\$402,196,333



Guaranteed REMIC Pass-Through Certificates Fannie Mae REMIC Trust 2018-88

The Certificates

We, the Federal National Mortgage Association (Fannie Mae), will issue the classes of certificates listed in the chart on this cover.

Payments to Certificateholders

We will make monthly payments on the certificates. You, the investor, will receive

- interest accrued on the balance of your certificate (except in the case of the accrual classes), and
- principal to the extent available for payment on your class.

We will pay principal at rates that may vary from time to time. We may not pay principal to certain classes for long periods of time.

The Fannie Mae Guaranty

We will guarantee that required payments of principal and interest on the certificates are available for distribution to investors on time.

The Trust and its Assets

The trust will own Fannie Mae MBS.

The mortgage loans underlying the Fannie Mae MBS are first lien, single-family, fixed-rate loans.

Class	Group	Original Class Balance	Principal Type(1)	Interest Rate	Interest Type(1)	CUSIP Number	Final Distribution Date
DA	1	\$ 75,000,000	SEQ	4.0%	FIX	3136B3PN4	February 2043
DV	1	10,920,000	SEQ/AD	4.0	FIX	3136B3PP9	February 2030
VD	1	13,440,000	SEQ/AD	4.0	FIX	3136B3PQ7	April 2039
DZ	1	19,547,949	SEQ	4.0	FIX/Z	3136B3PR5	December 2048
MA	2	51,570,137	SEQ/AD	3.5	FIX	3136B3PS3	September 2047
MZ	2	12,780,000	SEQ	3.5	FIX/Z	3136B3PT1	December 2058
BA	3	146,706,000	SEQ	4.0	FIX	3136B3PU8	November 2043
VB(2).	3	20,159,000	SEQ/AD	4.0	FIX	3136B3PV6	February 2030
BV(2).	3	15,957,000	SEQ/AD	4.0	FIX	3136B3PW4	May 2036
BZ(2) .	3	36,116,247	SEQ	4.0	FIX/Z	3136B3PX2	December 2048
R		0	NPR	0	NPR	3136B3PY0	December 2058

See "Description of the Certificates -Class Definitions and Abbreviations" in the REMIC prospectus.

(2) Exchangeable classes.

If you own certificates of certain classes, you can exchange them for certificates of the corresponding RCR classes to be delivered at the time of exchange. The BW and V Classes are the RCR classes. For a more detailed description of the RCR classes, see Schedule 1 attached to this prospectus supplement and "Description of the Certificates-Combination and Recombination-RCR Certificates" in the REMIC prospectus.

The dealer will offer the certificates from time to time in negotiated transactions at varying prices. We expect the settlement date to be November 30, 2018.

Carefully consider the risk factors on page S-6 of this prospectus supplement and starting on page 7 of the REMIC prospectus. Unless you understand and are able to tolerate these risks, you should not invest in the certificates.

You should read the REMIC prospectus as well as this prospectus supplement.

The certificates, together with interest thereon, are not guaranteed by the United States and do not constitute a debt or obligation of the United States or any agency or instrumentality thereof other than Fannie Mae.

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

Wells Fargo Securities

The date of this Prospectus Supplement is November 26, 2018

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AVAILABLE INFORMATION

You should purchase the certificates only if you have read and understood this prospectus supplement and the following documents (the "Disclosure Documents"):

- our Prospectus for Fannie Mae Guaranteed REMIC Pass-Through Certificates dated November 1, 2018 (the "REMIC Prospectus");
- our Prospectus for Fannie Mae Guaranteed Mortgage Pass-Through Certificates (Single-Family Residential Mortgage Loans) dated
 - O May 1, 2018, for all MBS issued on or after May 1, 2018,
 - O June 1, 2016, for all MBS issued on or after June 1, 2016 and prior to May 1, 2018,
 - October 1, 2014, for all MBS issued on or after October 1, 2014 and prior to June 1, 2016,
 - o March 1, 2013, for all MBS issued on or after March 1, 2013 and prior to October 1, 2014,
 - February 1, 2012, for all MBS issued on or after February 1, 2012 and prior to March 1, 2013,
 - ° July 1, 2011, for all MBS issued on or after July 1, 2011 and prior to February 1, 2012,
 - June 1, 2009, for all MBS issued on or after January 1, 2009 and prior to July 1, 2011,
 - o April 1, 2008, for all MBS issued on or after June 1, 2007 and prior to January 1, 2009, or
 - January 1, 2006, for all other MBS (as applicable, the "MBS Prospectus"); and
- any information incorporated by reference in this prospectus supplement as discussed below and under the heading "Incorporation by Reference" in the REMIC Prospectus.

For a description of current servicing policies generally applicable to existing Fannie Mae MBS pools, see "Yield, Maturity, and Prepayment Considerations" in the MBS Prospectus dated May 1, 2018.

The MBS Prospectus is incorporated by reference in this prospectus supplement. This means that we are disclosing information in that document by referring you to it. That document is considered part of this prospectus supplement, so you should read this prospectus supplement, and any applicable supplements or amendments, together with that document.

You can obtain copies of the Disclosure Documents by writing or calling us at:

Fannie Mae MBS Helpline 1100 15th Street, NW Washington, D.C. 20005 (telephone 800-2FANNIE).

In addition, the Disclosure Documents, together with the class factors, are available on our corporate Web site at www.fanniemae.com.

You also can obtain copies of the REMIC Prospectus and the MBS Prospectus by writing or calling the dealer at:

Wells Fargo Bank, N.A. c/o Wells Fargo Securities, LLC Customer Service MAC N9303-054 608 2nd Avenue South, Suite 500 Minneapolis, Minnesota 55479 US and International Callers: (800) 645-3751, option 5 WFSCustomerService@wellsfargo.com.

SUMMARY

This summary contains only limited information about the certificates. Statistical information in this summary is provided as of November 1, 2018. You should purchase the certificates only after reading this prospectus supplement and each of the additional disclosure documents listed on page S-3. In particular, please see the discussion of risk factors that appears in each of those additional disclosure documents.

Assets Underlying Each Group of Classes

Group	Assets
1	Group 1 MBS
2	Group 2 MBS
3	Group 3 MBS

Group 1, Group 2 and Group 3

Characteristics of the MBS

	Approximate Principal Balance	Pass- Through Rate	Range of Weighted Average Coupons or WACs (annual percentages)	Range of Weighted Average Remaining Terms to Maturity or WAMs (in months)
Group 1 MBS	\$118,907,949	4.00%	4.25% to 6.50%	241 to 360
Group 2 MBS	\$ 64,350,137	3.50%	3.75% to 6.00%	361 to 480
Group 3 MBS	\$218,938,247	4.00%	4.25% to 6.50%	241 to 360

Assumed Characteristics of the Underlying Mortgage Loans

	Principal Balance	Original Term to Maturity (in months)	Remaining Term to Maturity (in months)	Loan Age (in months)	Interest Rate
Group 1 MBS	\$118,907,949	360	354	4	4.700%
Group 2 MBS	\$ 64,350,137	480	418	55	4.071%
Group 3 MBS	\$218,938,247	360	347	11	4.341%

The actual remaining terms to maturity, loan ages and interest rates of most of the mortgage loans underlying the MBS will differ from those shown above, and may differ significantly. See "Risk Factors - Risks Relating to Yield and Prepayment - Yields on and weighted average lives of the certificates are affected by actual characteristics of the mortgage loans backing the series trust assets" in the REMIC Prospectus.

