA indicated that it does not intend to sustain LIBOR through using its influence or legal powers beyond that date. It is possible that the ICE Benchmark Administration ("ICE") 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 predicted or assured whether LIBOR will survive in its current form, a modified form, or at all. If LIBOR changes in a manner that

causes regulators or market participants to question LIBOR's continued viability as a benchmark, or if LIBOR becomes unavailable, investors in financial instruments linked to LIBOR will likely experience disparate outcomes based on relevant contractual terms, market or product type, jurisdiction, and a host of other factors. There can be no assurance that legislative or regulatory actions will provide for an effective LIBOR substitute or replacement or that broadly accepted industry practices regarding LIBOR cessation will develop. It is uncertain what effect such disparate outcomes or divergent industry practices will have on the performance or value of securities with an interest rate based on LIBOR ("LIBOR Classes").

In the event of a benchmark transition event with respect to LIBOR, Ginnie Mae will select an alternative index for LIBOR Classes in accordance with the ARRC Endorsed Terms, as described under "Description of the Securities — Interest Rate Indices — Determination of LIBOR" in the base offering circular. The ARRC Endorsed Terms, however, generally rely on actions to be taken by regulators or the Alternative Rates Reference Committee ("ARRC") convened by the Federal Reserve Board and the Federal Reserve Bank of New York, and there can be no assurance whether or when those actions will be taken. Further, there can be no assurance that those actions or related events will be sufficient to trigger a change from LIBOR to an alternative index in all circumstances where LIBOR is no longer representative of market interest rates, or that benchmark transition events for the LIBOR Classes will align with similar events in the market generally or in other parts of the financial markets, such as the derivatives market.

The ARRC Endorsed Terms provide for various alternative benchmarks based on availability: the first two alternatives involve the secured overnight financing rate ("SOFR") published by the Federal Reserve Bank of New York, and the last two alternatives are not currently specified. SOFR is a secured, risk-free rate that is calculated based on different criteria than LIBOR, which is an unsecured rate reflecting counterparty risk. Accordingly, SOFR and LIBOR may diverge, particularly in times of macroeconomic stress. Since

the initial publication of SOFR in April 2018, daily changes in SOFR have at times been more volatile than daily changes in comparable benchmark or market rates. Over the lives of the LIBOR Classes, SOFR may diverge from historical or indicative data. Term SOFR, which is the first alternative benchmark, is expected to be a prospective term rate based on SOFR. Term SOFR is currently in development and no assurance can be provided that its development will be completed. If term SOFR is unavailable as of the benchmark replacement date, as defined in the base offering circular under "Description of the Securities — Interest Rate Indices — Determination of LIBOR", the next alternative benchmark is compounded SOFR. Compounded SOFR is a compounded average for which there are multiple methodologies, which may also diverge from LIBOR. If a benchmark replacement other than term SOFR is chosen because term SOFR is not initially available, term SOFR will become the benchmark replacement if it later becomes available, which could lead to further volatility in the interest rates on the LIBOR Classes. Moreover, a benchmark replacement adjustment will be applied to compensate for the foregoing effects of any benchmark replacement. However, no assurance can be provided that any benchmark replacement adjustment will be sufficient to produce the economic equivalent of the thencurrent benchmark, either at the benchmark replacement date or over the lives of the LIBOR Classes. Additionally, Ginnie Mae cannot anticipate how long it will take to develop the systems and processes necessary to adopt a specific benchmark replacement, which may delay and contribute to uncertainty and volatility surrounding any benchmark transition for LIBOR Classes.

Ginnie Mae will have sole discretion with respect to certain elements of the benchmark replacement process, including determining whether a benchmark transition event and its related benchmark replacement date have occurred, determining which benchmark replacement is available, determining the earliest practicable index determination date for using the benchmark replacement in the event term SOFR or compounded SOFR is unavailable, determining benchmark replacement

adjustments (if not otherwise determined by applicable governing bodies or authorities) and making benchmark replacement conforming changes (including potential changes affecting the business day convention and index determination date). If Ginnie Mae, in its sole discretion, determines that an alternative index is not administratively feasible, including as a result of technical, administrative or operational issues, then such alternative index will be deemed not determinable as of such date. Ginnie Mae may determine an alternative not to be administratively feasible even if such alternative index has been adopted by other market participants in similar products. Furthermore, if Ginnie Mae does not select an alternative index on any date as a result of its determination that an alternative higher on the list of ARRC Endorsed Terms is not administratively feasible as of such date and such higher alternative subsequently becomes administratively feasible (as determined by Ginnie Mae in its sole discretion), then Ginnie Mae may elect to replace the previously selected alternative with such higher alternative. Any of the foregoing determinations will be at the sole discretion of Ginnie Mae and may adversely affect the return on LIBOR Classes, the trading market for such classes and the value of such classes. None of the foregoing determinations, or the application thereof to payment calculations on the LIBOR Classes, will be subject to the approval of security holders.

Notwithstanding the foregoing, Ginnie Mae will select only an alternative index as to which it and the trustee will receive an opinion of counsel that the selection of such alternative index will not cause any related Trust REMIC to lose its classification as a REMIC for United States federal income tax purposes.

The securities may not be a suitable investment for you. The securities, especially the group 5 and 6 securities and, in particular, the support, interest only, accrual and residual classes, are not suitable investments for all investors.

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

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

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

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

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

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

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

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

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

THE TRUST ASSETS

General

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

The Trust MBS (Groups 1, 2, 3, 4, 7 and 8)

The Subgroup 3A 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, 7 and 8 and Subgroup 3B and 3C Trust Assets are either:

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

The Group 4 Trust Assets consist of adjustable rate Ginnie Mae II MBS Certificates guaranteed by Ginnie Mae. Each adjustable rate Ginnie Mae Certificate has an initial fixed rate period. After the initial fixed rate period, the Certificate Rate for each such adjustable rate Ginnie Mae Certificate will adjust annually to a rate equal to the sum, rounded to the nearest 1/8 of one percent, of (i) the Index and (ii) the Certificate Margin, subject to annual and lifetime adjustment caps and floors. The Index, the Certificate Margin and the annual and lifetime adjustment caps and floors for each such Ginnie Mae Certificate are set forth in Exhibit B to this Supplement. Adjustments to the Mortgage Rates will be made in the same manner as adjustments to the Certificate Rate. See "The Trust Assets — The Mortgage Loans" in this Supplement.

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

The Underlying Certificates (Groups 5 and 6)

The Group 5 and 6 Trust Assets are Underlying Certificates that represent beneficial ownership interests in 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 or on ginniemae.gov. 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 Mortgage Loans

The Mortgage Loans underlying the Group 1, 2, 3, 7 and 8 Trust Assets are expected to have, on a weighted average basis, the characteristics set forth in the Terms Sheet under "Assumed Characteristics of the Mortgage Loans Underlying the Group 1, 2, 3, 7 and 8 Trust Assets" and the general characteristics described in the Base Offering Circular. The Mortgage Loans underlying the Group 4 Trust Assets are expected to have, on a weighted average basis, the characteristics set forth in Exhibit B to this Supplement. The Mortgage Loans will consist of first lien, single-family, fixed rate or adjustable rate, resi-

dential mortgage loans that are insured or guaranteed by the Federal Housing Administration, the United States Department of Veterans Affairs, Rural Development (formerly the Rural Housing Service) or the United States Department of Housing and Urban Development ("HUD"). See "The Ginnie Mae Certificates — General" in the Base Offering Circular.

The Mortgage Loans underlying the Group 4 Trust Assets are adjustable rate mortgage loans with initial fixed rate periods. After the initial fixed rate period, the Mortgage Rate on each of these Mortgage Loans adjusts annually, rounded to the nearest 1/8 of one percent, based on the Index plus a specified margin (the "Mortgage Margin"), subject to annual and lifetime adjustment caps and floors. Ginnie Mae pooling specifications require that all adjustable rate Mortgage Loans backing a particular Ginnie Mae Certificate have the same index, first Mortgage Rate adjustment date, annual Mortgage Rate adjustment date, mortgage payment adjustment date and index reference date. One month after each Mortgage Rate adjustment date, the payment amount of the related Mortgage Loan will be reset so that the remaining principal balance of that Mortgage Loan will fully amortize in equal monthly payments over its remaining term to maturity, assuming its Mortgage Rate remains constant at the new rate. See "Risk Factors — Adjustable rate mortgage loans are subject to certain caps, which may limit the amount of interest payable on such mortgage loans and may limit the WACR on the group 4 trust assets and the interest rates on the related securities after the initial fixed rate period of the related mortgage loans" in this Supplement.

Specific information regarding the characteristics of the Mortgage Loans underlying the Trust MBS is not available. For purposes of this Supplement, certain assumptions have been made regarding the remaining terms to maturity, loan ages and Mortgage Rates and, in the case of the Group 4 Trust Assets, Mortgage Margins and next Mortgage Rate adjustment dates of the Mortgage Loans underlying the Trust MBS. However, the actual remaining terms to maturity, loan ages and Mortgage Rates and, in the case of the Group 4 Trust Assets, Mortgage Margins and next Mortgage Rate adjustment dates of many of the Mortgage Loans will differ from the characteristics assumed, perhaps significantly. This will be the case even if the weighted average characteristics of the Mortgage Loans are the same as the assumed characteristics. Small differences in the characteristics of the Mortgage Loans can have a significant effect on the Weighted Average Lives and yields of the Securities. See "Risk Factors" and "Yield, Maturity and Prepayment Considerations" in this Supplement.

The Trustee Fee

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

GINNIE MAE GUARANTY

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

DESCRIPTION OF THE SECURITIES

General

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

Form of Securities

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

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

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

Distributions

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

Interest Distributions

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

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

Categories of Classes

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

Accrual Periods

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

Class	Accrual Period
Fixed Rate and Delay Classes	The calendar month preceding the related Distribution Date
Floating Rate and Inverse Floating	From the 20th day of the month preceding the month of the related
Rate Classes other than Delay	Distribution Date through the 19th day of the month of that
Classes	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 One-Month LIBOR. The Trustee or its agent will determine One-Month LIBOR on the basis of the ICE LIBOR method, as described under "Description of the Securities — Interest Rate Indices — Determination of LIBOR" in the Base Offering Circular.

We can provide no assurance that One-Month 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 One-Month LIBOR on the basis of the ICE LIBOR method for one-month U.S. dollar deposits will not change. Any change in One-Month LIBOR values resulting from any change in reporting or in the determination of One-Month LIBOR may cause One-Month LIBOR to fluctuate disproportionately to changes in other market lending rates. If One-Month LIBOR becomes unavailable, a replacement rate will be selected, as described under "Description of the Securities — Interest Rate Indices — Determination of LIBOR" in the Base Offering Circular.

Weighted Average Coupon Classes

The Weighted Average Coupon Classes will bear interest as shown under "Terms Sheet — Interest Rates" in this Supplement.

The Trustee's determination of One-Month LIBOR and its calculation of the Interest Rates will be final except in the case of clear error. Investors can obtain One-Month LIBOR levels and Interest Rates for the current and preceding Accrual Periods on ginniemae.gov or by calling the Information Agent at (800) 234-GNMA.

Accrual Classes

Each of Classes MZ, ZE and ZY is an Accrual Class. Interest will accrue on the Accrual Classes and be distributed as described under "Terms Sheet — Accrual Classes" in this Supplement.

Principal Distributions

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

Categories of Classes

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

Notional Classes

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

Residual Securities

The Class 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 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 ginniemae.gov.

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

Termination

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

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

Modification and Exchange

All or a portion of the Classes of REMIC Securities specified on the front cover may be exchanged for a proportionate interest in the related MX Class or Classes shown on Schedule I to this Supplement. Similarly, all or a portion of the related MX Class or Classes may be exchanged for proportionate interests in the related Class or Classes of REMIC Securities and, in the case of Combinations 1, 2, 4, 5, 6 and 8, other related MX Classes. This process may occur repeatedly.

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

In the case of Combinations 1, 2, 4, 5, 6 and 8, the related REMIC Securities may be exchanged for proportionate interests in various subcombinations of MX Classes. Similarly, all or a portion of these MX Classes may be exchanged for proportionate interests in the related REMIC Securities or in other subcombinations of the related MX Classes. Each subcombination may be effected only in proportions that result in the principal and interest entitlements of the Securities received being equal to the entitlements of the Securities surrendered. See the example under "Description of the Securities — Modification and Exchange" in the Base Offering Circular.

A Beneficial Owner proposing to effect an exchange must notify the Trustee through the Beneficial Owner's Book-Entry Depository participant. This notice must be received by the Trustee not later than two Business Days before the proposed exchange date. The exchange date can be any Business Day other than the last Business Day of the month. The notice must contain the outstanding principal or notional balances of the Securities to be included in the exchange and the proposed exchange date. The notice is required to be delivered to the Trustee by email to USBGNMATeam@USBank.com or in writing at its Corporate Trust Office at U.S. Bank National Association, One Federal Street, 3rd Floor, Boston, MA 02110, Attention: Ginnie Mae REMIC Program Agency Group 2020-030. The Trustee may be contacted by telephone at (617) 603-6451 and by fax at (617) 603-6644.

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

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

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

YIELD, MATURITY AND PREPAYMENT CONSIDERATIONS

General

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

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

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

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

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

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

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

Investors in the Group 5 and 6 Securities are urged to review the discussion under "Risk Factors — The rate of payments on the underlying certificates will directly affect the rate of payments on the group 5 and 6 securities" in this Supplement.

Accretion Directed Classes

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

Securities that Receive Principal on the Basis of Schedules

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

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

Security Group	PAC Classes	Initial Effective Ranges
1	YA and YB (in the aggregate)	150% PSA through 250% PSA
7	KA, KV and MV (in the aggregate)	150% PSA through 300% PSA
8	EA and EL (in the aggregate)	175% PSA through 300% PSA

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

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

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

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

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

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

Assumability

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

Final Distribution Date

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

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

Modeling Assumptions

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

- 1. The Mortgage Loans underlying the Group 1, 2, 3, 7 and 8 Trust Assets have the assumed characteristics shown under "Assumed Characteristics of the Mortgage Loans Underlying the Group 1, 2, 3, 7 and 8 Trust Assets" in the Terms Sheet, except in the case of information set forth under the 0% PSA Prepayment Assumption Rate, for which each Mortgage Loan underlying a Group 2 Trust Asset is assumed to have an original and a remaining term to maturity of 180 months, each Mortgage Loan underlying a Group 1, 7 or 8 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, 7 or 8 and Trust Asset is assumed to have a Mortgage Rate of 1.50% per annum higher than the related Certificate Rate. The Group 4 Trust Assets and the Mortgage Loans underlying the Group 4 Trust Assets have the assumed characteristics shown in Exhibit B.
- 2. The Mortgage Loans prepay at the constant percentages of PSA or CPR (described below), as applicable, shown in the related table.
- 3. Distributions on the Securities are always received on the 20th day of the month, whether or not a Business Day, commencing in April 2020.
 - 4. A termination of the Trust or any Underlying Trusts does not occur.
 - 5. The Closing Date for the Securities is March 30, 2020.
- 6. No expenses or fees are paid by the Trust other than the Trustee Fee, which is paid as described under "The Trust Assets The Trustee Fee" in this Supplement.

- 7. Distributions on the Underlying Certificates are made as described in the related Underlying Certificate Disclosure Documents.
 - 8. Each Class is held from the Closing Date and is not exchanged in whole or in part.
- 9. The Certificate Rate on each Group 4 Trust Asset for the first Distribution Date is based on the information set forth in Exhibit B. The Mortgage Margin, lifetime Mortgage Loan interest rate cap and lifetime Mortgage Loan interest rate floor will equal the related Certificate Margin, Lifetime Certificate Interest Rate Cap and Lifetime Certificate Interest Rate Floor, as applicable, plus the Servicing and Guaranty Fee Rate, each as shown in Exhibit B.
- 10. For purposes of the decrement tables for Security Group 4, on all Distribution Dates occurring after the next Mortgage Rate adjustment date for the related Mortgage Loans, the constant value of CMT and One-Year LIBOR shown with respect to any decrement table is used to calculate the Mortgage Rate with respect to the Mortgage Loans, subject to any applicable caps and floors.
- 11. With respect to the Group 4 Trust Assets, one month after each Mortgage Rate adjustment date the payment amount of the related Mortgage Loan will be reset so that the remaining principal balance of that Mortgage Loan will fully amortize in equal monthly payments over its remaining term to maturity, assuming its Mortgage Rate remains constant.
- 12. When calculating the Mortgage Rate or Certificate Rate with respect to the Group 4 Trust Assets, the rate is not rounded to the nearest 1/8 of one percent.

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

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

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

Decrement Tables

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

The decrement tables set forth below are based on the assumption that the Mortgage Loans prepay at the indicated percentages of PSA (the "PSA Prepayment Assumption Rates") or CPR (the "CPR Prepayment Assumption Rates"), as applicable. As used in the tables, each of the PSA Prepayment Assumption Rates or CPR Prepayment Assumption Rates reflects a percentage of the 100% PSA or CPR

assumed prepayment rate. The Mortgage Loans will not prepay at any of the PSA Prepayment Assumption Rates or CPR Prepayment Assumption Rates, and the timing of changes in the rate of prepayments actually experienced on the Mortgage Loans will not follow the pattern described for the PSA or CPR assumption.

The decrement tables set forth below illustrate the percentage of the Original Class Principal Balance (or, in the case of a Notional Class, the original Class Notional Balance) that would remain outstanding following the distribution made each specified month for each Regular or MX Class, based on the assumption that the related Mortgage Loans prepay at the PSA Prepayment Assumption Rates or CPR Prepayment Assumption Rates, as applicable, and, in the case of the Group 4 Securities, that CMT and One-Year LIBOR is at the specified level. The percentages set forth in the following decrement tables have been rounded to the nearest whole percentage (including rounding down to zero).

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

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

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

The Weighted Average Lives are likely to vary, perhaps significantly, from those set forth in the tables below due to the differences between the actual characteristics of the Mortgage Loans underlying the related Trust Assets and the Modeling Assumptions. In addition, the Weighted Average Lives of the Group 4 Securities are likely to vary due to differences between actual CMT and One-Year LIBOR, as applicable, and the assumed constant levels of CMT and One-Year LIBOR, as applicable.

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

Security Group 1 PSA Prepayment Assumption Rates

		Class	es FY ar	nd SY					lasses WA, WB, WC, WD, WE, WG, WH, WI, WJ and WK			Classes YA, YC, YD, YE, YG, YH, YI, YJ, YK and YL			
Distribution Date	0%	150%	180%	250%	400%	0%	150%	180%	250%	400%	0%	150%	180%	250%	400%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
March 2021	98	96	95	94	91	98	94	94	94	94	98	94	94	94	94
March 2022	97	88	86	83	75	95	85	85	85	85	95	84	84	84	84
March 2023	95	78	75	69	56	93	74	74	74	65	92	72	72	72	62
March 2024	93	70	66	57	42	90	63	63	63	48	90	61	61	61	45
March 2025	91	62	57	47	31	88	54	54	54	36	87	51	51	51	31
March 2026	89	55	50	39	23	85	45	45	45	26	84	42	42	42	21
March 2027	87	49	43	32	17	82	38	38	38	19	81	33	33	33	14
March 2028	85	43	37	27	12	79	31	31	31	14	78	26	26	26	9
March 2029	83	38	32	22	9	76	26	26	26	11	74	21	21	21	5
March 2030	80	33	28	18	7	73	21	21	21	8	71	16	16	16	2
March 2031	78	29	24	15	5	69	17	17	17	6	67	12	12	12	0
March 2032	75	26	21	12	4	66	14	14	14	4	63	8	8	8	0
March 2033	72	22	18	10	3	62	11	11	11	3	59	6	6	6	0
March 2034	69	19	15	8	2	58	9	9	9	2	55	3	3	3	0
March 2035	66	17	13	7	1	54	8	8	8	2	51	1	1	1	0
March 2036	63	15	11	5	1	50	6	6	6	1	46	0	0	0	0
March 2037	60	12	9	4	1	45	5	5	5	1	42	0	0	0	0
March 2038	56	11	8	3	1	41	4	4	4	1	37	0	0	0	0
March 2039	53	9	6	3	0	36	3	3	3	0	31	0	0	0	0
March 2040	49	8	5	2	0	31	2	2	2	0	26	0	0	0	0
March 2041	45	6	4	2	0	26	2	2	2	0	21	0	0	0	0
March 2042	41	5	3	1	0	20	1	1	1	0	15	0	0	0	0
March 2043	36	4	3	1	0	14	1	1	1	0	9	0	0	0	0
March 2044	32	3	2	1	0	8	1	1	1	0	2	0	0	0	0
March 2045	27	3	2	0	0	2	1	1	1	0	0	0	0	0	0
March 2046	22	2	1	0	0	0	0	0	0	0	0	0	0	0	0
March 2047	17	1	1	0	0	0	0	0	0	0	0	0	0	0	0
March 2048	12	1	0	0	0	0	0	0	0	0	0	0	0	0	0
March 2049	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
March 2050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average															
Life (vears)	18.3	8.6	7.7	6.1	4.3	14.9	6.7	6.7	6.7	4.8	14.2	5.8	5.8	5.8	4.2

PSA Prepayment Assumption Rates

			Class YB					Class ZY		
Distribution Date	0%	150%	180%	250%	400%	0%	150%	180%	250%	400%
Initial Percent	100	100	100	100	100	100	100	100	100	100
March 2021	100	100	100	100	100	103	103	99	90	71
March 2022	100	100	100	100	100	105	105	93	66	8
March 2023	100	100	100	100	100	108	108	86	37	0
March 2024	100	100	100	100	100	111	111	81	18	0
March 2025	100	100	100	100	100	113	113	79	7	0
March 2026	100	100	100	100	100	116	116	78	1	0
March 2027	100	100	100	100	100	119	119	79	0	0
March 2028	100	100	100	100	100	122	119	78	0	0
March 2029	100	100	100	100	100	125	117	76	0	0
March 2030	100	100	100	100	100	128	112	72	0	0
March 2031	100	100	100	100	91	132	106	67	0	0
March 2032	100	100	100	100	67	135	99	62	0	0
March 2033	100	100	100	100	48	138	92	57	0	0
March 2034	100	100	100	100	35	142	84	51	0	0
March 2035	100	100	100	100	25	145	76	46	0	0
March 2036	100	97	97	97	18	149	68	41	0	0
March 2037	100	78	78	78	13	153	61	36	0	0
March 2038	100	62	62	62	9	157	54	31	0	0
March 2039	100	49	49	49	7	161	47	27	0	0
March 2040	100	38	38	38	5	165	40	23	0	0
March 2041	100	30	30	30	3	169	34	19	0	0
March 2042	100	23	23	23	2	173	29	16	0	0
March 2043	100	17	17	17	1	178	24	13	0	0
March 2044	100	13	13	13	1	182	19	10	0	0
March 2045	35	9	9	9	1	187	15	8	0	0
March 2046	6	6	6	6	0	162	11	6	0	0
March 2047	4	4	4	4	0	124	8	4	0	0
March 2048	2	2	2	2	0	85	5	2	0	0
March 2049	1	1	1	1	0	44	2	1	0	0
March 2050	0	0	0	0	0	0	0	0	0	0
Weighted Average										
Life (years)	25.0	19.8	19.8	19.8	13.8	27.7	17.8	13.9	2.7	1.3

Security Group 2 PSA Prepayment Assumption Rates

		Cla	Classes QG and QI						
Distribution Date	0%	100%	246%	400%	500%				
Initial Percent	100	100	100	100	100				
March 2021	95	84	76	68	62				
March 2022	91	69	57	45	38				
March 2023	86	55	41	29	23				
March 2024	80	42	29	18	13				
March 2025	75	31	19	11	7				
March 2026	69	20	11	6	3				
March 2027	62	10	5	2	1				
March 2028	56	1	0	0	0				
March 2029	49	0	0	0	0				
March 2030	42	0	0	0	0				
March 2031	34	0	0	0	0				
March 2032	26	0	0	0	0				
March 2033	18	0	0	0	0				
March 2034	9	0	0	0	0				
March 2035	0	0	0	0	0				
Weighted Average									
Life (years)	8.4	3.6	2.9	2.3	2.0				

Security Group 3 CPR Prepayment Assumption Rates

			Class PT		
Distribution Date	0%	10%	20%	30%	40%
Initial Percent	100	100	100	100	100
March 2021	97	87	78	68	58
March 2022	94	76	60	46	34
March 2023	91	66	47	31	20
March 2024	87	57	36	21	11
March 2025	84	50	27	14	7
March 2026	80	43	21	9	4
March 2027	76	36	16	6	2
March 2028	72	31	12	4	1
March 2029	68	26	9	3	1
March 2030	63	22	7	2	0
March 2031	58	18	5	1	0
March 2032	53	15	4	1	0
March 2033	48	12	3	0	0
March 2034	42	10	2	0	0
March 2035	36	7	1	0	0
March 2036	30	6	1	0	0
March 2037	23	4	1	0	0
March 2038	16	2	0	0	0
March 2039	9	1	0	0	0
March 2040	1	0	0	0	0
March 2041	1	0	0	0	0
March 2042	1	0	0	0	0
March 2043	0	0	0	0	0
March 2044	0	0	0	0	0
March 2045	0	0	0	0	0
March 2046	0	0	0	0	0
March 2047	0	0	0	0	0
March 2048	0	0	0	0	0
Weighted Average					
Life (years)	11.8	6.2	3.8	2.6	1.9

Security Group 4
CPR Prepayment Assumption Rates

	0.7		ses F an 000% C One-Yo	CMT	OR	3.0	3.00	ses F an 000% C One-Yo		OR	6.0	7.00	ses F an 000% C One-Ye	CMT	OR	9.0	11.50	es F an 0000% (One-Ye	CMT)R
Distribution Date	0%	10%	20%	30%	40%	0%	10%	20%	30%	40%	0%	10%	20%	30%	40%	0%	10%	20%	30%	40%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
March 2021	97	87	77	68	58	97	87	77	68	58	97	87	77	68	58	97	87	77	68	58
March 2022	93	75	59	45	33	94	76	60	46	34	94	76	60	46	34	94	76	60	46	34
March 2023	89	65	45	30	19	90	66	46	31	20	91	66	47	31	20	91	66	47	31	20
March 2024	84	55	35	20	11	87	57	36	21	11	88	58	36	21	11	88	58	36	21	11
March 2025	80	47	26	13	6	84	49	27	14	6	85	50	28	14	7	86	51	28	14	7
March 2026	76	40	20	9	4	80	42	21	9	4	83	44	22	10	4	83	44	22	10	4
March 2027	72	34	15	6	2	76	36	16	6	2	80	38	17	7	2	80	38	17	7	2
March 2028	67	29	11	4	1	72	31	12	4	1	76	33	13	4	1	76	33	13	4	1
March 2029	63	24	8	3	1	68	26	9	3	1	73	28	10	3	1	73	28	10	3	1
March 2030	58	20	6	2	0	64	22	7	2	0	69	24	7	2	0	69	24	7	2	0
March 2031	53	17	5	1	0	59	19	5	1	0	65	20	6	1	0	65	20	6	1	0
March 2032	48	14	3	1	0	54	15	4	1	0	60	17	4	1	0	60	17	4	1	0
March 2033	43	11	2	0	0	49	13	3	0	0	55	14	3	1	0	55	14	3	1	0
March 2034	39	9	2	0	0	44	10	2	0	0	50	11	2	0	0	50	12	2	0	0
March 2035	34	7	1	0	0	40	8	1	0	0	46	9	2	0	0	46	9	2	0	0
March 2036	30	6	1	0	0	35	7	1	0	0	41	8	1	0	0	41	8	1	0	0
March 2037	26	4	1	0	0	31	5	1	0	0	36	6	1	0	0	36	6	1	0	0
March 2038	22	3	0	0	0	26	4	0	0	0	31	5	1	0	0	31	5	1	0	0
March 2039	17	2	0	0	0	21	3	0	0	0	25	3	0	0	0	25	3	0	0	0
March 2040	13	2	0	0	0	16	2	0	0	0	19	2	0	0	0	19	2	0	0	0
March 2041	9	1	0	0	0	11	1	0	0	0	14	1	0	0	0	14	1	0	0	0
March 2042	6	1	0	0	0	7	1	0	0	0	9	1	0	0	0	9	1	0	0	0
March 2043	4	0	0	0	0	5	0	0	0	0	6	1	0	0	0	6	1	0	0	0
March 2044	3	0	0	0	0	3	0	0	0	0	4	0	0	0	0	4	0	0	0	0
March 2045	1	0	0	0	0	2	0	0	0	0	2	0	0	0	0	2	0	0	0	0
March 2046	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0
March 2047	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
March 2048	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
March 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average																				
Life (years)	11.8	6.0	3.7	2.5	1.8	12.7	6.3	3.8	2.6	1.8	13.5	6.5	3.9	2.6	1.9	13.5	6.6	3.9	2.6	1.9