Settlement Date

We expect to issue the certificates on November 30, 2018.

Distribution Dates

We will make payments on the certificates on the 25th day of each calendar month, or on the next business day if the 25th day is not a business day.

Record Date

On each distribution date, we will make each monthly payment on the certificates to holders of record on the last day of the preceding month.

Book-Entry and Physical Certificates

We will issue the classes of certificates in the following forms:

Fed Book-Entry

Physical

All classes of certificates other than the R Class

R Class

Exchanging Certificates Through Combination and Recombination

If you own certificates of a class designated as "exchangeable" on the cover of this prospectus supplement, you will be able to exchange them for a proportionate interest in the related RCR certificates. Schedule 1 lists the available combinations of the certificates eligible for exchange and the related RCR certificates. You can exchange your certificates by notifying us and paying an exchange fee. We will deliver the RCR certificates upon such exchange.

We will apply principal and interest payments from exchanged REMIC certificates to the corresponding RCR certificates, on a pro rata basis, following any exchange.

Interest Rates

During each interest accrual period, the fixed rate classes will bear interest at the applicable annual interest rates listed on the cover of this prospectus supplement or on Schedule 1.

Distributions of Principal

For a description of the principal payment priorities, see "Description of the Certificates-Distributions of Principal" in this prospectus supplement.

Weighted Average Lives (years)*

	PSA Prepayment Assumption											
Group 1 Classes	0%	100%	143%	200%	300%	400%	500%	600%				
DA	15.1	5.7	4.6	3.6	2.7	2.3	1.9	1.7				
DV	6.0	6.0	5.9	5.4	4.5	3.8	3.3	2.9				
VD	16.0	13.2	11.1	9.1	6.9	5.5	4.6	4.0				
DZ	27.3	20.7	18.3	15.6	11.9	9.5	7.8	6.6				
			PSA	Prepaym	ent Assur	nption						
Group 2 Classes	<u>0%</u>	100%	131%	200%	300%	400%	<u>500%</u>	<u>600%</u>				
MA	17.6	6.1	5.1	3.7	2.6	2.0	1.6	1.3				
MZ	35.0	21.8	19.4	15.1	11.0	8.4	6.7	5.4				
			PSA	Prepaym	ent Assur	nption						
Group 3 Classes	<u>0%</u>	100%	143%	200%	300%	400%	<u>500%</u>	600%				
BA	15.7	5.7	4.5	3.5	2.5	2.0	1.7	1.4				
VB	6.0	6.0	5.9	5.5	4.6	3.8	3.2	2.8				
BV	14.4	13.1	11.1	9.0	6.8	5.3	4.4	3.7				
BZ	27.6	20.2	17.8	15.1	11.5	9.1	7.4	6.2				
BW	27.6	19.3	16.5	13.4	9.8	7.6	6.1	5.1				
V	9.7	9.1	8.2	7.1	5.5	4.5	3.7	3.2				

^{*} Determined as specified under "Yield, Maturity and Prepayment Considerations - Weighted Average Lives and Final Distribution Dates" in the REMIC Prospectus.

ADDITIONAL RISK FACTOR

Recent natural disasters may present a risk of increased mortgage loan defaults. In November 2018, various areas of Northern and Southern California experienced catastrophic damage due to wildfires; in September and October of 2018, areas of the coastal Carolinas and Florida experienced extensive damage as a result of Hurricane Florence and Hurricane Michael, respectively; and in late summer 2017, Hurricane Harvey, Hurricane Irma and Hurricane Maria resulted in catastrophic damage to extensive areas of the Southeastern United States (including coastal Texas and Louisiana and coastal and inland Florida and Georgia), Puerto Rico and the U.S. Virgin Islands. The full extent of the damage resulting from the foregoing events, including fire loss, severe flooding, high winds and environmental contamination, remains uncertain. Thousands of people have been displaced and interruptions in the affected regional economies have been significant. Although the long-term effects are unclear, these events could lead to a general economic downturn in the affected regions, including job losses and declines in real estate values. Accordingly, the rate of defaults on mortgage loans in the affected areas may increase. Any such increase will result in early payments of principal to holders of certificates backed by MBS with underlying mortgage loans secured by properties in the affected areas.

DESCRIPTION OF THE CERTIFICATES

The material under this heading describes the principal features of the Certificates. You will find additional information about the Certificates in the other sections of this prospectus supplement, as well as in the additional Disclosure Documents and the Trust Agreement. If we use a capitalized term in this prospectus supplement without defining it, you will find the definition of that term in the applicable Disclosure Document or in the Trust Agreement.

General

Structure. We will create the Fannie Mae REMIC Trust specified on the cover of this prospectus supplement (the "Trust") pursuant to a trust agreement dated as of May 1, 2010 and a supplement thereto dated as of November 1, 2018 (the "Issue Date"). We will issue the Guaranteed REMIC Pass-Through Certificates (the "REMIC Certificates") pursuant to that trust agreement and supplement. We will issue the Combinable and Recombinable REMIC Certificates (the "RCR Certificates" and, together with the REMIC Certificates, the "Certificates") pursuant to a separate trust agreement dated as of May 1, 2010 and a supplement thereto dated as of the Issue Date (together with the trust agreement and supplement relating to the REMIC Certificates, the "Trust Agreement"). We will execute the Trust Agreement in our corporate capacity and as trustee (the "Trustee"). In general, the term "Classes" includes the Classes of REMIC Certificates and RCR Certificates.

The assets of the Trust will include three groups of Fannie Mae Guaranteed Mortgage Pass-Through Certificates (the "Group 1 MBS," "Group 2 MBS" and "Group 3 MBS" and together, the "MBS").

Each MBS represents a beneficial ownership interest in a pool of first lien, one- to four-family ("single-family"), fixed-rate residential mortgage loans (the "Mortgage Loans") having the characteristics described in this prospectus supplement.

The Trust will constitute a "real estate mortgage investment conduit" ("REMIC") under the Internal Revenue Code of 1986, as amended (the "Code").

The following chart contains information about the assets, the "regular interests" and the "residual interest" of the REMIC. The REMIC Certificates other than the R Class are collectively referred to as the "Regular Classes" or "Regular Certificates," and the R Class is referred to as the "Residual Class" or "Residual Certificate."

	Assets	Regular Interests	Residual Interest
REMIC	MBS	All Classes of REMIC	R
		Certificates other than the R Class	

Fannie Mae Guaranty. For a description of our guaranties of the Certificates and the MBS, see the applicable discussions appearing under the heading "Fannie Mae Guaranty" in the REMIC Prospectus and the MBS Prospectus. Our guaranties are not backed by the full faith and credit of the United States.

Characteristics of Certificates. Except as specified below, we will issue the Certificates in book-entry form on the book-entry system of the U.S. Federal Reserve Banks. Entities whose names appear on the book-entry records of a Federal Reserve Bank as having had Certificates deposited in their accounts are "Holders" or "Certificateholders."

We will issue the Residual Certificate in fully registered, certificated form. The "Holder" or "Certificateholder" of the Residual Certificate is its registered owner. The Residual Certificate can be transferred at the corporate trust office of the Transfer Agent, or at the office of the Transfer Agent in New York, New York. U.S. Bank National Association in Boston, Massachusetts will be the initial Transfer Agent. We may impose a service charge for any registration of transfer of the Residual Certificate and may require payment to cover any tax or other governmental charge. See also "-Characteristics of the Residual Class" below.