Security Group 5 PSA Prepayment Assumption Rates

			Class CI		
Distribution Date	0%	300%	600%	900%	1,200%
Initial Percent	100	100	100	100	100
March 2021	98	81	64	47	29
March 2022	96	65	41	21	7
March 2023	93	53	25	9	2
March 2024	91	43	15	4	0
March 2025	89	34	9	2	0
March 2026	86	27	9 5 3	1	0
March 2027	83	21	3	0	0
March 2028	80	16	2	0	0
March 2029	78	13	1	0	0
March 2030	75	10	1	0	0
March 2031	71	7	0	0	0
March 2032	68	6	0	0	0
March 2033	65	4	0	0	0
March 2034	61	3	0	0	0
March 2035	58	2	0	0	0
March 2036	54	2	0	0	0
March 2037	50	1	0	0	0
March 2038	46	1	0	0	0
March 2039	42	1	0	0	0
March 2040	37	1	0	0	0
March 2041	32	0	0	0	0
March 2042	27	0	0	0	0
March 2043	21	0	0	0	0
March 2044	15	0	0	0	0
March 2045	10	0	0	0	0
March 2046	5	0	0	0	0
March 2047	1	0	0	0	0
March 2048	0	0	0	0	0
Weighted Average					
Life (years)	15.8	4.4	2.2	1.3	0.8

Security Group 6 PSA Prepayment Assumption Rates

			Class DI		
Distribution Date	0%	300%	600%	900%	1,200%
Initial Percent	100	100	100	100	100
March 2021	98	83	63	44	24
March 2022	97	65	37	16	5
March 2023	95	51	21	7	1
March 2024	93	39	11	3	0
March 2025	91	30	7	1	0
March 2026	89	23	4	1	0
March 2027	86	17	3	0	0
March 2028	83	12	2	0	0
March 2029	79	9	1	0	0
March 2030	76	7	1	0	0
March 2031	72	6	0	0	0
March 2032	68	4	0	0	0
March 2033	65	3 3	0	0	0
March 2034	61	3	0	0	0
March 2035	56	2	0	0	0
March 2036	52	2	0	0	0
March 2037	47	1	0	0	0
March 2038	43	1	0	0	0
March 2039	38	1	0	0	0
March 2040	33	0	0	0	0
March 2041	28	0	0	0	0
March 2042	22	0	0	0	0
March 2043	16	0	0	0	0
March 2044	10	0	0	0	0
March 2045	6	0	0	0	0
March 2046	3	0	0	0	0
March 2047	0	0	0	0	0
March 2048	0	0	0	0	0
Weighted Average					
Life (years)	15.6	4.1	2.0	1.2	0.7

Security Groups 5 and 6 PSA Prepayment Assumption Rates

			Class GI		
Distribution Date	0%	300%	600%	900%	1,200%
Initial Percent	100	100	100	100	100
March 2021	98	82	64	46	27
March 2022	96	65	39	19	6
March 2023	94	52	23	8	2
March 2024	92	41	13	3	0
March 2025	90	32	8	1	0
March 2026	87	25	5	1	0
March 2027	84	19	8 5 3 2	0	0
March 2028	81	14	2	0	0
March 2029	78	11	1	0	0
March 2030	75	9	1	0	0
March 2031	72	7	0	0	0
March 2032	68	5	0	0	0
March 2033	65	4	0	0	0
March 2034	61	3	0	0	0
March 2035	57	2	0	0	0
March 2036	53	2	0	0	0
March 2037	49	1	0	0	0
March 2038	45	1	0	0	0
March 2039	40	1	0	0	0
March 2040	35	0	0	0	0
March 2041	30	0	0	0	0
March 2042	25	0	0	0	0
March 2043	19	0	0	0	0
March 2044	13	0	0	0	0
March 2045	9	0	0	0	0
March 2046	4	0	0	0	0
March 2047	1	0	0	0	0
March 2048	0	0	0	0	0
Weighted Average					
Life (years)	15.7	4.3	2.1	1.2	0.8

Security Group 7 PSA Prepayment Assumption Rates

	Clas	sses IM, M	, MG, M L and N		MK,	Classes K, KA, KB, KC, KD, KE and KI			Class KG			Class KV								
Distribution Date	0%	150%	180%	300%	400%	0%	150%	180%	300%	400%	0%	150%	180%	300%	400%	0%	150%	180%	300%	400%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
March 2021	97	94	94	94	94	97	93	93	93	93	100	100	100	100	100	100	100	100	100	100
March 2022	95	84	84	84	84	94	82	82	82	82	100	100	100	100	100	100	100	100	100	100
March 2023	92	71	71	71	68	91	69	69	69	66	100	100	100	100	100	100	100	100	100	100
March 2024	89	60	60	60	51	88	57	57	57	47	100	100	100	100	100	100	100	100	100	100
March 2025	86	50	50	50	38	84	46	46	46	33	100	100	100	100	100	100	100	100	100	100
March 2026	82	40	40	40	28	81	35	35	35	22	100	100	100	100	100	100	100	100	100	100
March 2027	79	32	32	32	21	77	27	27	27	14	100	100	100	100	100	100	100	100	100	100
March 2028	75	26	26	26	15	73	19	19	19	8	100	100	100	100	100	100	100	100	100	100
March 2029	72	20	20	20	11	69	14	14	14	4	100	100	100	100	100	100	100	100	100	100
March 2030	68	16	16	16	8	65	9	9	9	1	100	100	100	100	100	100	100	100	100	100
March 2031	64	13	13	13	6	61	6	6	6	0	100	100	100	100	80	100	100	100	100	70
March 2032	60	10	10	10	4	56	3	3	3	0	100	100	100	100	58	100	100	100	100	39
March 2033	55	8	8	8	3	52	0	0	0	0	100	100	100	100	42	100	100	100	100	16
March 2034	51	6	6	6	2	47	0	0	0	0	100	82	82	82	31	100	73	73	73	0
March 2035	46	5	5	5	2	42	0	0	0	0	100	64	64	64	22	100	47	47	47	0
March 2036	41	4	4	4	1	36	0	0	0	0	100	49	49	49	16	100	26	26	26	0
March 2037	36	3	3	3	1	31	0	0	0	0	100	38	38	38	11	100	9	9	9	0
March 2038	31	2	2	2	1	25	0	0	0	0	100	29	29	29	8	100	0	0	0	0
March 2039	25	2	2	2	0	19	0	0	0	0	100	22	22	22	6	100	0	0	0	0
March 2040	19	1	1	1	0	12	0	0	0	0	100	17	17	17	4	100	0	0	0	0
March 2041	13	1	1	1	0	6	0	0	0	0	100	12	12	12	3	100	0	0	0	0
March 2042	7	1	1	1	0	0	0	0	0	0	88	9	9	9	2	83	0	0	0	0
March 2043	0	0	0	0	0	0	0	0	0	0	7	7	7	7	1	0	0	0	0	0
March 2044	0	0	0	0	0	0	0	0	0	0	5	5	5	5	1	0	0	0	0	0
March 2045	0	0	0	0	0	0	0	0	0	0	3	3	3	3	1	0	0	0	0	0
March 2046	0	0	0	0	0	0	0	0	0	0	2	2	2	2	0	0	0	0	0	0
March 2047	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0
March 2048	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
March 2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
March 2050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average																				
Life (years)	13.3	6.0	6.0	6.0	4.9	12.6	5.1	5.1	5.1	4.2	22.6	16.9	16.9	16.9	13.4	22.3	15.1	15.1	15.1	11.8

PSA	Prepayment	Assumption	Rates
r ₃ n	rrepayment	Assumption	naic

						FSAI	терауш	CIII ASSU	шрион	Rates						
	Classes M, MA, MB, MC, MD, ME and MI Class MV									Class MZ						
Distribution Date	0%	150%	180%	300%	400%	0%	150%	180%	300%	400%	0%	150%	180%	300%	400%	
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
March 2021	97	94	94	94	94	100	100	100	100	100	103	103	100	89	80	
March 2022	94	83	83	83	83	100	100	100	100	100	106	106	97	63	35	
March 2023	91	71	71	71	68	100	100	100	100	100	109	109	93	33	0	
March 2024	88	59	59	59	50	100	100	100	100	100	113	113	91	14	0	
March 2025	85	48	48	48	36	100	100	100	100	100	116	116	91	4	0	
March 2026	82	39	39	39	26	100	100	100	100	100	120	120	92	0	0	
March 2027	78	30	30	30	19	100	100	100	100	100	123	122	92	0	0	
March 2028	75	24	24	24	13	100	100	100	100	100	127	120	90	0	0	
March 2029	71	18	18	18	9	100	100	100	100	100	131	116	86	0	0	
March 2030	67	14	14	14	6	100	100	100	100	100	135	110	80	0	0	
March 2031	63	11	11	11	4	100	100	100	100	100	139	103	74	Ŏ	Ŏ	
March 2032	59	8	8	8	2	100	100	100	100	100	143	95	67	0	0	
March 2033	54	6	6	6	1	100	100	100	100	100	148	86	61	0	0	
March 2034	50	4	4	4	0	100	100	100	100	97	152	78	54	0	0	
March 2035	45	2	2	2	0	100	100	100	100	70	157	70	48	0	0	
March 2036	40	1	1	1	0	100	100	100	100	50	162	62	42	0	0	
March 2037	34	0	0	0	Ŏ	100	100	100	100	36	166	55	36	Ŏ	Ŏ	
March 2038	29	0	0	0	0	100	92	92	92	26	171	48	31	0	0	
March 2039	23	0	0	0	0	100	70	70	70	18	177	41	27	0	0	
March 2040	17	Õ	Õ	Õ	Ŏ	100	52	52	52	13	182	35	22	Ŏ	Ŏ	
March 2041	11	0	0	0	0	100	39	39	39	9	188	30	19	0	0	
March 2042	4	0	0	0	0	100	29	29	29	6	193	25	15	0	0	
March 2043	0	0	0	0	0	20	20	20	20	4	197	20	12	0	0	
March 2044	0	0	0	0	0	14	14	14	14	3	173	16	10	0	0	
March 2045	0	0	0	0	0	10	10	10	10	2	148	13	7	0	0	
March 2046	0	0	0	0	0	6	6	6	6	1	121	9	5	0	0	
March 2047	0	0	0	0	0	3	3	3	3	1	93	6	4	0	0	
March 2048	0	0	0	0	0	1	1	1	1	0	63	4	2	0	0	
March 2049	0	0	0	0	0	0	0	0	0	0	32	2	1	0	0	
March 2050	0	0	0	0	0	0	0	0	Õ	Ö	0	0	0	Ö	0	
Weighted Average																
Life (years)	13.1	5.6	5.6	5.6	4.6	23.3	20.9	20.9	20.9	16.9	26.7	16.9	14.8	2.6	1.6	

Security Group 8 PSA Prepayment Assumption Rates

	Class E					Classes EA, EB, EC, ED, EG, EH, EI, EJ, EK and EM				EI, EJ,	Class EL				
Distribution Date	0%	175%	205%	300%	500%	0%	175%	205%	300%	500%	0%	175%	205%	300%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
March 2021	98	94	94	94	94	98	94	94	94	94	100	100	100	100	100
March 2022	96	84	84	84	83	96	84	84	84	83	100	100	100	100	100
March 2023	94	71	71	71	58	94	71	71	71	57	100	100	100	100	100
March 2024	91	59	59	59	40	91	59	59	59	39	100	100	100	100	100
March 2025	89	49	49	49	27	89	48	48	48	26	100	100	100	100	100
March 2026	87	40	40	40	19	86	39	39	39	17	100	100	100	100	100
March 2027	84	32	32	32	13	84	31	31	31	11	100	100	100	100	100
March 2028	81	25	25	25	9	81	24	24	24	7	100	100	100	100	100
March 2029	78	20	20	20	6	78	19	19	19	4	100	100	100	100	100
March 2030	75	16	16	16	4	75	15	15	15	3	100	100	100	100	100
March 2031	72	13	13	13	3	71	11	11	11	1	100	100	100	100	100
March 2032	68	10	10	10	2	68	9	9	9	0	100	100	100	100	100
March 2033	65	8	8	8	1	64	7	7	7	0	100	100	100	100	83
March 2034	61	6	6	6	1	60	5	5	5	0	100	100	100	100	55
March 2035	57	5	5	5	1	56	3	3	3	0	100	100	100	100	37
March 2036	53	4	4	4	0	52	2	2	2	0	100	100	100	100	25
March 2037	49	3	3	3	0	48	2	2	2	0	100	100	100	100	16
March 2038	44	2	2	2	0	43	1	1	1	0	100	100	100	100	11
March 2039	39	2	2	2	0	38	0	0	0	0	100	100	100	100	7
March 2040	34	1	1	1	0	33	0	0	0	0	100	90	90	90	5
March 2041	29	1	1	1	0	28	0	0	0	0	100	67	67	67	3
March 2042	23	1	1	1	0	22	0	0	0	0	100	50	50	50	2
March 2043	17	1	1	1	0	16	0	0	0	0	100	36	36	36	1
March 2044	11	0	0	0	0	9	0	0	0	0	100	26	26	26	1
March 2045	4	0	0	0	0	3	0	0	0	0	100	18	18	18	0
March 2046	0	0	0	0	0	0	0	0	0	0	12	12	12	12	0
March 2047	0	0	0	0	0	0	0	0	0	0	7	7	7	7	0
March 2048	0	0	0	0	0	0	0	0	0	0	4	4	4	4	0
March 2049	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0
March 2050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average															
Life (years)	15.5	6.0	6.0	6.0	4.1	15.3	5.7	5.7	5.7	3.9	25.7	22.6	22.6	22.6	15.0

PSA Prepayment Assumption Rates

Classes FE and SE					Class ZE						
Distribution Date	0%	175%	205%	300%	500%		0%	175%	205%	300%	500%
Initial Percent	100	100	100	100	100		100	100	100	100	100
March 2021	99	95	95	93	90		102	102	99	89	67
March 2022	97	87	85	80	70		104	104	94	62	0
March 2023	96	77	74	65	49		106	106	88	33	0
March 2024	94	67	63	52	33		108	108	84	14	0
March 2025	92	59	54	42	23		111	111	82	4	0
March 2026	91	51	47	34	16		113	113	82	0	0
March 2027	89	45	40	27	11		115	114	82	0	0
March 2028	87	39	34	21	7		117	112	79	0	0
March 2029	85	34	29	17	5		120	107	75	0	0
March 2030	83	30	25	14	3		122	101	70	0	0
March 2031	80	26	21	11	2		125	93	64	0	0
March 2032	78	22	18	9	2		127	85	58	0	0
March 2033	75	19	15	7	1		130	77	52	0	0
March 2034	72	16	13	5	1		132	70	46	0	0
March 2035	69	14	11	4	0		135	62	40	0	0
March 2036	66	12	9	3	0		138	54	35	0	0
March 2037	63	10	7	3	0		140	48	30	0	0
March 2038	60	8	6	2	0		143	41	26	0	0
March 2039	56	7	5	1	0		146	35	22	0	0
March 2040	52	6	4	1	0		149	30	18	0	0
March 2041	48	5	3	1	0		152	25	15	0	0
March 2042	44	4	3	1	0		155	21	12	0	0
March 2043	40	3	2	0	0		158	17	10	0	0
March 2044	35	2	2	0	0		162	13	7	0	0
March 2045	30	2	1	0	0		165	10	6	0	0
March 2046	24	1	1	0	0		153	7	4	0	0
March 2047	19	1	1	0	0		118	5	3	0	0
March 2048	13	1	0	0	0		81	3	2	0	0
March 2049	7	0	0	0	0		42	1	1	0	0
March 2050	0	0	0	0	0		0	0	0	0	0
Weighted Average											
Life (years)	19.0	7.9	7.2	5.4	3.6		27.9	16.4	13.3	2.5	1.2

Yield Considerations

An investor seeking to maximize yield should make a decision whether to invest in any Regular or MX Class based on:

- the anticipated yield of that Class resulting from its purchase price,
- the investor's own projection of Mortgage Loan prepayment rates under a variety of scenarios,
- in the case of the Group 5 and 6 Securities, the investor's own projection of payment rates on the Underlying Certificates under a variety of scenarios,
- in the case of a Floating Rate or an Inverse Floating Rate Class or the Class IO Securities, the investor's own projection of levels of One-Month LIBOR under a variety of scenarios, and
- in the case of the Group 4 Securities, the investor's own projection of levels of CMT and One-Year LIBOR under a variety of scenarios.

No representation is made regarding Mortgage Loan prepayment rates, Underlying Certificate payment rates, CMT levels, One-Year LIBOR levels, One-Month LIBOR levels or the yield of any Class.

Prepayments: Effect on Yields

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

- In the case of Regular Securities or MX Securities purchased at a premium (especially the Interest Only Classes), faster than anticipated rates of principal payments could result in actual yields to investors that are lower than the anticipated yields.
- Investors in the Interest Only Classes should also consider the risk that rapid rates of principal payments could result in the failure of investors to recover fully their investments.
- In the case of Regular Securities or MX Securities purchased at a discount, slower than anticipated rates of principal payments could result in actual yields to investors that are lower than the anticipated yields.
- The rates of principal amortization on the Mortgage Loans underlying the Group 4 Trust Assets will depend upon the level of and annual adjustments in the applicable Mortgage Rates, with higher Mortgage Rates and earlier increases in Mortgage Rates affecting the rates of prepayments, which could result in actual yields to investors that are lower than the anticipated yields.

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

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

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

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

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

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

One-Month LIBOR: Effect on Yields of the Floating Rate and Inverse Floating Rate Classes and the Class IO Securities

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

CMT and One-Year LIBOR: Effect on Yields of the Group 4 Securities

Low levels of CMT or One-Year LIBOR can reduce the yield of the Group 4 Securities. See "Risk Factors — After the initial fixed rate period of the mortgage loans underlying the group 4 trust assets, the mortgage rates on such mortgage loans adjust annually based on CMT or one-year LIBOR, as applicable, the level of which will affect the yield on the related securities" in this Supplement.

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 50 days earlier.

Yield Tables

The following tables show the pre-tax yields to maturity on a corporate bond equivalent basis of specified Classes at various constant percentages of PSA or CPR, as applicable, and, in the case of the Inverse Floating Rate Classes, at various constant levels of One-Month LIBOR and, in the case of the Class IO Securities, at various constant levels of One-Month LIBOR, CMT and One-Year LIBOR, as applicable.

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

The yields were calculated by

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

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

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

SECURITY GROUP 1 Sensitivity of Class SY to Prepayments Assumed Price 23.0%*

	PSA Prepayment Assumption Rate									
One-Month LIBOR	150%	180%	250%	400%						
0.25000%	16.0%	14.4%	10.7%	2.5%						
0.70463%	13.7%	12.1%	8.3%	0.1%						
3.37732%	0.0%	(1.7)%	(5.7)%	(14.4)%						
6.05000% and above	**	*****	3(4.3)4	**						

Sensitivity of Class WI to Prepayments Assumed Price 13.5%*

PSA Prepayment Assumption Rates												
150%	180%	250%	400%	425%								
8.7%	8.7%	8.7%	1.4%	0.0%								

Sensitivity of Class YI to Prepayments Assumed Price 12.0%*

PSA Prepayment Assumption Rates					
150%	180%	250%	400%	416%	
9.9%	9.9%	9.9%	1.1%	0.0%	

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

^{**} Indicates that investors will suffer a loss of virtually all of their investment.

SECURITY GROUP 2

Sensitivity of Class QI to Prepayments Assumed Price 8.46875%*

PSA Prepayment Assumption Rates

100%	246%	343%	400%	500%
17.1%	7.0%	0.0%	(4.2)%	(11.9)%

SECURITY GROUP 4

Sensitivity of Class IO to Prepayments Assumed Price 3.0%* 0.39000% CMT 0.75975% One-Year LIBOR

CPR Prepayment Assumption Rates One-Month LIBOR 10% 20% 30% 40% 44.7% 31.2% 16.8% 1.4% (2.1)%23.6% 11.2% (16.3)% 12.6000% and above

Sensitivity of Class IO to Prepayments Assumed Price 3.0%* 3.00000% CMT 3.00000% One-Year LIBOR

	CPR Prepayment Assumption Rates			
One-Month LIBOR	10%	20%	30%	40%
0.25000%	107.2%	90.5%	72.7%	53.4%
0.70463%	89.7%	73.8%	56.9%	38.7%
6.65232%	**	**	**	**
12.6000% and above	**	**	**	**

Sensitivity of Class IO to Prepayments Assumed Price 3.0%* 7.00000% CMT 6.00000% One-Year LIBOR

	CPR Prepayment Assumption Rates			
One-Month LIBOR	10%	20%	30%	40%
0.25000%	124.6%	106.9%	88.0%	67.7%
0.70463%	108.4%	91.5%	73.5%	54.1%
6.65232%	(2.9)%	(14.1)%	(26.0)%	(38.9)%
12.6000% and above	**	**	**	**

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

^{**} Indicates that investors will suffer a loss of virtually all of their investment.

Sensitivity of Class IO to Prepayments Assumed Price 3.0%* 11.50000% CMT 9.00000% One-Year LIBOR

	CP	R Prepayment	Assumption R	ates
One-Month LIBOR	10%	20%	30%	40%
0.25000%	124.7%	107.0%	88.1%	67.8%
0.70463%	108.6%	91.7%	73.6%	54.2%
6.65232%	(1.4)%	(12.7)%	(24.7)%	(37.6)%
12.6000% and above	**	**	**	**

SECURITY GROUP 5

Sensitivity of Class CI to Prepayments Assumed Price 7.125%*

PSA Prepayment Assumption Rates

300%	600%	617%	900%	1,200%
27.7%	1.6%	0.0%	(29.2)%	(67.0)%

SECURITY GROUP 6

Sensitivity of Class DI to Prepayments Assumed Price 6.75%*

PSA Prepayment Assumption Rates

300%	600%	602%	900%	1,200%
29.6%	0.3%	0.1%	(32.1)%	(69.9)%

SECURITY GROUPS 5 and 6

Sensitivity of Class GI to Prepayments Assumed Price 6.921875%*

PSA Prepayment Assumption Rates

300%	600%	614%	900%	1,200%
28.8%	1.4%	0.0%	(30.1)%	(68.0)%

SECURITY GROUP 7

Sensitivity of Class IM to Prepayments Assumed Price 8.25%*

PSA Prepayment Assumption Rates

150%	180%	300%	400%	816%
23.7%	23.7%	23.7%	20.1%	0.0%

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

^{**} Indicates that investors will suffer a loss of virtually all of their investment.

Sensitivity of Class KI to Prepayments Assumed Price 7.5%*

PSA Prepayment Assumption

150%	180%	300%	400%	789%
26.1%	26.1%	26.1%	22.0%	0.0%

Sensitivity of Class MI to Prepayments Assumed Price 7.75%*

PSA Prepayment Assumption Rates

150%	180%	300%	400%	829%
25.9%	25.9%	25.9%	22.2%	0.0%

SECURITY GROUP 8

Sensitivity of Class EI to Prepayments Assumed Price 15.75%*

PSA Prepayment Assumption Rates

175%	205%	300%	490%	500%
9.9%	9.9%	9.9%	0.1%	(0.5)%

Sensitivity of Class SE to Prepayments Assumed Price 19.9375%*

PSA Prepayment Assumption Rates

One-Month LIBOR	175%	205%	300%	500%
0.25000%	19.5%	17.9%	12.9%	2.0%
0.70463%	16.9%	15.3%	10.2%	(0.8)%
3.37732%	1.1%	(0.5)%	(6.0)%	(17.9)%
6.05000% and above	**	**	**	**

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

CERTAIN UNITED STATES FEDERAL INCOME TAX CONSEQUENCES

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

REMIC Elections

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

^{**} Indicates that investors will suffer a loss of virtually all of their investment.

Regular Securities

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

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

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

Group(s)	PSA or CPR
1 and 7	180% PSA
2	246% PSA
3 and 4	20% CPR
5 and 6	600% PSA
8	205% PSA

In the case of the Floating Rate Classes, the interest rate values to be used for these determinations are the initial Interest Rates as set forth in the Terms Sheet under "Interest Rates." No representation is made, however, about the rate at which prepayments on the Mortgage Loans underlying any Group of Trust Assets actually will occur or the level of One-Month LIBOR, CMT or One-Year 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.

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 pay-

ments 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.

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.

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. Fiduciaries of any such Plans should consult with their counsel before purchasing any of the Securities.

Prospective Plan investors should consult with their advisors 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.

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.

See "ERISA Considerations" in the Base Offering Circular.

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

LEGAL INVESTMENT CONSIDERATIONS

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

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

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

PLAN OF DISTRIBUTION

Subject to the terms and conditions of the Sponsor Agreement, the Sponsor has agreed to purchase all of the Securities if any are sold and purchased. The Sponsor proposes to offer the Regular and MX Classes to the public from time to time for sale in negotiated transactions at varying prices to be determined at the time of sale, plus accrued interest from (1) March 1, 2020 on the Fixed Rate and Delay Classes and (2) March 20, 2020 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 Aggregate Scheduled Principal Balances of each Class receiving principal distributions or interest distributions based upon a notional balance from the same Trust Asset Group will increase by the same proportion. The Trust Agreement, the Final Data Statement, the Final Schedules and the Supplemental Statement, if any, will reflect any increase in the size of the transaction.

LEGAL MATTERS

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

Available Combinations(1)

REMIC Securities			Maximum Original Class	MX	MX Securities			
	Principal Balance or Class Notional Balance	Related MX Class	Principal Balance or Class Notional Balance(2)	Principal Type(3)	Interest Rate	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
Security Group 1 Combination 1(5)								
YA	\$59,912,000	YC	\$59,912,000	PAC/AD	2.25%	FIX	38382DZQ5	May 2049
		YD	59,912,000	PAC/AD	2.00	FIX	38382DZR3	May 2049
		YE	59,912,000	PAC/AD	1.75	FIX	38382DZS1	May 2049
		YG	59,912,000	PAC/AD	1.50	FIX	38382DZT9	May 2049
		YH	59,912,000	PAC/AD	1.25	FIX	38382DZU6	May 2049
		YI	29,956,000	NTL (PAC/AD)	3.00	FIX/IO	38382DZV4	May 2049
		YJ	59,912,000	PAC/AD	1.00	FIX	38382DZW2	May 2049
		YK	44,934,000	PAC/AD	3.00	FIX	38382DZX0	May 2049
		YL	35,947,200	PAC/AD	3.50	FIX	38382DZY8	May 2049
Combination 2(5)								
YA	\$59,912,000	WA	\$63,921,000	PAC/AD	2.50%	FIX	38382DZZ5	March 2050
YB	4,009,000	WB	63,921,000	PAC/AD	2.25	FIX	38382DA25	March 2050
		WC	63,921,000	PAC/AD	2.00	FIX	38382DA33	March 2050
		WD	63,921,000	PAC/AD	1.75	FIX	38382DA41	March 2050
		WE	63,921,000	PAC/AD	1.50	FIX	38382DE88	March 2050
		MG	63,921,000	PAC/AD	1.25	FIX	38382DE96	March 2050
		MH	63,921,000	PAC/AD	1.00	FIX	38382DA58	March 2050
		WI	31,960,500	NTL (PAC/AD)	3.00	FIX/IO	38382DA66	March 2050
		WJ	47,940,750	PAC/AD	3.00	FIX	38382DA74	March 2050
		WK	38,352,600	PAC/AD	3.50	FIX	38382DA82	March 2050
Security Groups 5 and 6 Combination 3(6)								
	\$49,218,044	CI	\$86,075,577	NTL (SC/PT)	3.50%	3.50% FIX/IO	38382DA90	February 2048