Authorized Denominations. We will issue the Certificates in the following denominations:

lasses

Denominations

All Classes (except the R Class)

\$1,000 minimum plus whole dollar increments

The MBS

The MBS provide that principal and interest on the related Mortgage Loans are passed through monthly. The Mortgage Loans underlying the MBS are conventional, fixed-rate, fully-amortizing mortgage loans secured by first mortgages or deeds of trust on single-family residential properties. These Mortgage Loans have original maturities of up to 30 years in the case of the Group 1 MBS and Group 3 MBS; and up to 40 years in the case of the Group 2 MBS.

In addition, the pools of Mortgage Loans backing the Group 2 MBS have been designated as pools of "reperforming modified loans" as described further under "The Mortgage Loans-Previously Delinquent Mortgage Loans-Reperforming Loans" and "-Reperforming Modified Loans" in the MBS Prospectus dated May 1, 2018. These loans are conventional, modified mortgage loans that became delinquent after we initially acquired them but were current as of the issue date of each related MBS. For periodic updates to that description, please refer to the Pool Prefix Glossary available on our Web site at www.fanniemae.com. For additional information about the particular pools underlying the Group 2 MBS, see the Final Data Statement for the Trust and the related prospectus supplement for each MBS. See also "Risk Factors-Risks Relating to Yield and Prepayment-Mortgage loans that became delinquent after we initially acquired them, and that in some cases may have been modified, may perform differently than do mortgage loans without a history of delinquency" in the MBS Prospectus dated May 1, 2018.

For additional information, see "Summary- Group 1, Group 2 and Group 3 - Characteristics of the MBS" in this prospectus supplement and "The Mortgage Loan Pools" and "Yield, Maturity and Prepayment Considerations" in the MBS Prospectus.

Distributions of Interest

General. The Certificates will bear interest at the rates specified in this prospectus supplement. Interest to be paid on each Certificate (or added to principal, in the case of the Accrual Classes) on a Distribution Date will consist of one month's interest on the outstanding balance of that Certificate immediately prior to that Distribution Date. For a description of the Accrual Classes, see "-Accrual Classes" below.

Delay Classes and No-Delay Classes. The "Delay" Classes and "No-Delay" Classes are set forth in the following table:

Delay Classes

No-Delay Classes

All interest-bearing Classes

See "Description of the Certificates - Distributions on Certificates - Interest Distributions" in the REMIC Prospectus.

Accrual Classes. The DZ, MZ and BZ Classes are Accrual Classes. Interest will accrue on each Accrual Class at the applicable annual rate specified on the cover of this prospectus supplement. However, we will not pay any interest on the Accrual Classes. Instead, interest accrued on each Accrual Class will be added as principal to its principal balance on each Distribution Date. We will pay principal on the Accrual Classes as described under "-Distributions of Principal" below.

Distributions of Principal

On the Distribution Date in each month, we will make payments of principal on the Classes of REMIC Certificates as described below. Following any exchange of REMIC Certificates for RCR Certificates, we will apply principal payments from the exchanged REMIC Certificates to the corresponding RCR Certificates on a pro rata basis.

• Group 1

The DZ Accrual Amount to DV and VD, in that order, until retired, and thereafter to DZ.

The Group 1 Cash Flow Distribution Amount to DA, DV, VD and DZ, in that order, until retired.

The "DZ Accrual Amount" is any interest then accrued and added to the principal balance of the DZ Class.

The "Group 1 Cash Flow Distribution Amount" is the principal then paid on the Group 1 MBS.

• Group 2

The MZ Accrual Amount to MA until retired, and thereafter to MZ.

The Group 2 Cash Flow Distribution Amount to MA and MZ, in that order, until retired.

The "MZ Accrual Amount" is any interest then accrued and added to the principal balance of the MZ Class.

The "Group 2 Cash Flow Distribution Amount" is the principal then paid on the Group 2 MBS.

• *Group 3*

The BZ Accrual Amount to VB and BV, in that order, until retired, and thereafter to BZ.

The Group 3 Cash Flow Distribution Amount to BA, VB, BV and BZ, in that order, until retired.

The "BZ Accrual Amount" is any interest then accrued and added to the principal balance of the BZ Class.

The "Group 3 Cash Flow Distribution Amount" is the principal then paid on the Group 3 MBS.

Structuring Assumptions

Pricing Assumptions. Except where otherwise noted, the information in the tables in this prospectus supplement has been prepared based on the following assumptions (collectively, the "Pricing Assumptions"):

- the Mortgage Loans underlying the MBS have the original terms to maturity, remaining terms to maturity, loan ages and interest rates specified under "Summary- Group 1, Group 2 and Group 3 Assumed Characteristics of the Underlying Mortgage Loans" in this prospectus supplement;
- the Mortgage Loans prepay at the constant percentages of PSA specified in the related tables;
- the settlement date for the Certificates is November 30, 2018; and
- each Distribution Date occurs on the 25th day of a month.

The actual remaining terms to maturity, loan ages and interest rates of most of the mortgage loans underlying the MBS will differ from the assumed characteristics shown in the Summary, and may differ significantly. See "Risk Factors - Risks Relating to Yield and Prepayment - Yields on and weighted average lives of the certificates are affected by actual characteristics of the mortgage loans backing the series trust assets" in the REMIC Prospectus.

Prepayment Assumptions. The prepayment model used in this prospectus supplement is PSA. For a description of PSA, see "Yield, Maturity and Prepayment Considerations-Prepayment Models" in the REMIC Prospectus. It is highly unlikely that prepayments will occur at any constant PSA rate or at any other constant rate.

Weighted Average Lives of the Certificates

For a description of how the weighted average life of a Certificate is determined, see "Yield, Maturity and Prepayment Considerations-Weighted Average Lives and Final Distribution Dates" in the REMIC Prospectus.

In general, the weighted average lives of the Certificates will be shortened if the level of prepayments of principal of the related Mortgage Loans increases. However, the weighted average lives will depend upon a variety of other factors, including

- the timing of changes in the rate of principal distributions, and
- the priority sequences of distributions of principal of the Classes.

See "-Distributions of Principal" above.

The effect of these factors may differ as to various Classes and the effects on any Class may vary at different times during the life of that Class. Accordingly, we can give no assurance as to the weighted average life of any Class. Further, to the extent the prices of the Certificates represent discounts or premiums to their original principal balances, variability in the weighted average lives of those Classes of Certificates could result in variability in the related yields to maturity. For an example of how the weighted average lives of the Classes may be affected at various constant prepayment rates, see the Decrement Tables below.

Decrement Tables

The following tables indicate the percentages of original principal balances of the specified Classes that would be outstanding after each date shown at various constant PSA rates, and the corresponding weighted average lives of those Classes. The tables have been prepared on the basis of the Pricing Assumptions.

In the case of the information set forth for each Class under 0% PSA, however, we assumed that the Mortgage Loans have the original and remaining terms to maturity and bear interest at the annual rates specified in the table below.

Mortgage Loans Backing Trust Assets Specified Below	Original Terms to <u>Maturity</u>	Remaining Terms to <u>Maturity</u>	Interest Rates
Group 1 MBS	360 months	360 months	6.50%
Group 2 MBS	480 months	480 months	6.00%
Group 3 MBS	360 months	360 months	6.50%

It is unlikely that all of the Mortgage Loans will have the loan ages, interest rates or remaining terms to maturity assumed, or that the Mortgage Loans will prepay at any *constant* PSA level.