REMIC Securities				MX	MX Securities			
Class	Original Class Principal Balance or Class Notional Balance	Related MX Class	Maximum Original Class Principal Balance or Class Notional Balance(2)	Principal Type(3)	Interest Rate	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
Committee County								
Security Group / Combination 4(5)								
KA	\$43,327,000	K	\$43,327,000	PAC/AD	2.00%	FIX	38382DB24	March 2049
		KB	43,327,000	PAC/AD	2.25	FIX	38382DB32	March 2049
		KC	43,327,000	PAC/AD	2.50	FIX	38382DB40	March 2049
		KD	43,327,000	PAC/AD	2.75	FIX	38382DB57	March 2049
		KE	28,884,666	PAC/AD	3.50	FIX	38382DB65	March 2049
		KI	14,442,333	NTL (PAC/AD)	3.00	FIX/IO	38382DB73	March 2049
Combination $5(5)$								
KA	\$43,327,000	M	\$45,739,000	PAC/AD	2.00%	FIX	38382DB81	December 2049
KV	2,412,000	MA	45,739,000	PAC/AD	3.00	FIX	38382DB99	December 2049
		MB	45,739,000	PAC/AD	2.25	FIX	38382DC23	December 2049
		MC	45,739,000	PAC/AD	2.50	FIX	38382DC31	December 2049
		MD	45,739,000	PAC/AD	2.75	FIX	38382DC49	December 2049
		ME	30,492,666	PAC/AD	3.50	FIX	38382DC56	December 2049
		MI	15,246,333	NTL (PAC/AD)	3.00	FIX/IO	38382DC64	December 2049
Combination 6(5)								
KA	\$43,327,000	IM	\$15,621,666	NTL (PAC/AD)	3.00%	FIX/IO	38382DC72	March 2050
KV	2,412,000	MG	46,865,000	PAC/AD	2.00	FIX	38382DC80	March 2050
MV	1,126,000	MH	46,865,000	PAC/AD	2.25	FIX	38382DC98	March 2050
		MJ	46,865,000	PAC/AD	2.50	FIX	38382DD22	March 2050
		MK	46,865,000	PAC/AD	2.75	FIX	38382DD30	March 2050
		ML	31,243,333	PAC/AD	3.50	FIX	38382DD48	March 2050
		MP	46,865,000	PAC/AD	3.00	FIX	38382DD55	March 2050
Combination 7								
KV MV	\$ 2,412,000 1,126,000	KG	\$ 3,538,000	PAC/AD	3.00%	FIX	38382DD63	March 2050

REMIC Securities				MX	MX Securities			
Class	Original Class Principal Balance or Class Notional Balance	Related MX Class	Maximum Original Class Principal Balance or Class Notional Balance(2)	Principal Type(3)	Interest Rate	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
Security Group 8 Combination 8(5)								
EA	\$43,028,082	EB	\$43,028,082	PAC/AD	1.00%	FIX	38382DD71	January 2050
		EC	43,028,082	PAC/AD	1.25	FIX	38382DD89	January 2050
		ED	43,028,082	PAC/AD	1.50	FIX	38382DD97	January 2050
		EG	43,028,082	PAC/AD	1.75	FIX	38382DE21	January 2050
		EH	34,422,465	PAC/AD	2.25	FIX	38382DS42	January 2050
		EI	10,757,020	NTL (PAC/AD)	4.00	FIX/IO	38382DE39	January 2050
		Ē	28,685,388	PAC/AD	2.50	FIX	38382DE47	January 2050
		EK	24,587,475	PAC/AD	2.75	FIX	38382DE54	January 2050
		EM	21,514,041	PAC/AD	3.00	FIX	38382DE62	January 2050
Combination 9								
EA	\$43,028,082	Э	\$43,678,082	PAC/AD	2.00%	FIX	38382DE70	March 2050
EL	650,000							

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

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

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

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

In the case of Combinations 1, 2, 4, 5, 6 and 8, various subcombinations are permitted. See "Description of the Securities — Modification and Exchange" in the Base Offering Circular for a discussion of subcombinations.

5) Derived from REMIC Classes relating to separate Groups.

Schedule II

SCHEDULED PRINCIPAL BALANCES

Distribution Date	Classes YA and YB (in the aggregate)	Classes KA, KV and MV (in the aggregate)	Classes EA and EL (in the aggregate)
Initial Balance	\$63,921,000.00	\$46,865,000.00	\$43,678,082.00
April 2020	63,727,809.81	46,703,915.70	43,548,412.47
May 2020	63,515,864.01	46,528,251.90	43,403,360.52
June 2020	63,285,250.57	46,338,077.64	43,242,987.84
July 2020	63,036,071.84	46,133,473.13	43,067,369.91
August 2020	62,768,444.58	45,914,529.74	42,876,595.97
September 2020	62,482,499.80	45,681,349.89	42,670,768.93
October 2020	62,178,382.71	45,434,047.04	42,450,005.35
November 2020	61,856,252.62	45,172,745.54	42,214,435.34
December 2020	61,516,282.77	44,897,580.57	41,964,202.41
January 2021	61,158,660.22	44,608,698.01	41,699,463.37
February 2021	60,783,585.66	44,306,254.31	41,420,388.18
March 2021	60,391,273.22	43,990,416.33	41,127,159.77
April 2021	59,981,950.30	43,661,361.22	40,819,973.82
May 2021	59,555,857.32	43,319,276.22	40,499,038.60
June 2021	59,113,247.48	42,964,358.45	40,164,574.69
July 2021	58,654,386.54	42,596,814.79	39,816,814.76
August 2021	58,179,552.51	42,216,861.59	39,456,003.28
September 2021	57,689,035.39	41,824,724.48	39,082,396.24
October 2021	57,183,136.84	41,420,638.12	38,696,260.82
November 2021	56,662,169.88	41,004,845.98	38,297,875.12
December 2021	56,126,458.58	40,577,600.06	37,887,527.75
January 2022	55,576,337.63	40,139,160.60	37,465,517.54
February 2022	55,012,152.09	39,689,795.83	37,032,153.09
March 2022	54,434,256.91	39,229,781.67	36,587,752.46
April 2022	53,843,016.60	38,759,401.42	36,132,642.70
May 2022	53,238,804.83	38,278,945.44	35,667,159.47
June 2022	52,622,003.97	37,788,710.84	35,191,646.60
July 2022	51,993,004.72	37,289,001.16	34,706,455.65
August 2022	51,369,262.02	36,793,349.83	34,225,947.28
September 2022	50,750,731.57	36,301,722.20	33,750,076.08
October 2022	50,137,369.40	35,814,083.90	33,278,797.04
November 2022	49,529,131.94	35,330,400.83	32,812,065.60
December 2022	48,925,975.93	34,850,639.18	32,349,837.61
January 2023	48,327,858.49	34,374,765.41	31,892,069.34
February 2023	47,734,737.06	33,902,746.23	31,438,717.47
March 2023	47,146,569.46	33,434,548.64	30,989,739.08
April 2023	46,563,313.84	32,970,139.91	30,545,091.69
May 2023	45,984,928.66	32,509,487.56	30,104,733.17
June 2023	45,411,372.76	32,052,559.39	29,668,621.84
July 2023	44,842,605.28	31,599,323.44	29,236,716.37
August 2023	44,278,585.72	31,149,748.02	28,808,975.86
September 2023	43,719,273.89	30,703,801.70	28,385,359.76
October 2023	43,164,629.93	30,261,453.30	27,965,827.93

Distribution Date	Classes YA and YB (in the aggregate)	Classes KA, KV and MV (in the aggregate)	Classes EA and EL (in the aggregate)
November 2023	\$42,614,614.31	\$29,822,671.88	\$27,550,340.61
December 2023	42,069,187.80	29,387,426.78	27,138,858.39
January 2024	41,528,311.52	28,955,687.55	26,731,342.26
February 2024	40,991,946.89	28,527,424.02	26,327,753.56
March 2024	40,460,055.63	28,102,606.25	25,928,054.01
April 2024	39,932,599.80	27,681,204.54	25,532,205.69
May 2024	39,409,541.74	27,263,189.43	25,140,171.03
June 2024	38,890,844.11	26,848,531.70	24,751,912.83
July 2024	38,376,469.87	26,437,202.38	24,367,394.22
August 2024	37,866,382.29	26,029,172.71	23,986,578.69
September 2024	37,360,544.93	25,624,414.17	23,609,430.09
October 2024	36,858,921.63	25,222,898.50	23,235,912.60
November 2024	36,361,476.55	24,824,597.62	22,865,990.73
December 2024	35,868,174.14	24,429,483.71	22,499,629.35
January 2025	35,378,979.13	24,037,529.17	22,136,793.63
February 2025	34,893,856.52	23,648,706.62	21,777,449.09
March 2025	34,412,771.62	23,262,988.91	21,421,561.59
April 2025	33,935,690.03	22,880,349.08	21,069,097.28
May 2025	33,462,577.59	22,500,760.43	20,720,022.66
June 2025	32,993,400.45	22,124,196.45	20,374,304.53
July 2025	32,528,125.03	21,750,630.85	20,031,910.01
August 2025	32,066,718.01	21,380,037.55	19,692,806.54
September 2025	31,609,146.36	21,012,390.69	19,356,961.85
October 2025	31,155,377.31	20,647,664.62	19,024,344.00
November 2025	30,705,378.35	20,285,833.88	18,694,921.32
December 2025	30,259,117.24	19,926,873.24	18,368,662.48
January 2026	29,816,562.00	19,570,757.65	18,045,536.42
February 2026	29,377,680.92	19,217,462.29	17,725,512.38
March 2026	28,942,442.54	18,866,962.51	17,408,559.89
April 2026	28,510,815.65	18,519,233.89	17,094,648.78
May 2026	28,082,769.31	18,174,252.19	16,783,749.15
June 2026	27,658,272.82	17,835,211.10	16,475,831.39
July 2026	27,237,295.73	17,502,283.83	16,172,852.16
August 2026	26,819,807.84	17,175,362.63	15,875,260.49
September 2026	26,405,779.19	16,854,341.58	15,582,962.69
October 2026	25,995,180.09	16,539,116.61	15,295,866.64
November 2026	25,587,981.06	16,229,585.48	15,013,881.83
December 2026	25,184,962.02	15,925,647.68	14,736,919.28
January 2027	24,787,984.78	15,627,204.48	14,464,891.56
February 2027	24,396,961.53	15,334,158.86	14,197,712.71
March 2027	24,011,805.69	15,046,415.46	13,935,298.25
April 2027	23,632,431.93	14,763,880.60	13,677,565.17
May 2027	23,258,756.12	14,486,462.22	13,424,431.86
June 2027	22,890,695.35	14,214,069.87	13,175,818.12
July 2027	22,528,167.88	13,946,614.65	12,931,645.13
August 2027	22,171,093.12	13,684,009.23	12,691,835.41
September 2027	21,819,391.65	13,426,167.78	12,456,312.83

Distribution Date	Classes YA and YB (in the aggregate)	Classes KA, KV and MV (in the aggregate)	Classes EA and EL (in the aggregate)
October 2027	\$21,472,985.19	\$13,173,005.97	\$12,225,002.54
November 2027	21,131,796.55	12,924,440.93	11,997,831.00
December 2027	20,795,749.65	12,680,391.26	11,774,725.92
January 2028	20,464,769.50	12,440,776.94	11,555,616.25
February 2028	20,138,782.19	12,205,519.35	11,340,432.18
March 2028	19,817,714.84	11,974,541.27	11,129,105.08
April 2028	19,501,495.64	11,747,766.79	10,921,567.50
May 2028	19,190,053.78	11,525,121.33	10,717,753.16
June 2028	18,883,319.48	11,306,531.62	10,517,596.92
July 2028	18,581,223.94	11,091,925.66	10,321,034.75
August 2028	18,283,699.35	10,881,232.71	10,128,003.73
September 2028	17,990,678.88	10,674,383.26	9,938,442.02
October 2028	17,702,096.64	10,471,309.00	9,752,288.84
November 2028	17,417,887.70	10,271,942.84	9,569,484.47
December 2028	17,137,988.03	10,076,218.83	9,389,970.20
January 2029	16,862,334.55	9,884,072.20	9,213,688.34
February 2029	16,590,865.05	9,695,439.28	9,040,582.20
March 2029	16,323,518.24	9,510,257.54	8,870,596.07
April 2029	16,060,233.69	9,328,465.52	8,703,675.17
May 2029	15,800,951.84	9,150,002.85	8,539,765.70
June 2029	15,545,613.97	8,974,810.21	8,378,814.77
July 2029	15,294,162.24	8,802,829.31	8,220,770.41
August 2029	15,046,539.59	8,634,002.89	8,065,581.53
September 2029	14,802,689.80	8,468,274.67	7,913,197.94
October 2029	14,562,557.47	8,305,589.39	7,763,570.30
November 2029	14,326,087.97	8,145,892.73	7,616,650.15
December 2029	14,093,227.47	7,989,131.33	7,472,389.83
January 2030	13,863,922.91	7,835,252.75	7,330,742.53
February 2030	13,638,121.97	7,684,205.49	7,191,662.24
March 2030	13,415,773.12	7,535,938.93	7,055,103.74
April 2030	13,196,825.53	7,390,403.36	6,921,022.59
May 2030	12,981,229.14	7,247,549.93	6,789,375.13
June 2030	12,768,934.56	7,107,330.64	6,660,118.45
July 2030	12,559,893.16	6,969,698.34	6,533,210.37
August 2030	12,354,056.98	6,834,606.70	6,408,609.47
September 2030	12,151,378.75	6,702,010.20	6,286,275.01
October 2030	11,951,811.89	6,571,864.14	6,166,166.97
November 2030	11,755,310.48	6,444,124.58	6,048,246.04
December 2030	11,561,829.27	6,318,748.37	5,932,473.56
January 2031	11,371,323.65	6,195,693.10	5,818,811.56
February 2031	11,183,749.67	6,074,917.11	5,707,222.72
March 2031	10,999,063.99	5,956,379.48	5,597,670.37
April 2031	10,817,223.91	5,840,040.01	5,490,118.48
May 2031	10,638,187.34	5,725,859.19	5,384,531.64
June 2031	10,461,912.80	5,613,798.23	5,280,875.04
July 2031	10,288,359.40	5,503,818.99	5,179,114.49
August 2031	10,117,486.84	5,395,884.04	5,079,216.40