In addition, the diverse remaining terms to maturity of the Mortgage Loans could produce slower or faster principal distributions than indicated in the tables at the specified constant PSA rates, even if the weighted average remaining term to maturity and the weighted average loan age of the Mortgage Loans are identical to the weighted averages specified in the Pricing Assumptions. This is the case because pools of loans with identical weighted averages are nonetheless likely to reflect differing dispersions of the related characteristics.

Percent of Original Principal Balances Outstanding

				DA (Class							DV	Class			
				PSA Prej Assum	payment							PSA Pre	payment nption			
Date	0%	100%	143%	200%	300%	400%	500%	600%	0%	100%	143%	200%	300%	400%	500%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2019	98	94	93	91	88	84	81	78	93	93	93	93	93	93	93	93
November 2020	96 94	85 74	81 66	75 57	66 42	57 27	48 15	39 3	85 77	85 77	85 77	85 77	85 77	85 77	85 77	85 77
November 2022	92	63	53	41	22	5	0	0	69	69	69	69	69	69	11	0
November 2023	90	54	42	27	6	0	ő	0	60	60	60	60	60	0	0	0
November 2024	87	45	31	15	0	0	0	0	52	52	52	52	5	0	0	0
November 2025	85	36	21	5	0	0	0	0	42	42	42	42	0	0	0	0
November 2026	82	28	13	0	0	0	0	0	33	33	33	4	0	0	0	0
November 2027	79 76	21 14	5 0	0 0	0 0	0	0 0	0 0	23 12	23 12	23 0	0 0	0	0 0	0	0
November 2029	72	7	0	0	0	0	0	0	12	1	0	0	0	0	0	0
November 2030	69	1	0	0	ő	0	ő	0	0	0	0	0	0	0	0	0
November 2031	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2032	61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2033	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2034	52 47	0	0	0	0 0	0	0 0	0	0	0 0	0	0	0	0 0	0 0	0
November 2035	41	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0
November 2037	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2038	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2039	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2040	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2041	9	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0
November 2042	1 0	0	0	0 0	0 0	0	0 0	0 0	0	0 0	0	0	0	0 0	0 0	0
November 2044	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2045	0	0	Õ	0	0	0	0	0	0	0	Õ	0	0	0	0	0
November 2046	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2047	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2048	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Life (years)**	15.1	5.7	4.6	3.6	2.7	2.3	1.9	1.7	6.0	6.0	5.9	5.4	4.5	3.8	3.3	2.9
				VD (Class							DZ (Class			
				PSA Pre	payment							PSA Pre	payment			
Date	0%			PSA Prej Assun	payment	400%	500%	600%	0%	100%			payment		500%	600%
	0%	100%	143%	PSA Prej Assum	payment nption 300%	400%	<u>500%</u>		0%	100%	143%	PSA Pre Assun	payment nption 300%	400%	500%	
Initial Percent	100	100% 100	143% 100	PSA Prej Assum 200% 100	payment nption 300% 100	400% 100	100	100	100	100	143% 100	PSA Pre Assum 200% 100	payment nption 300% 100	400% 100	100	100
Initial Percent November 2019	100 100	100% 100 100	143% 100 100	PSA Prej Assum 200% 100 100	200% 100 100	400% 100 100	100 100	100 100	100 104	100 104	143% 100 104	PSA Pre Assun 200% 100 104	payment nption 300% 100 104	400% 100 104	100 104	100 104
Initial Percent	100	100% 100	143% 100	PSA Prej Assum 200% 100	payment nption 300% 100	400% 100	100	100	100	100	143% 100	PSA Pre Assum 200% 100	payment nption 300% 100	400% 100	100	100
November 2019 November 2020 November 2021 November 2022	100 100 100 100 100	100% 100 100 100 100 100	143% 100 100 100 100 100	PSA Prej Assuri 200% 100 100 100 100 100	300% 100 100 100 100 100 100	400% 100 100 100 100 100	100 100 100 100 100	100 100 100 100 100 44	100 104 108 113 117	100 104 108 113 117	143% 100 104 108 113 117	PSA Pre Assur 200% 100 104 108 113 117	300% 100 104 108 113 117	400% 100 104 108 113 117	100 104 108 113 117	100 104 108 113 117
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2023	100 100 100 100 100 100	100% 100 100 100 100 100 100	143% 100 100 100 100 100 100	PSA Prej Assum 200% 100 100 100 100 100 100	300% 100 100 100 100 100 100 100	400% 100 100 100 100 100 88	100 100 100 100 100 100	100 100 100 100 44 0	100 104 108 113 117 122	100 104 108 113 117 122	143% 100 104 108 113 117 122	PSA Pre Assum 200% 100 104 108 113 117 122	300% 100 104 108 113 117 122	400% 100 104 108 113 117 122	100 104 108 113 117 122	100 104 108 113 117 93
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2023 November 2023 November 2024	100 100 100 100 100 100 100	100% 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100	PSA Prej Assum 200% 100 100 100 100 100 100	300% 100 100 100 100 100 100 100	100 100 100 100 100 100 100 88 13	100 100 100 100 100 14 0	100 100 100 100 100 44 0	100 104 108 113 117 122 127	100 104 108 113 117 122 127	143% 100 104 108 113 117 122 127	200% 100 104 108 113 117 122 127	300% 100 104 108 113 117 122 127	100 104 108 113 117 122 127	100 104 108 113 117 122 90	100 104 108 113 117 93 58
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2023 November 2024 November 2024 November 2025	100 100 100 100 100 100 100 100	100% 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100 100	200% 100 100 100 100 100 100 100 100 100	300% 100 100 100 100 100 100 100	100 100 100 100 100 100 100 88 13 0	100 100 100 100 100 100 14 0	100 100 100 100 100 44 0 0	100 104 108 113 117 122 127 132	100 104 108 113 117 122 127 132	143% 100 104 108 113 117 122 127 132	200% 100 104 108 113 117 122 127 132	300% 100 104 108 113 117 122 127 132	100 104 108 113 117 122 127 101	100 104 108 113 117 122 90 62	100 104 108 113 117 93 58 36
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2023 November 2023 November 2024	100 100 100 100 100 100 100	100% 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100	PSA Prej Assum 200% 100 100 100 100 100 100	300% 100 100 100 100 100 100 100	100 100 100 100 100 100 100 88 13	100 100 100 100 100 14 0	100 100 100 100 100 44 0	100 104 108 113 117 122 127	100 104 108 113 117 122 127	143% 100 104 108 113 117 122 127	200% 100 104 108 113 117 122 127	300% 100 104 108 113 117 122 127	100 104 108 113 117 122 127	100 104 108 113 117 122 90	100 104 108 113 117 93 58
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2023 November 2024 November 2024 November 2025 November 2025	100 100 100 100 100 100 100 100	100% 100 100 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100 10	PSA Prej Assum 200% 100 100 100 100 100 100 100 100	300% 100 100 100 100 100 100 100	400% 100 100 100 100 100 88 13 0	100 100 100 100 100 100 14 0	100 100 100 100 100 44 0 0	100 104 108 113 117 122 127 132 138	100 104 108 113 117 122 127 132 138	143% 100 104 108 113 117 122 127 132 138	PSA Pre Assun 200% 100 104 108 113 117 122 127 132 138	300% 100 104 108 113 117 122 127 132 127	400% 100 104 108 113 117 122 127 101 75	100 104 108 113 117 122 90 62 42	100 104 108 113 117 93 58 36 23