Distribution Date	Classes YA and YB (in the aggregate)	Classes KA, KV and MV (in the aggregate)	Classes EA and EL (in the aggregate)
September 2031	\$ 9,949,255.42	\$ 5,289,956.57	\$ 4,981,147.74
October 2031	9,783,625.98	5,186,000.44	4,884,876.08
November 2031	9,620,559.95	5,083,980.15	4,790,369.52
December 2031	9,460,019.32	4,983,860.81	4,697,596.75
January 2032	9,301,966.59	4,885,608.15	4,606,526.98
February 2032	9,146,364.86	4,789,188.52	4,517,129.97
March 2032	8,993,177.71	4,694,568.83	4,429,375.98
April 2032	8,842,369.28	4,601,716.60	4,343,235.82
May 2032	8,693,904.21	4,510,599.91	4,258,680.78
June 2032	8,547,747.67	4,421,187.42	4,175,682.68
July 2032	8,403,865.30	4,333,448.33	4,094,213.79
August 2032	8,262,223.27	4,247,352.38	4,014,246.89
September 2032	8,122,788.22	4,162,869.85	3,935,755.24
October 2032	7,985,527.29	4,079,971.55	3,858,712.54
November 2032	7,850,408.08	3,998,628.79	3,783,092.96
December 2032	7,717,398.66	3,918,813.40	3,708,871.14
January 2033	7,586,467.58	3,840,497.72	3,636,022.12
February 2033	7,457,583.82	3,763,654.54	3,564,521.42
March 2033	7,330,716.82	3,688,257.18	3,494,344.95
April 2033	7,205,836.47	3,614,279.40	3,425,469.07
May 2033	7,082,913.10	3,541,695.42	3,357,870.52
June 2033	6,961,917.45	3,470,479.95	3,291,526.48
July 2033	6,842,820.70	3,400,608.12	3,226,414.50
August 2033	6,725,594.44	3,332,055.49	3,162,512.55
September 2033	6,610,210.68	3,264,798.10	3,099,798.95
October 2033	6,496,641.83	3,198,812.36	3,038,252.43
November 2033	6,384,860.71	3,134,075.15	2,977,852.08
December 2033	6,274,840.53	3,070,563.71	2,918,577.35
January 2034	6,166,554.88	3,008,255.72	2,860,408.05
February 2034	6,059,977.74	2,947,129.24	2,803,324.36
March 2034	5,955,083.48	2,887,162.73	2,747,306.79
April 2034	5,851,846.82	2,828,335.02	2,692,336.20
May 2034	5,750,242.88	2,770,625.33	2,638,393.77
June 2034	5,650,247.10	2,714,013.23	2,585,461.02
July 2034	5,551,835.32	2,658,478.68	2,533,519.81
August 2034	5,454,983.70	2,604,001.98	2,482,552.28
September 2034	5,359,668.76	2,550,563.77	2,432,540.93
October 2034	5,265,867.37	2,498,145.06	2,383,468.52
November 2034	5,173,556.72	2,446,727.17	2,335,318.14
December 2034	5,082,714.35	2,396,291.79	2,288,073.18
January 2035	4,993,318.12	2,346,820.90	2,241,717.31
February 2035	4,905,346.20	2,298,296.81	2,196,234.48
March 2035	4,818,777.09	2,250,702.17	2,151,608.93
April 2035	4,733,589.62	2,204,019.90	2,107,825.19
May 2035	4,649,762.90	2,158,233.25	2,064,868.05
June 2035	4,567,276.37	2,113,325.77	2,022,722.56
July 2035	4,486,109.76	2,069,281.30	1,981,374.03

Distribution Date	Classes YA and YB (in the aggregate)	Classes KA, KV and MV (in the aggregate)	Classes EA and EL (in the aggregate)
August 2035	\$ 4,406,243.08	\$ 2,026,083.96	\$ 1,940,808.06
September 2035	4,327,656.66	1,983,718.16	1,901,010.47
October 2035	4,250,331.10	1,942,168.58	1,861,967.35
November 2035	4,174,247.30	1,901,420.20	1,823,665.01
December 2035	4,099,386.42	1,861,458.25	1,786,090.03
January 2036	4,025,729.91	1,822,268.21	1,749,229.22
February 2036	3,953,259.48	1,783,835.85	1,713,069.60
March 2036	3,881,957.12	1,746,147.17	1,677,598.45
April 2036	3,811,805.08	1,709,188.43	1,642,803.25
May 2036	3,742,785.87	1,672,946.15	1,608,671.71
June 2036	3,674,882.25	1,637,407.08	1,575,191.77
July 2036	3,608,077.25	1,602,558.19	1,542,351.56
August 2036	3,542,354.13	1,568,386.70	1,510,139.43
September 2036	3,477,696.40	1,534,880.08	1,478,543.94
October 2036	3,414,087.81	1,502,025.99	1,447,553.85
November 2036	3,351,512.38	1,469,812.33	1,417,158.11
December 2036	3,289,954.32	1,438,227.21	1,387,345.88
January 2037	3,229,398.09	1,407,258.97	1,358,106.51
February 2037	3,169,828.39	1,376,896.13	1,329,429.52
March 2037	3,111,230.13	1,347,127.44	1,301,304.63
April 2037	3,053,588.45	1,317,941.85	1,273,721.74
May 2037	2,996,888.70	1,289,328.50	1,246,670.94
June 2037	2,941,116.47	1,261,276.74	1,220,142.48
July 2037	2,886,257.52	1,233,776.09	1,194,126.78
August 2037	2,832,297.86	1,206,816.28	1,168,614.45
September 2037	2,779,223.69	1,180,387.21	1,143,596.25
October 2037	2,727,021.41	1,154,478.98	1,119,063.11
November 2037	2,675,677.63	1,129,081.84	1,095,006.11
December 2037	2,625,179.15	1,104,186.25	1,071,416.52
January 2038	2,575,512.96	1,079,782.82	1,048,285.73
February 2038	2,526,666.27	1,055,862.34	1,025,605.29
March 2038	2,478,626.44	1,032,415.76	1,003,366.92
April 2038	2,431,381.04	1,009,434.19	981,562.47
May 2038	2,384,917.82	986,908.91	960,183.94
June 2038	2,339,224.72	964,831.35	939,223.47
July 2038	2,294,289.84	943,193.11	918,673.34
August 2038	2,250,101.48	921,985.93	898,525.98
September 2038	2,206,648.07	901,201.69	878,773.94
October 2038	2,163,918.27	880,832.45	859,409.90
November 2038	2,121,900.87	860,870.37	840,426.68
December 2038	2,080,584.83	841,307.79	821,817.24
January 2039	2,039,959.28	822,137.17	803,574.64
February 2039	2,000,013.52	803,351.12	785,692.08
March 2039	1,960,736.99	784,942.36	768,162.88
April 2039	1,922,119.29	766,903.76	750,980.47
May 2039	1,884,150.20	749,228.33	734,138.41
June 2039	1,846,819.61	731,909.19	717,630.38

Distribution Date	Classes YA and YB (in the aggregate)]	Classes KA, KV and MV the aggregate)	sses EA and EL the aggregate)
July 2039	\$ 1,810,117.60	\$	714,939.59	\$ 701,450.14
August 2039	1,774,034.38		698,312.89	685,591.61
September 2039	1,738,560.30		682,022.61	670,048.77
October 2039	1,703,685.86		666,062.34	654,815.76
November 2039	1,669,401.71		650,425.82	639,886.77
December 2039	1,635,698.62		635,106.89	625,256.14
January 2040	1,602,567.52		620,099.51	610,918.29
February 2040	1,569,999.46		605,397.75	596,867.74
March 2040	1,537,985.62		590,995.77	583,099.11
April 2040	1,506,517.33		576,887.87	569,607.12
May 2040	1,475,586.03		563,068.42	556,386.59
June 2040	1,445,183.31		549,531.91	543,432.42
July 2040	1,415,300.86		536,272.94	530,739.61
August 2040	1,385,930.52		523,286.20	518,303.25
September 2040	1,357,064.23		510,566.47	506,118.52
October 2040	1,328,694.06		498,108.63	494,180.68
November 2040	1,300,812.20		485,907.66	482,485.09
December 2040	1,273,410.95		473,958.62	471,027.16
January 2041	1,246,482.75		462,256.69	459,802.43
February 2041	1,220,020.12		450,797.09	448,806.49
March 2041	1,194,015.70		439,575.18	438,035.02
April 2041	1,168,462.27		428,586.36	427,483.76
May 2041	1,143,352.68		417,826.15	417,148.56
June 2041	1,118,679.90		407,290.13	407,025.32
July 2041	1,094,437.02		396,973.98	397,110.02
August 2041	1,070,617.22		386,873.44	387,398.72
September 2041	1,047,213.78		376,984.33	377,887.53
October 2041	1,024,220.10		367,302.58	368,572.67
November 2041	1,001,629.65		357,824.14	359,450.39
December 2041	979,436.03		348,545.09	350,517.02
January 2042	957,632.91		339,461.55	341,768.97
February 2042	936,214.07		330,569.71	333,202.70
March 2042	915,173.39		321,865.85	324,814.74
April 2042	894,504.82		313,346.30	316,601.68
May 2042	874,202.42		305,007.47	308,560.18
June 2042	854,260.33		296,845.84	300,686.96
July 2042	834,672.79		288,857.95	292,978.78
August 2042	815,434.12		281,040.39	285,432.48
September 2042	796,538.72		273,389.83	278,044.96
October 2042	777,981.09		265,903.01	270,813.17
November 2042	759,755.80		258,576.71	263,734.10
December 2042	741,857.51		251,407.77	256,804.82
January 2043	724,280.95		244,393.11	250,022.44
February 2043	707,020.94		237,529.70	243,384.12
March 2043	690,072.38		230,814.54	236,887.09
April 2043	673,430.24		224,244.73	230,528.62
May 2043	657,089.58		217,817.39	224,306.01

Distribution Date	Classes YA and YB (in the aggregate)	Classes KA, KV and MV (in the aggregate)	Classes EA and EL (in the aggregate)
June 2043	\$ 641,045.52	\$ 211,529.71	\$ 218,216.65
July 2043	625,293.25	205,378.92	212,257.94
August 2043	609,828.06	199,362.32	206,427.36
September 2043	594,645.29	193,477.24	200,722.40
October 2043	579,740.35	187,721.08	195,140.64
November 2043	565,108.74	182,091.28	189,679.66
December 2043	550,745.99	176,585.32	184,337.12
January 2044	536,647.75	171,200.73	179,110.70
February 2044	522,809.70	165,935.10	173,998.14
March 2044	509,227.58	160,786.06	168,997.20
April 2044	495,897.24	155,751.27	164,105.71
May 2044	482,814.54	150,828.45	159,321.51
June 2044	469,975.44	146,015.35	154,642.51
July 2044	457,375.95	141,309.78	150,066.63
August 2044	445,012.14	136,709.58	145,591.84
September 2044	432,880.13	132,212.63	141,216.17
October 2044	420,976.13	127,816.85	136,937.65
November 2044	409,296.37	123,520.21	132,754.36
December 2044	397,837.18	119,320.69	128,664.42
January 2045	386,594.90	115,216.35	124,665.99
February 2045	375,565.96	111,205.26	120,757.25
March 2045	364,746.84	107,285.52	116,936.43
April 2045	354,134.07	103,455.29	113,201.78
May 2045	343,724.22	99,712.74	109,551.57
June 2045	333,513.93	96,056.10	105,984.15
July 2045	323,499.89	92,483.62	102,497.84
August 2045	313,678.84	88,993.57	99,091.04
September 2045	304,047.57	85,584.28	95,762.15
October 2045	294,602.92	82,254.09	92,509.62
November 2045	285,341.77	79,001.39	89,331.92
December 2045	276,261.06	75,824.59	86,227.53
January 2046	267,357.77	72,722.12	83,195.00
February 2046	258,628.94	69,692.47	80,232.87
March 2046	250,071.64	66,734.12	77,339.73
April 2046	241,682.99	63,845.61	74,514.18
May 2046	233,460.16	61,025.50	71,754.86
June 2046	225,400.35	58,272.38	69,060.42
July 2046	217,500.84	55,584.84	66,429.56
August 2046	209,758.89	52,961.54	63,860.98
September 2046	202,171.87	50,401.14	61,353.42
October 2046	194,737.15	47,902.33	58,905.64
November 2046	187,452.15	45,463.83	56,516.40
December 2046	180,314.33	43,084.37	54,184.53
January 2047	173,321.19	40,762.72	51,908.85
February 2047	166,470.27	38,497.68	49,688.21
March 2047	159,759.16	36,288.04	47,521.47
April 2047	153,185.47	34,132.66	45,407.53

Distribution Date	sses YA and YB the aggregate)	K	lasses KA, V and MV he aggregate)	ses EA and EL he aggregate)
May 2047	\$ 146,746.85	\$	32,030.38	\$ 43,345.31
June 2047	140,440.99		29,980.09	41,333.73
July 2047	134,265.62		27,980.68	39,371.76
August 2047	128,218.51		26,031.08	37,458.37
September 2047	122,297.45		24,130.25	35,592.55
October 2047	116,500.27		22,277.12	33,773.31
November 2047	110,824.85		20,470.71	31,999.68
December 2047	105,269.08		18,710.00	30,270.72
January 2048	99,830.89		16,994.02	28,585.50
February 2048	94,508.26		15,321.82	26,943.10
March 2048	89,299.17		13,692.46	25,342.62
April 2048	84,201.67		12,105.01	23,783.19
May 2048	79,213.80		10,558.58	22,263.95
June 2048	74,333.67		9,052.27	20,784.04
July 2048	69,559.40		7,585.24	19,342.64
August 2048	64,889.13		6,156.61	17,938.93
September 2048	60,321.05		4,765.56	16,572.12
October 2048	55,853.37		3,411.28	15,241.43
November 2048	51,484.32		2,092.96	13,946.09
December 2048	47,212.18		809.82	12,685.34
January 2049	43,035.23		0.00	11,458.44
February 2049	38,951.81		0.00	10,264.69
March 2049	34,960.25		0.00	9,103.35
April 2049	31,058.93		0.00	7,973.75
May 2049	27,246.25		0.00	6,875.19
June 2049	23,520.65		0.00	5,807.01
July 2049	19,880.56		0.00	4,768.55
August 2049	16,324.47		0.00	3,759.16
September 2049	12,850.87		0.00	2,778.23
October 2049	9,458.30		0.00	1,825.12
November 2049	6,145.29		0.00	899.23
December 2049	2,910.42		0.00	0.00
January 2050 and thereafter	0.00		0.00	0.00