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2023 November 2023 November 2025 November 2026 November 2027 November 2027 November 2028 November 2029	100 100 100 100 100 100 100 100 100 100	100% 100 100 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100 100 100 10	PSA Prej Assum 200% 100 100 100 100 100 100 100 100 52 5 0	300% 100 100 100 100 100 100 100 0 0 0 0	400% 100 100 100 100 100 100 88 13 0 0 0	100 100 100 100 100 100 14 0 0 0 0	100 100 100 100 100 44 0 0 0 0 0	100 104 108 113 117 122 127 132 138 143 149 155	100 104 108 113 117 122 127 132 138 143 149 155	143% 100 104 108 113 117 122 127 132 138 143 149 155	200% 100 104 108 113 117 122 127 132 138 143 149 130	300% 100 104 108 113 117 122 127 132 127 101 81 64	400% 100 104 108 113 117 122 127 101 75 55 41 30	100 104 108 113 117 122 90 62 42 29 19	100 104 108 113 117 93 58 36 23 14 9
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2023 November 2024 November 2025 November 2026 November 2027 November 2028 November 2028 November 2029 November 2030	100 100 100 100 100 100 100 100 100 100	100% 100 100 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100 10	PSA Prej Assum 200% 100 100 100 100 100 100 100 100 52 5 0 0	300% 100 100 100 100 100 100 100	400% 100 100 100 100 100 100 88 13 0 0 0 0	100 100 100 100 100 100 14 0 0 0 0 0	100 100 100 100 100 44 0 0 0 0 0 0 0	100 104 108 113 117 122 127 132 138 143 149 155 161	100 104 108 113 117 122 127 132 138 143 149 155 161	143% 100 104 108 113 117 122 127 132 138 143 149 155 161	PSA Pre Assum 200% 100 104 108 113 117 122 127 132 138 143 149 130 110	Dayment Daym	400% 100 104 108 113 117 122 127 101 75 55 41 30 22	100 104 108 113 117 122 90 62 42 29 19 13 9	100 104 108 113 117 93 58 36 23 14 9 5
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2022 November 2024 November 2025 November 2026 November 2026 November 2027 November 2028 November 2029 November 2030 November 2030 November 2031	100 100 100 100 100 100 100 100 100 100	100% 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100 10	PSA Prej Assum 200% 100 100 100 100 100 100 100 100 100	300% 100 100 100 100 100 100 100 100 0 0 0	400% 100 100 100 100 100 88 13 0 0 0 0 0	100 100 100 100 100 100 14 0 0 0 0 0	100 100 100 100 100 44 0 0 0 0 0 0 0	100 104 108 113 117 122 127 132 138 143 149 155 161 168	100 104 108 113 117 122 127 132 138 143 149 155 161 168	143% 100 104 108 113 117 122 127 132 138 143 149 155 161 148	PSA Pre Assun 200% 100 104 108 113 117 122 127 132 138 143 149 130 110 93	300% 100 104 108 117 122 127 132 127 101 81 64 51 40	400% 100 104 108 113 117 122 127 101 75 55 41 30 22 16	100 104 108 113 117 122 90 62 42 29 19 13 9 6	100 104 108 113 117 93 58 36 23 14 9 5
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2023 November 2024 November 2025 November 2026 November 2026 November 2027 November 2028 November 2029 November 2030 November 2031 November 2031	100 100 100 100 100 100 100 100 100 100	100% 100 100 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100 100 100 10	PSA Prej Assum 200% 100 100 100 100 100 100 100 100 52 5 0 0 0	300% 100 100 100 100 100 100 100 0 0 0 0	400% 100 100 100 100 100 88 13 0 0 0 0 0 0	100 100 100 100 100 100 14 0 0 0 0 0 0	100 100 100 100 100 44 0 0 0 0 0 0 0 0 0	100 104 108 113 117 122 127 132 138 143 149 155 161 168 175	100 104 108 113 117 122 127 132 138 143 149 155 161 168 175	143% 100 104 108 113 117 122 127 132 138 143 149 155 161 148 130	PSA Pre Assur 200% 100 104 108 113 117 122 127 132 138 143 149 130 110 93 79	300% 100 104 108 113 117 122 127 132 127 101 81 64 51 40 31	400% 100 104 108 113 117 122 127 101 75 55 41 30 22 16 12	100 104 108 113 117 122 90 62 42 29 19 13 9 6	100 104 108 113 117 93 58 36 23 14 9 5 3
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2022 November 2024 November 2025 November 2026 November 2026 November 2027 November 2028 November 2029 November 2030 November 2030 November 2031	100 100 100 100 100 100 100 100 100 100	100% 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100 10	PSA Prej Assum 200% 100 100 100 100 100 100 100 100 100	300% 100 100 100 100 100 100 100 100 0 0 0	400% 100 100 100 100 100 88 13 0 0 0 0 0	100 100 100 100 100 100 14 0 0 0 0 0	100 100 100 100 100 44 0 0 0 0 0 0 0	100 104 108 113 117 122 127 132 138 143 149 155 161 168	100 104 108 113 117 122 127 132 138 143 149 155 161 168	143% 100 104 108 113 117 122 127 132 138 143 149 155 161 148	PSA Pre Assun 200% 100 104 108 113 117 122 127 132 138 143 149 130 110 93	300% 100 104 108 117 122 127 132 127 101 81 64 51 40	400% 100 104 108 113 117 122 127 101 75 55 41 30 22 16	100 104 108 113 117 122 90 62 42 29 19 13 9 6	100 104 108 113 117 93 58 36 23 14 9 5
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2022 November 2023 November 2024 November 2025 November 2026 November 2026 November 2027 November 2028 November 2029 November 2030 November 2031 November 2031 November 2032 November 2033 November 2033 November 2034 November 2034 November 2034 November 2035	100 100 100 100 100 100 100 100 100 100	100% 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100 10	PSA Prej Assum 200% 100 100 100 100 100 100 100 100 100	300% 100 100 100 100 100 100 100 0 0 0 0	400% 100 100 100 100 100 88 13 0 0 0 0 0 0 0 0 0 0	100 100 100 100 100 100 14 0 0 0 0 0 0 0	100 100 100 100 100 44 0 0 0 0 0 0 0 0 0	100 104 108 113 117 122 127 138 143 149 155 161 168 175 182 189 197	100 104 108 113 117 122 127 132 138 143 149 155 161 168	143% 100 104 108 113 117 122 127 132 138 143 149 155 161 148 130 113 98 85	PSA Pre Assum 200% 100 104 108 113 117 122 127 132 138 143 149 130 110 93 79 66 555 46	300% 100 104 108 113 117 122 127 101 81 64 51 40 31 25	400% 100 104 108 113 117 122 127 101 75 55 41 30 222 16 12 8 6 4	100 104 108 113 117 122 90 62 42 29 19 13 9 6 4 3	100 104 108 113 117 93 58 36 23 14 9 5 3 2
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2023 November 2024 November 2025 November 2026 November 2026 November 2027 November 2028 November 2029 November 2029 November 2031 November 2031 November 2031 November 2032 November 2033 November 2034 November 2035 November 2035 November 2035 November 2035	100 100 100 100 100 100 100 100 100 100	100% 100 100 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100 100 100 10	PSA Prej Assum 200% 100 100 100 100 100 100 100 100 100	100 100 100 100 100 100 100 100 0 0 0 0	400% 100 100 100 100 100 88 13 0 0 0 0 0 0 0 0 0 0 0	100 100 100 100 100 100 14 0 0 0 0 0 0 0	100 100 100 100 100 44 0 0 0 0 0 0 0 0 0	100 104 108 113 117 122 127 132 138 143 149 155 161 168 175 182 189 197 205	100 104 108 113 117 122 127 132 138 149 155 161 168 175 168 150 133	143% 100 104 108 113 117 122 127 132 138 143 149 155 161 148 130 113 98 85 73	PSA Pre Assur 200% 100 104 108 113 117 122 127 132 138 143 149 130 110 93 79 66 55 46 38	100 104 108 113 117 122 127 132 127 101 81 64 51 40 31 25 19	400% 100 104 108 113 117 122 127 101 75 55 41 30 22 16 12 8 6 4 3	100 104 108 113 117 122 90 62 42 29 19 13 9 6 4 3 2	100 104 108 113 117 93 58 36 23 14 9 5 3 2