Underlying Certificates

Ginnie Mae I or II	п	п	П	П	П	п	П	П	П	п	п	П
Percentage of Class in Trust	98.9443522992%	100.0000000000	100.0000000000	41.6325190748	100.0000000000	100,0000000000	100.0000000000	100.0000000000	100.0000000000	44.2884170469	100.0000000000	30.8961735838
Notional Balance in Trust	\$ 6,739,405	1,572,723	10,753,096	10,653,551	5,180,917	4,297,918	3,326,901	1,321,396	5,372,137	12,146,499	12,205,234	12,505,800
Underlying Certificate Factor(2)	0.65366745	0.97330598	0.48751385	0.56865543	0.60444034	0.60170853	0.57436785	0.61665157	0.58264453	0.78322648	0.97567366	1.000000000
Original Notional Balance of Class	\$10,420,143	1,615,857	22,057,006	45,000,001	8,571,428	7,142,857	5,792,284	2,142,857	9,220,266	35,016,571	12,509,546	40,476,857
Principal Type(1)	NTL(PAC/AD)	NTL(SC/SEQ/AD)	NTL(PT)	NTL(PAC/AD)	NTL(PAC/AD)	NTL(PAC/AD)	NTL(PT)	NTL(PAC/AD)	NTL(PT)	NTL(PAC/AD)	NTL(SC/SEQ)	NTL(PAC/AD)
Final Distribution Date	April 2046	January 2047	February 2047	March 2047	December 2047	December 2047	January 2048	February 2048	February 2048	July 2046	May 2047	September 2047
Interest Type(1)	FIX/IO	FIX/IO	FIX/IO	FIX/IO	FIX/IO	FIX/IO	FIX/IO	FIX/IO	FIX/IO	FIX/IO	FIX/IO	FIX/IO
Interest Rate	3.5%	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
CUSIP	38379WSQ6	38376T7K2	38376T7D8	38376U5K1	38380H5B4	38380H6G2	38380U5X7	38380KQ24	38380KG58	38379X2I8	38380GDC5	38380HHW5
Issue Date	April 29, 2016	February 28, 2017	February 28, 2017	May 30, 2017	December 29, 2017	December 29, 2017	January 30, 2018	February 28, 2018	February 28, 2018	July 29, 2016	August 30, 2017	September 29, 2017
Class	11(4)	GI(4)(5)	10(4)	BI(3)(4)	OI(4)	NI(4)	IM(4)	DI(4)	DI(4)	HI(3)(4)	D(4)(6)	IB(4)
Series	2016-048	2017-033	2017-033	2017-080	2017-184	2017-188	2018-006	2018-018	2018-032	2016-093	2017-130	2017-136
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
Trust Asset Group	v	v	5	5	v	v	v	v	v	9	9	9

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

Underlying Certificate Factors are as of March 2020.

MX Class.

More than 10% of the Mortgage Loans underlying this Underlying Certificate may be higher balance Mortgage Loans. See "Risk Factors" in this Supplement. 284

Class GI is backed by a previously issued Ginnie Mae MX certificate, as outlined below: $\widehat{\mathcal{O}}$

• MX Class PL from 2017-014

Class ID is backed by previously issued Ginnie Mae MX certificates, as outlined below: 9

• MX Class JI from 2017-084

• MX Class JG from 2017-084

Assumed Characteristics of the Mortgage Loans Underlying the Group 4 Trust Assets(1)

Initial Certificate Rate at MBS Issuance(14)	5.000%	6.500	5.000	6.000	5.500	5.500	6.500	6.000	6.000	7.000	000.9	5.000	5.000 4.000	5.000	2.000	4.500	4.000	4.000	4.000	5.750 4.000	3.750	3.750 0.750	3.750	4.250	4.500	4.250	3.500	5.500	0.500	4.500	5.500 4.500	4.500	5.500	3.500	4.000	3.500	3.000	3.500	4.000	3.500	5.500
Final Maturity Date	December 20, 2026 December 20, 2026	January 20, 202/ January 20, 2027	March 20, 2027	June 20, 2027	August 20, 2027	November 20, 202/ January 20, 2028	February 20, 2028	March 20, 2028 May 20, 2028	January 20, 2030	April 20, 2030	May 20, 2050 June 20, 2030	July 20, 2031	February 20, 2052 March 20, 2032	March 20, 2032	February 20, 2032	September 20, 2032	December 20, 2032	May 20, 2055 July 20, 2033	November 20, 2033	December 20, 2055 January 20, 2034	January 20, 2034	January 20, 2054 May 20, 2034	May 20, 2034	July 20, 2034	August 20, 2034 August 20, 2034	September 20, 2034	April 20, 2035	May 20, 2036	May 20, 2025 Anoust 20, 2038	September 20, 2038	June 20, 2023 Sentember 20, 2038	December 20, 2038	July 20, 2023	October 20, 2039	October 20, 2039	December 20, 2039	January 20, 2040	January 20, 2040 February 20, 2040	February 20, 2040	June 20, 2040	July 20, 2040
Lifetime Certificate Interest Rate Floor(13)	1.500%	1.500	1.500	1.500	1.500	1.500	1.500	1500	1.500	2.000	1.500	1.500	1.500	1.500	2.000	1.500	1.500	1.500	1.000	1.500	1.500	1.500	1.500	1.500	1.500	1.500	2.000	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500
Lifetime Certificate Interest Rate Cap(12)	10.000%	11.500	10.000	11.000	10.500	10.500	11.500	11.000	11.000	12.000	11.000	10.000	10:000 6 000	10.000	10.000	9.500	0006	0006 0006	9.000	8.70	8.750	8.750	8.750	9.250	9.500	9.250	8.500	10.500	11.500	9.500	10.500	9.500	10.500	8.500	10.000	8.500	8.000	8.500	10.000	8.500	8.500
Periodic Certificate Interest Rate Limit(11)	1.000%	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0001	1.000	1.000	1.000	1.000	1.000	1.000	000.1	1.000	0001	1.000	1.000	1.000	1.000	1.000	1.000	2000	1.000	0000	1.000	1.000	1.000	2.000	1.000	1.000	1.000	2.000	1.000	1.000
Mortgage Rate Reset Frequency(10)	Annually Annually	Annually Annually	Annually	Annually	Annually	Annually Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually Annually	Annually	Annually	Annually
Next Mortgage Rate Adjustment Date(9)	January 1, 2021 January 1, 2021	April 1, 2020 April 1, 2020	April 1, 2020	July 1, 2020 July 1, 2020	October 1, 2020	January 1, 2021 April 1, 2020	April 1, 2020	April 1, 2020 Iuly 1, 2020	April 1, 2020	July 1, 2020	July 1, 2020 July 1, 2020	October 1, 2020	April 1, 2020 April 1, 2020	April 1, 2020	April 1, 2020	October 1, 2020	January 1, 2021	July 1, 2020 October 1, 2020	January 1, 2021	January 1, 2021 April 1, 2020	April 1, 2020	April 1, 2020 July 1, 2020	July 1, 2020	October 1, 2020	October 1, 2020	October 1, 2020	April 1, 2020 July 1, 2020	July 1, 2020	July 1, 2020 October 1, 2020	October 1, 2020	July 1, 2020 July 1, 2020	January 1, 2021	October 1, 2020	200	January 1, 2021	January 1, 2021	April 1, 2020	April 1, 2020 April 1, 2020	April 1, 2020	July 1, 2020	October 1, 2020
Issue Date	December 1, 1996 December 1, 1996	January 1, 1997 January 1, 1997	March 1, 1997	June 1, 1997	August 1, 1997	November 1, 199/ January 1, 1998	February 1, 1998	March 1, 1998 May 1, 1998	January 1, 2000	April 1, 2000	May 1, 2000 June 1, 2000	July 1, 2001	February 1, 2002 March 1, 2002	March 1, 2002	March 1, 2002	September 1, 2002	December 1, 2002	May 1, 2005 July 1, 2003	November 1, 2003	December 1, 2005 January 1, 2004	January 1, 2004	January 1, 2004 May 1, 2004	May 1, 2004	July 1, 2004	August 1, 2004 August 1, 2004	September 1, 2004	April 1, 2005	May 1, 2006	May 1, 1995 Anoust 1, 2008	September 1, 2008	June 1, 1993 October 1, 2008	December 1, 2008	July 1, 1993 September 1, 2000	October 1, 2009	October 1, 2009	December 1, 2009	January 1, 2010	January 1, 2010 February 1, 2010	February 1, 2010	June 1, 2010	July 1, 2010
Certificate Margin(8)	1.500%	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	2.000	1.500	1.500	1.500	1.000	1.500	1.500	1.500	1.500	1.500	1.500	1.500	2.000	1.500	1500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500
Index	1-Year CMT 1-Year CMT	1-Year CMI 1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMI 1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMI 1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMI	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMI	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMI 1-Year CMT	1-Year CMT	1-Year OMT	1-Year CMT
Approximate Weighted Average Servicing and Guaranty Fee Rate(7)	1.240%	1.185	1.241	1.225	1.175	1.248	1.241	1.060	1.254	1.221	1.156	1.128	1.155	1.048	0.500	1.053	1.102	0.668	0.741	0.515	0.489	0.489	0.502	0.537	0.538	0.750	0.660	0.678	0.5/1	0.575	0.530	0.574	0.511	0.461	0.642	0.548	0.346	0.541	0.712	0.687	0.508
Current Certificate (Rate(6)	3.125%	4.000	4.000	3.875	3.250	5.1.25 4.000	4.000	4.000	4.000	3.875	3.875	3.250	4.000	4.000	4.500	3.250	3.125	3.250	2.625	5.125 4.000	4.000	3.875	3.875	3.250	3.250	3.250	4.375	3.875	5.8/5	3.250	5.8/5 5.05 5.05 5.05	3.125	3.250	3.125	3.125	3.125	4.000	4.000	4.000	3.875	5.250
Approximate Weighted Average Current Mortgage Rate(5)	4.365%	5.220	5.241	5.100	4.425	4.514 5.248	5.241	5.060	5.254	5.096	5.031	4.378	5.104 5.104	5.048	5.000	4.303	4.227	3.918	3.366	5.058 4.702	4.489	4.489	4.377	3.787	3.788	4.000	5.035	4.553	4.440	3.825	4.405	3.699	3.761	3.586	3.767	3.673	4.346	4.541	4.712	4.562	5.818
Approximate Weighted Average Loan Age (in months)(4)	280 280 330	279	277	274	272	267 267	266	265 263	243	239	238	224	218	217	220	211	208	202 201	196	195	194	4 S	190	188	187	187	179	166	323 139	138	322 130	135	321	125	125	124	123	123 122	122	118	117
Approximate Weighted Average Remaining Term to Maturity (in months)(3)	888	8 8	88	8	% 5	2.2	\$	56	117	121	121	136	142 142	143	140	149	152	159	163	164	165	168	168	171	172	173	181	194	25/	221	8 52	224	39	235	235	235	237	238	238	242	243
A Ginnie Mae Certificate Principal Balance(2)	\$ 3,280.58	4,272.54	9,894.23	1,331.25	6,219.48	4,452.45	7,463.65	29,548.27	6,769.42	770.21	8.050.16	1,957.54	263,000.92	5,370.76	10,771.36	8,474.86	6,611.32	10.448.81	471,309.87	5.864.39	217,932.67	39,754.22	486,646.43	578,618.99	122,402.43	64,205.63	24.464.13	459,670.52	23,301.55	52,904.27	50,797.70	218,857.52	1,137.84	174,373.84	52,373.67	51,275.32	80,818.88	590,840.18 447,311.49	121,582.62	39,430.26	317,551.44
Pool Number	80020	80030 80031	80051	80085	80104	80150 80152	80171	80180	80364	80397	80419	80524	805/9	80585	80586	90020	80657	8069/	9/_/08	80/30	80817	8081/	80916	80991	81036	81070	81300	81689	8198 82145	82158	821/	82236	8238	82408	82414	82433	82461	82408 82478	82484	82557	875/4

Initial Certificate Rate at MBS Issuance(14)	3.000%	3.000	3.500	2.500	3.000	3.000	3.000	3.000	3.000	2.500	3,500	3.000	3.000	2.500	3.000	2.500	3.500	3,000	2.500	3.000	3.000	2.500	3.000	3.000	5.500	5.000	5.000	6.500	6.500	000.9	7.500	6.000	6.000	4.000	6.500	2.500	3.000	2.000	2.500	3.500	3.000	2.500	2.000	2.500	2.500	2.500
Final Maturity Date	July 20, 2040 July 20, 2040	August 20, 2040	September 20, 2040 September 20, 2040	October 20, 2040	October 20, 2040 October 20, 2040	November 20, 2040	November 20, 2040	January 20, 2041	February 20, 2041	April 20, 2041	May 20, 2041 May 20, 2041	July 20, 2041	July 20, 2041	August 20, 2041	August 20, 2041	August 20, 2041 October 20, 2041	October 20, 2041	October 20, 2041 November 20, 2041	December 20, 2041	December 20, 2041 December 20, 2041	December 20, 2041	January 20, 2042	February 20, 2042 February 20, 2042	March 20, 2042	November 20, 2023 November 20, 2023	January 20, 2024	February 20, 2024 May 20, 2024	November 20, 2024	December 20, 2024	July 20, 2025	January 20, 2021	January 20, 2026 January 20, 2026	October 20, 2021	November 20, 2039	August 20, 2026 October 20, 2026	April 20, 2042	April 20, 2042 May 20, 2042	May 20, 2042	June 20, 2042	June 20, 2042	June 20, 2042 July 20, 2042	October 20, 2042	November 20, 2042	January 20, 2045 February 20, 2043	April 20, 2043 June 20, 2043	June 20, 2043
Lifetime Certificate Interest Rate Floor(13)	1.500%	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	2.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1500	1.500	1.500	1.500
191 O	8.000%	8:000	8.500	7.500	8.000	8.000	9.000	8.000	9:000	7.500	8.500	8.000	8.000	7.500	8.000	7.500	8.500	8:000	7.500	8.000	8.000	7.500	8.000	8.000	10.500	10.000	10.000	11.500	11.500	11.000	12.500	11.000	11.000	9:000	11.500	7.500	8.000	7.000	7.500	8.500	8.000	7.500	7:000	7.500	7.500	7.500
Periodic Certificate Interest Rate Limit(11)	1.000%	1.000	1.000	1.000	1.000	1.000	2.000	1.000	2.000	1.000	1000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Mortgage Rate Reset Frequency(10)	Annually Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually	Annually Annually	Annually	Annually	Annually Annually	Annually Annually	Annually
Next Mortgage Rate Adjustment Date(9)	October 1, 2020 October 1, 2020	October 1, 2020	October 1, 2020	January 1, 2021	January 1, 2021	January 1, 2021	January 1, 2021	April 1, 2020 April 1, 2020	April 1, 2020	July 1, 2020	July 1, 2020 July 1, 2020	October 1, 2020	October 1, 2020	October 1, 2020	October 1, 2020	January 1, 2021	É,	January 1, 2021 January 1, 2021	î —î :	January 1, 2021	January 1, 2021	April 1, 2020	April 1, 2020 April 1, 2020	April 1, 2020	January 1, 2021 January 1, 2021	April 1, 2020	April 1, 2020 Iuly 1, 2020	January 1, 2021	January 1, 2021	October 1, 2020	April 1, 2020	April 1, 2020	January 1, 2021	January 1, 2021	October 1, 2020	July 1, 2020	July 1, 2020 July 1, 2020	July 1, 2020 July 1, 2020	July 1, 2020 July 1, 2020	July 1, 2020	July 1, 2020 October 1, 2020	January 1, 2021	January 1, 2021	April 1, 2020 April 1, 2020	July 1, 2020 July 1, 2020	julý 1, 2020
Issue Date	July 1, 2010 July 1, 2010	August 1, 2010	September 1, 2010 September 1, 2010	October 1, 2010	October 1, 2010 October 1, 2010	November 1, 2010	November 1, 2010	January 1, 2011	February 1, 2011	April 1, 2011	May 1, 2011 May 1, 2011	July 1, 2011	July 1, 2011	August 1, 2011	August 1, 2011	October 1, 2011	October 1, 2011	November 1, 2011	December 1, 2011	December 1, 2011 December 1, 2011	December 1, 2011	January 1, 2012	February 1, 2012 February 1, 2012	March 1, 2012	November 1, 1995 November 1, 1993	January 1, 1994	February 1, 1994 May 1, 1994	November 1, 1994	December 1, 1994	July 1, 1995	January 1, 1991	January 1, 1996	October 1, 1991 December 1, 1991	February 1, 2010	August 1, 1996 October 1, 1996	April 1, 2012	April 1, 2012 May 1, 2012	May 1, 2012 May 1, 2012	June 1, 2012	June 1, 2012	June 1, 2012 July 1, 2012	October 1, 2012	November 1, 2012	January 1, 2015 February 1, 2013	April 1, 2013 June 1, 2013	June 1, 2013
Certificate Margin(8)	1.500%	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500
Index	1-Year CMT 1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMI	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT		1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMI		1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT		1-Year CMT	1-Year CMT	1-Year CMI 1-Year CMT	1-Year CMT 1-Year CMT	1-Year CMT
Approximate Weighted Average Servicing and Guaranty Fee Rate(7)	0.351% 0.464	0.513	0.644	0.517	0.522	0.492	0.614	0.476	0.704	0.481	0.559	0.537	0.367	0.505	0.350	0.519	0.470	0.363	0.525	0.458	0.538	0.343	0.357	0.420	0.617	0.538	0.558	0.622	0.735	1.115	0.547	1.214	0.614	0.500	1.173	0.327	0.395	0.478	0.312	0.500	0.470	0.346	0.541	0.336	0.346	0.339
Current Certificate Rate(6)	3.250%	3.250	3.250	3.125	3.125	3.125	3.125	4.000	4.000	3.875	5.87 5.78 5.78	3.250	3.250	3.250	3.250	3.125	3.125	3.125	3.125	3.125	3.125	4.000	4.000	4.000	3.125	4.000	4.000	3.125	3.125	3.250	4.000	4.000	3.125	3.125	3.250	3.875	3.875 278.5	3.875	3.875 5.875	3.875	3.250	3.125	3.125	4.000	3.875 3.875	3.875
Approximate Weighted Average Current Mortgage Rate(5)	3.601%	3.763	3.894	3.642	3,647	3.617	3.739	4.476	4.704	4.356	4.454	3.787	3.617	3.755	3.600	3.644	3.595	3,488	3.650	3.583	3.663	4.343	4.357	4.420	3.742	4.538	4.558	3.747	3.860	4.365	7,547	5.214	3.739	3.625	4.423	4.202	4.270	4.353	4.187	4.375	4.345 3.656	3.471	3.666	4.336	4.221 4.167	4.214
Approximate Weighted Average Loan Age (in months)(4)	116	115	115	113	113	113	112	111	109	107	106 107	105	104	103	103	101	102	101	66	101	100	86	0 86	88	310 317	315	314	305	304	297	351	291	342 240	124	284	207 26	%%	25	<i>\$</i> %	1.2.	2,23	8 8	8 8	% % %	æ &	82
Approximate Weighted Average Remaining Term to Maturity (in)	243 243	243	245	245	247	247	248	249 250	251	252	254	255	256	256	257	258	258	259	259	259	560 260	262	707 707 707	262	4 4	343	949	55	% G	63	08	8	18	236	92 p	265	264	264	266 266	266	265 267	271	5 5 5 6 6 7 8 7 8 8 7 8 8 7 8 8 7 8 7 8 8 7 8 7	275	276 277	278
Ginnie Mae Certificate Principal M Balance(2) E	570,111.80 352,655.12	23,809.29	60,035.61	142,639.92	58,150.55	66,636.20	207,343.34	139,338.79	138,728.04	59,396.09	4,2/6.35	672,263.55	365,940.08	703,950.20	331,986.36	218,128.77	206,405.96	585.469.22	568,223.97	386,838.20 41 782 13	299,708.07	357,776.61	348.424.16	175,321.36	7.213.20	822.83	4,278.77	1,701.36	13,576.59	2,050.79	4,119.87	2,144.24	5,252.77	179,781.95	3,131.07	1,178,231.63	687,564.43	23,358.13	385,718.72	73,564.98	228,402.23 32,661.70	216,490.16	300,685.89	90,102.90	113,605.27 338,495.50	61,337.30
Pool Number 1	82577 \$ 82580	82594	82625	82645	82640	82663	82672	82712	82745	82793	82830	82885	82887	82903	82906	82958	82960	82980 82980	82997	82999	83003	83023	83039	83052	8314 8326	8358	8373	8542	8562	8651				٠.									MA0554			MA1101

Initial Certificate Rate at MBS Issuance(14)	2.000%	2.000	2.000	2.500	2.500	2.500	1.500	2.000	2.500	3.000	2.500	3.500	3.000	2.000	3.000	2.000	3.000	1.500	3.000	1.500	2.000	1.500	2.500	2.000	2.500	2.500	3.500	3.500	2.500	2.500	
Final Maturity Date	July 20, 2043	August 20, 2043	August 20, 2043	February 20, 2044	April 20, 2044	May 20, 2044	May 20, 2044	June 20, 2044	July 20, 2044	January 20, 2045	February 20, 2045	April 20, 2045	May 20, 2045	May 20, 2045	July 20, 2045	October 20, 2045	January 20, 2046	April 20, 2046	June 20, 2046	October 20, 2046	November 20, 2046	August 20, 2046	January 20, 2047	July 20, 2047	July 20, 2047	September 20, 2047	January 20, 2048	March 20, 2048	March 20, 2048	April 20, 2048	
Lifetime Certificate Interest Rate Floor(13)	1.500%	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	
Lifetime Certificate Interest Rate Cap(12)	7.000%	7.000	7.000	7.500	7.500	7.500	6.500	7.000	7.500	8.000	7.500	8.500	8:000	7.000	8:000	7.000	8.000	6.500	8.000	6.500	7.000	6.500	8.500	7.000	8.500	7.500	8.500	8.500	8.500	8.500	
Periodic Certificate Interest Rate Limit(11)	1.000%	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	2.000	1.000	2.000	1.000	1.000	1.000	2.000	2.000	
E #																															
Next Mortgage Rate Adjustment Date(9)	October 1, 2020	October 1, 2020	October 1, 2020	April 1, 2020	July 1, 2020	July 1, 2020	July 1, 2020	July 1, 2020	October 1, 2020	April 1, 2020	April 1, 2020	July 1, 2020	July 1, 2020	July 1, 2020	October 1, 2020	January 1, 2021	April 1, 2021	July 1, 2020	July 1, 2021	January 1, 2021	January 1, 2021	October 1, 2021	April 1, 2024	October 1, 2022	October 1, 2024	October 1, 2020	April 1, 2023	April 1, 2023	April 1, 2025	July 1, 2025	
Issue Date	July 1, 2013	August 1, 2013	August 1, 2013	February 1, 2014	April 1, 2014	May 1, 2014	May 1, 2014	June 1, 2014	July 1, 2014	January 1, 2015	February 1, 2015	April 1, 2015	May 1, 2015	May 1, 2015	July 1, 2015	October 1, 2015	January 1, 2016	April 1, 2016	June 1, 2016	October 1, 2016	November 1, 2016	September 1, 2016	January 1, 2017	July 1, 2017	July 1, 2017	September 1, 2017	January 1, 2018	March 1, 2018	March 1, 2018	April 1, 2018	
Certificate Margin(8)			1.500	1.500	1.500	1.500	1.500	1.500					1.500																		
Index	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	1-Year CMT	
Approximate Weighted Average Servicing and Guaranty Fee Rate(7)	0.356%		0.505					0.534																					0.250	0.250	
Current Certificate Rate(6)	3.250%	3.250	3.250	3.500	3.500	3.500	3.875	3.875	3.250	3.000	2.500	3.500	3.000	3.875	3.000	3.125	3.000	2.500	3.000	2.500	3.000	1.500	2.500	2.000	2.500	2.500	3.500	3.500	2.500	2.500	
Approximate Weighted Average Current Mortgage Rate(5)	3.606%	3.569	3.755	3.852	3.917	3.932	4.625	4.409	3.721	3.384	2.883	3.883	3.401	4.231	3.380	3.758	3.430	2.778	3.483	2.765	3.234	1.750	2.750	2.451	2.750	2.862	3.871	3.879	2.750	2.750	
Approximate Weighted Average Loan Age (in months)(4)	81	80	79	74	72	20	70	69	69	63	62	99	28	28	57	53	51	47	46	41	40	43	38	33	32	31	56	24	24	23	
Approximate Weighted Average Remaining Term to Maturity (in months)(3)	279	280	278	286	288	290	290	291	291	297	298	300	302	302	303	306	309	310	314	319	319	317	322	327	328	327	334	336	336	337	
Ginnie Mae Certificate Principal Balance(2)	\$ 607,752.88	752,090.40	276,426.47	241,126.49	96,364.28	121,145.67	144,221.60	215,663.68	314,252.54	111,533.32	180,648.26	81,218.98	447,753.15	900,147.53	1,604,684.41	170,432.82	195,099.38	154,909.72	383,599.06	101,201.69	551,998.00	228,403.90	498,707.40	418,457.03	88,686.39	357,301.83	708,538.03	377,891.20	255,784.51	87,024.96	
Pool Number	MA1167	MA1234	MA1242	MA1690	MA1851	MA1932	MA1941	MA2017	MA2085	MA2534	MA2614	MA2770	MA 2840	MA2849	MA2975	MA3195	MA3388	MA3621	MA3748	MA4025	MA4091	MA4152	MA4407	MA4597	MA4602	MA4741	MA4975	MA5090	MA5093	MA5152	

- Assets and the related Mortgage Loans. All weighted averages provided in this Exhibit B are weighted based on the outstanding principal The information in this Exhibit B is provided by the Sponsor as of March 1, 2020. It is based on information regarding the Group 4 Trust amounts of the Mortgage Loans as of March 1, 2020.
- The Ginnie Mae Certificate Principal Balance is the sum of the outstanding principal amounts of the Mortgage Loans underlying the related Trust MBS.
 - The Approximate Weighted Average Remaining Term to Maturity (in months) is the approximate weighted average remaining term to The Approximate Weighted Average Loan Age (in months) is the approximate weighted average loan age of the Mortgage Loans undermaturity of the Mortgage Loans underlying the related Trust MBS. 4
- The Approximate Weighted Average Current Mortgage Rate is the approximate weighted average of the interest rates of the Mortgage Loans underlying the related Trust MBS. lying the related Trust MBS. (V)
- (6) The Current Certificate Rate is the current certificate rate of the related Trust MBS.
- The Approximate Weighted Average Servicing and Guaranty Fee Rate is the approximate weighted average monthly fee rate for servicing and for the Ginnie Mae Certificate Guaranty Fee. 6
- The Certificate Margin is the margin of the Mortgage Loans underlying the related Trust MBS net of the Servicing and Guaranty Fee Rate.
- The Next Mortgage Rate Adjustment Date is the next date on which the Mortgage Rate of each Mortgage Loan underlying the related Trust MBS resets under the Mortgage Rate formula and the related Mortgage Loan documents.

- (10) The Mortgage Rate Reset Frequency is the frequency that the Mortgage Rate of each Mortgage Loan resets under the Mortgage Rate formula and related Mortgage Loan documents applicable to each Mortgage Loan underlying the related Trust MBS after the first Mortgage Rate adjustment date.
- (11) The Periodic Certificate Interest Rate Limit is the maximum periodic interest rate adjustment possible based on the MBS Guide.
- (12) The Lifetime Certificate Interest Rate Cap is the maximum certificate interest rate possible based on the MBS Guide.
- (13) The Lifetime Certificate Interest Rate Floor is the minimum certificate interest rate possible based on the MBS Guide.
- (14) The Initial Certificate Rate at MBS Issuance is the initial certificate rate of the related Trust MBS.

The remaining terms to maturity, loan ages, Mortgage Rates, Mortgage Margins and next Mortgage Rate adjustment dates of many of the Mortgage Loans underlying the Group 4 Trust Assets will differ from the characteristics assumed, perhaps significantly. See "The Trust Assets — The Mortgage Loans" in this Supplement.



\$469,226,153

Government National Mortgage Association

GINNIE MAE®

Guaranteed REMIC
Pass-Through Securities
and MX Securities
Ginnie Mae REMIC Trust 2020-030

OFFERING CIRCULAR SUPPLEMENT March 24, 2020

> Morgan Stanley Ramirez & Co., Inc.