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2023 November 2023 November 2024 November 2025 November 2026 November 2027 November 2027 November 2028 November 2029 November 2030 November 2030 November 2031 November 2031 November 2032 November 2033 November 2033 November 2034 November 2034 November 2035 November 2036 November 2036 November 2036	100 100 100 100 100 100 100 100 100 100	100% 100 100 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100 100 100 10	PSA Prej Assum 200% 100 100 100 100 100 100 100 100 100	300% 100 100 100 100 100 100 100 0 0 0 0	400% 100 100 100 100 100 100 0 0 0 0 0 0	100 100 100 100 100 100 14 0 0 0 0 0 0 0	100 100 100 100 100 44 0 0 0 0 0 0 0 0 0	100 104 108 113 117 122 127 132 138 143 149 155 161 168 175 182 189 197 205 214	100 104 108 113 117 122 127 132 138 143 149 155 161 168 150 133 118	143% 100 104 108 113 117 122 127 132 138 143 149 155 161 148 130 113 98 85 73 62	PSA Pre Assum 200% 100 104 108 113 117 122 127 132 138 143 149 130 110 93 79 66 55 46 38 31	300% 100 104 108 113 117 122 127 132 127 101 81 64 51 40 31 125 19 15	400% 100 104 108 113 117 122 127 101 75 55 41 30 22 16 12 8 6 4 4 3 2	100 104 108 113 117 122 90 62 42 29 19 13 9 6 4 3 2	100 104 108 113 117 93 58 36 23 14 9 5 3 2
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2022 November 2023 November 2024 November 2025 November 2026 November 2027 November 2027 November 2028 November 2029 November 2030 November 2031 November 2031 November 2031 November 2033 November 2033 November 2034 November 2035 November 2035 November 2036 November 2036 November 2037 November 2037	100 100 100 100 100 100 100 100 100 100	100% 100 100 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100 100 100 10	PSA Prej Assum 200% 100 100 100 100 100 100 100 100 100	300% 100 100 100 100 100 100 100 0 0 0 0	400% 100 100 100 100 100 100 0 0 0 0 0 0	100 100 100 100 100 100 114 0 0 0 0 0 0	100 100 100 100 100 44 0 0 0 0 0 0 0 0 0	100 104 108 113 117 122 127 132 138 143 149 155 161 168 175 182 189 197 205 214 222	100 104 108 113 117 122 127 132 138 143 149 155 161 168 175 168 150 133 118 103 90	143% 100 104 108 113 117 122 127 138 143 149 155 161 148 130 113 98 85 73 62 53	PSA Pre Assur 200% 100 104 108 113 117 122 127 132 138 143 149 130 110 93 79 66 55 46 38 31 25	300% 100 104 108 113 117 122 127 132 127 101 81 64 51 40 31 125 19 15 11 9 7	400% 100 104 108 113 117 122 127 101 75 55 41 30 22 16 12 8 6 4 3 2 2	100 104 108 113 117 122 90 62 42 29 19 13 9 6 4 3 2	100 104 108 113 117 93 58 36 23 14 9 5 3 2
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2022 November 2023 November 2024 November 2025 November 2026 November 2026 November 2027 November 2028 November 2029 November 2030 November 2031 November 2031 November 2031 November 2032 November 2033 November 2034 November 2035 November 2036 November 2036 November 2037 November 2037 November 2038 November 2038 November 2039	100 100 100 100 100 100 100 100 100 100	100% 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100 100 100 10	PSA Prej Assum 200% 100 100 100 100 100 100 100 100 100	300% 100 100 100 100 100 100 100 0 0 0 0	400% 100 100 100 100 100 88 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	100 100 100 100 100 100 114 0 0 0 0 0 0	100 100 100 100 100 44 0 0 0 0 0 0 0 0 0	100 104 108 113 117 122 127 138 143 149 155 161 168 175 182 189 197 205 214 222 225	100 104 108 113 117 122 127 132 138 143 149 155 161 168 175 168 150 133 118 103 90 77	143% 100 104 108 113 117 122 127 132 138 143 149 155 161 148 130 113 98 85 73 62 53 44	PSA Pre Assum 200% 100 104 108 113 117 122 127 132 138 143 149 130 110 93 79 66 55 46 38 31 125 21	300% 100 104 108 113 117 122 127 132 127 101 81 64 51 40 31 25 19 15 11 9 7 5	400% 100 104 108 113 117 122 127 101 75 55 41 30 22 16 12 8 6 4 3 2 2 1	100 104 108 113 117 122 90 62 42 29 19 13 9 6 4 3 2	100 104 108 113 117 93 58 36 23 14 9 5 3 2
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2022 November 2023 November 2024 November 2025 November 2026 November 2027 November 2027 November 2028 November 2029 November 2030 November 2031 November 2031 November 2031 November 2033 November 2033 November 2034 November 2035 November 2035 November 2036 November 2036 November 2037 November 2037	100 100 100 100 100 100 100 100 100 100	100% 100 100 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100 100 100 10	PSA Prej Assum 200% 100 100 100 100 100 100 100 100 100	300% 100 100 100 100 100 100 100 0 0 0 0	400% 100 100 100 100 100 100 0 0 0 0 0 0	100 100 100 100 100 100 114 0 0 0 0 0 0	100 100 100 100 100 44 0 0 0 0 0 0 0 0 0	100 104 108 113 117 122 127 132 138 143 149 155 161 168 175 182 189 197 205 214 222	100 104 108 113 117 122 127 132 138 143 149 155 161 168 175 168 150 133 118 103 90	143% 100 104 108 113 117 122 127 138 143 149 155 161 148 130 113 98 85 73 62 53	PSA Pre Assur 200% 100 104 108 113 117 122 127 132 138 143 149 130 110 93 79 66 55 46 38 31 25	300% 100 104 108 113 117 122 127 132 127 101 81 64 51 40 31 125 19 15 11 9 7	400% 100 104 108 113 117 122 127 101 75 55 41 30 22 16 12 8 6 4 3 2 2	100 104 108 113 117 122 90 62 42 29 19 13 9 6 4 3 2 1 1 1 1 ***	100 104 108 113 117 93 58 36 23 14 9 5 3 2
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2022 November 2023 November 2024 November 2025 November 2026 November 2027 November 2028 November 2029 November 2029 November 2030 November 2031 November 2031 November 2031 November 2033 November 2033 November 2034 November 2035 November 2035 November 2036 November 2037 November 2037 November 2038 November 2039 November 2039 November 2040 November 2041 November 2041	100 100 100 100 100 100 100 100 100 100	100% 100 100 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100 100 100 10	PSA Prej Assum 200% 100 100 100 100 100 100 100 100 52 5 0 0 0 0 0 0 0 0 0 0 0	300% 100 100 100 100 100 100 100 0 0 0 0	400% 100 100 100 100 100 88 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	100 100 100 100 100 100 114 0 0 0 0 0 0	100 100 100 100 100 44 0 0 0 0 0 0 0 0 0	100 104 108 113 117 122 127 132 138 149 155 161 168 175 182 189 197 205 214 222 225 225	100 104 108 113 117 122 127 132 138 143 149 155 161 168 175 168 150 133 118 103 90 77 65	143% 100 104 108 113 117 122 127 132 138 149 155 161 148 130 113 98 85 73 62 53 44 36	PSA Pre Assur 200% 100 104 108 113 117 122 127 132 138 143 149 130 110 93 79 66 55 46 38 31 25 21 16 13 10	100 104 108 113 117 122 127 132 127 101 81 64 51 140 31 25 19 15 11 9 7 5 4	400% 100 104 108 113 117 122 127 101 75 55 41 30 22 16 12 8 6 4 3 2 2 1 1 1 *	100 104 108 113 117 122 90 62 42 29 19 13 3 9 6 4 4 3 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	100 104 108 113 117 93 58 36 23 14 9 5 3 2
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2022 November 2023 November 2024 November 2025 November 2026 November 2026 November 2027 November 2028 November 2029 November 2030 November 2031 November 2031 November 2032 November 2032 November 2033 November 2034 November 2035 November 2036 November 2036 November 2037 November 2038 November 2038 November 2039 November 2039 November 2040 November 2041 November 2041 November 2042 November 2043	100 100 100 100 100 100 100 100 100 100	100% 100 100 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100 100 100 10	PSA Prej Assum 200% 100 100 100 100 100 100 100 100 100	Description 100 10	400% 100 100 100 100 100 88 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	100 100 100 100 100 100 114 0 0 0 0 0 0	100 100 100 100 100 44 0 0 0 0 0 0 0 0 0	100 104 108 113 117 122 127 132 138 143 149 155 161 168 175 189 197 205 214 222 225 225 225 225 197	100 104 108 113 117 122 127 132 138 143 149 155 161 168 175 168 150 133 118 103 90 77 65 54 44 35	143% 100 104 108 113 117 122 127 132 138 143 149 155 161 148 130 113 98 85 73 62 53 44 36 29 23 18	PSA Pre Assum 200% 100 104 108 113 117 122 127 132 138 143 149 130 110 93 79 66 555 46 38 31 25 21 16 13 10 7	100 104 108 113 117 122 127 132 127 101 81 64 51 15 11 9 7 5 4 3 2 1 1 1 1 1 1 1 1 1	100 104 108 113 117 122 127 101 75 55 41 30 22 16 12 8 6 4 3 2 2 1 1 1 1 1 1 1 8	100 104 108 113 117 122 90 62 42 29 19 13 9 6 4 3 2 1 1 1 *****************************	100 104 108 113 117 93 58 36 23 14 9 5 3 2
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2023 November 2024 November 2025 November 2026 November 2026 November 2027 November 2028 November 2029 November 2030 November 2031 November 2031 November 2032 November 2033 November 2033 November 2034 November 2035 November 2035 November 2036 November 2037 November 2037 November 2038 November 2039 November 2039 November 2040 November 2041 November 2041 November 2042 November 2043 November 2043 November 2044	100 100 100 100 100 100 100 100 100 100	100% 100 100 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100 100 100 10	PSA Prej Assum 200% 100 100 100 100 100 100 100 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Description 100 10	400% 100 100 100 100 100 100 0 0 0 0 0 0	100 100 100 100 100 100 114 0 0 0 0 0 0	100 100 100 100 100 44 0 0 0 0 0 0 0 0 0	100 104 108 113 117 122 127 132 138 149 155 161 168 175 182 189 197 205 214 222 225 225 225 225	100 104 108 113 117 122 127 132 138 149 155 161 168 175 168 150 133 118 103 90 77 65 54 44 43 35 26	143% 100 104 108 113 117 122 127 132 138 149 155 161 148 130 113 98 85 73 62 53 44 36 29 23 18	PSA Pre Assur 200% 100 104 108 113 117 122 127 138 143 149 130 110 93 79 66 55 46 38 31 25 21 16 13 10 7 5	Dayment Daym	400% 100 104 108 113 117 122 127 101 75 55 41 30 22 16 4 3 2 2 1 1 1 * * *	100 104 108 113 117 122 90 62 42 29 19 13 9 6 4 3 2 1 1 1 *****************************	100 104 108 113 117 93 58 36 23 14 9 5 3 2
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2022 November 2023 November 2024 November 2025 November 2026 November 2027 November 2027 November 2028 November 2029 November 2030 November 2031 November 2031 November 2031 November 2033 November 2033 November 2034 November 2035 November 2035 November 2036 November 2037 November 2038 November 2038 November 2039 November 2039 November 2040 November 2041 November 2041 November 2041 November 2042 November 2043 November 2044 November 2045	100 100 100 100 100 100 100 100 100 100	100% 100 100 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100 100 100 10	PSA Prej Assum 200% 100 100 100 100 100 100 100 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	300% 100 100 100 100 100 100 100 100 0 0 0	400% 100 100 100 100 100 100 0 0 0 0 0 0	100 100 100 100 100 100 114 0 0 0 0 0 0	100 100 100 100 100 44 0 0 0 0 0 0 0 0 0	100 104 108 113 117 122 127 138 143 149 155 161 168 175 214 222 225 225 225 225 197 162 125	100 104 108 113 117 122 127 138 143 149 155 161 168 175 168 175 168 170 133 118 103 90 77 65 54 44 44 35 26 18	143% 100 104 108 113 117 122 127 138 143 149 155 161 148 130 113 98 85 73 36 62 53 44 36 29 23 18 18 19 19 19 19 19 19 19 19 19 19	PSA Pre Assur 200% 100 104 108 117 122 127 132 138 143 149 130 110 93 79 66 55 46 38 31 25 21 16 13 10 7 5 3	100 104 108 113 117 122 127 132 127 101 81 64 51 15 11 9 7 5 4 3 2 1 1 1 1 1 1 1 1 1	100 104 108 113 117 122 127 101 75 55 41 30 22 16 12 8 6 4 3 2 2 1 1 1 1 1 1 1 8	100 104 108 113 117 122 90 62 42 29 19 13 9 6 4 3 2 1 1 1 *****************************	100 104 108 113 117 93 58 36 23 14 9 5 3 2
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2023 November 2024 November 2025 November 2026 November 2026 November 2027 November 2028 November 2029 November 2030 November 2031 November 2031 November 2032 November 2033 November 2033 November 2034 November 2035 November 2035 November 2036 November 2037 November 2037 November 2038 November 2039 November 2039 November 2040 November 2041 November 2041 November 2042 November 2043 November 2043 November 2044	100 100 100 100 100 100 100 100 100 100	100% 100 100 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100 100 100 10	PSA Prej Assum 200% 100 100 100 100 100 100 100 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Description 100 10	400% 100 100 100 100 100 100 0 0 0 0 0 0	100 100 100 100 100 100 114 0 0 0 0 0 0	100 100 100 100 100 44 0 0 0 0 0 0 0 0 0	100 104 108 113 117 122 127 132 138 149 155 161 168 175 182 189 197 205 214 222 225 225 225 225	100 104 108 113 117 122 127 132 138 149 155 161 168 175 168 150 133 118 103 90 77 65 54 44 43 35 26	143% 100 104 108 113 117 122 127 132 138 143 149 155 161 148 130 113 98 85 73 62 53 44 36 29 23 18	PSA Pre Assur 200% 100 104 108 113 117 122 127 138 143 149 130 110 93 79 66 55 46 38 31 25 21 16 13 10 7 5	300% 100 104 108 113 117 122 127 132 127 101 81 64 51 40 31 125 19 15 11 9 7 5 4 3 2 1 1	400% 100 104 108 113 117 122 127 101 75 55 41 30 22 16 12 8 6 4 3 2 2 1 1 * * * *	100 104 108 113 117 122 90 62 42 29 19 3 9 6 4 4 3 2 1 1 1 1 ***************************	100 104 108 113 117 93 58 36 23 14 9 5 3 2

9.1

6.9

November 2048

Weighted Average
Life (years)**

16.0

13.2

11.1

4.6

4.0

5.5

0

20.7

18.3

15.6

11.9

9.5

7.8

27.3

0

6.6

^{*} Indicates an outstanding balance greater than 0% and less than 0.5% of the original principal balance.

** Determined as specified under "Yield, Maturity and Prepayment Considerations - Weighted Average Lives and Final Distribution Dates" in the REMIC Prospectus.

	MA Class								MZ Class							
	PSA Prepayment Assumption											PSA Prej Assun				
Date	0%	100%	131%	200%	300%	400%	500%	600%	0%	100%	131%	200%	300%	400%	500%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2019	98	90	88	83	75	68	61	53	104	104	104	104	104	104	104	104
November 2020	97	81	76	67	55	44	33	23	107	107	107	107	107	107	107	107
November 2021	95	72	66	54	38	25	13	4	111	111	111	111	111	111	111	111
November 2022	93	63	56	42	25	11	0	0	115	115	115	115	115	115	114	80
November 2023	91	55	47	32	13	0	0	0	119	119	119	119	119	118	79	50
November 2024	89	48	39	22	4	0	0	0	123	123	123	123	123	88	54	32
November 2025	87	41	31	14	0	0	0	0	128	128	128	128	112	66	37	20
November 2026	84	34	24	7	0	0	0	0	132	132	132	132	90	49	25	12
November 2027	82	27	17	0	0	0	0	0	137	137	137	137	72	37	17	8
November 2028	79	21	11	0	0	0	0	0	142	142	142	118	58	27	12	5
November 2029	77	15	5	0	0	0	0	0	147	147	147	101	46	20	8	3
November 2030	74	10	0	0	0	0	0	0	152	152	151	87	37	15	6	2
November 2031	71	4	0	0	0	0	0	ő	158	158	135	74	30	11	4	1
November 2032	68	0	0	0	0	0	0	ő	163	160	121	63	24	8	3	1
November 2033	65	0	0	0	0	0	0	0	169	145	108	54	19	6	2	*
November 2034	61	0	0	0	0	0	0	0	175	132	96	46	15	4	ī	*
November 2035	58	0	0	0	0	0	0	0	181	120	85	39	12	3	i	*
November 2036	54	0	0	0	0	0	0	0	188	108	75	33	9	2	i	*
November 2037	50	0	0	0	0	0	0	0	194	97	67	28	7	2	*	*
November 2038	46	0	0	0	0	0	0	0	201	87	59	23	6	1	*	*
November 2039	42	0	0	0	0	0	0	0	208	78	51	20	4	1	*	*
November 2040	37	0	0	0	0	0	0	0	216	69	45	16	3	i	*	*
November 2041	32	0	0	0	0	0	0	0	223	61	39	13	3	*	*	*
November 2042	27	0	0	0	0	0	0	ő	231	54	33	11	2	*	*	*
November 2043	22	0	0	0	0	0	0	0	240	47	28	9	2	*	*	*
November 2044	16	0	0	0	0	0	0	0	248	40	24	7	1	*	*	*
November 2045	11	0	0	0	0	0	0	0	257	34	20	6	1	*	*	*
November 2046	4	0	0	0	0	0	0	ő	266	29	16	4	1	*	*	*
November 2047	0	0	0	0	0	0	0	ő	267	23	13	3	*	*	*	*
November 2048	0	0	0	0	0	0	0	0	250	19	10	3	*	*	*	*
November 2049	0	0	0	0	0	0	0	0	231	14	8	2	*	*	*	*
November 2050	0	0	0	0	0	0	0	ő	211	10	5	1	*	*	*	*
November 2051	0	0	0	0	ő	0	0	ő	190	6	3	1	*	*	*	*
November 2052	0	0	0	0	0	0	0	ő	167	3	1	*	*	*	*	*
November 2053	0	0	0	0	0	0	0	0	143	0	0	0	0	0	0	0
November 2054	0	0	0	0	0	0	0	0	118	0	0	0	0	0	0	0
November 2055	0	0	0	0	0	0	0	0	91	0	0	0	0	0	0	0
November 2056	0	0	0	0	0	0	0	0	63	0	0	0	0	0	0	0
November 2057	0	0	0	0	0	0	0	0	32	0	0	0	0	0	0	0
November 2058	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average	U	U	U	U	U	U	U	U	V	v	U	U	U	U	U	U
Life (years)**	17.6	6.1	5.1	3.7	2.6	2.0	1.6	1.3	35.0	21.8	19.4	15.1	11.0	8.4	6.7	5.4

^{*} Indicates an outstanding balance greater than 0% and less than 0.5% of the original principal balance.

** Determined as specified under "Yield, Maturity and Prepayment Considerations - Weighted Average Lives and Final Distribution Dates" in the REMIC Prospectus.

				Assun								Assum				
Date	0%	100%	143%	200%	300%	400%	500%	600%	0%	100%	143%	200%	300%	400%	500%	600%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2019	98	92	90	87	82	77	72	66	93	93	93	93	93	93	93	93
November 2020	97	82	76	69	58	46	36	26	85	85	85	85	85	85	85	85
November 2021	95	71	63	53	37	22	9	0	77	77	77	77	77	77	77	61
November 2022	93	62	51	39	20	4	0	0	69	69	69	69	69	69	1	0
November 2023	90	53	41	27	6	0	0	0	60	60	60	60	60	0	0	0
November 2024	88	44	31	16	0	0	0	0	51	51	51	51	15	0	0	0
November 2025	86	36	22	7	0	0	0	0	42	42	42	42	0	0	0	0
November 2026	83	29	14	0	0	0	0	0	33	33	33	21	0	0	0	0
November 2027	80 77	22 16	7 1	0	0	0 0	0 0	0	23 12	23 12	23 12	0 0	0	0	0	0
November 2029	74	10	0	0	0	0	0	0	1	1	0	0	0	0	0	0
November 2030	71	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2031	67	0	0	0	0	0	0	0	Õ	0	0	0	0	Õ	0	0
November 2032	63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2033	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2034	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2035	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2036	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2037	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2038	34 28	0 0	0	0	0	0 0	0 0	0	0	0	0 0	0 0	0	0	0	0
November 2040	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2041	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2042	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2043	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2044	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2045	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November 2046	0	0 0	0	0	0	0 0	0 0	0	0	0	0 0	0 0	0	0	0 0	0
November 2048	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average	Ů	Ü	Ü	Ü	· ·	Ü	Ü	O	v	Ü	Ü	Ü	Ü	Ü	Ü	· ·
Life (years)**	15.7	5.7	4.5	3.5	2.5	2.0	1.7	1.4	6.0	6.0	5.9	5.5	4.6	3.8	3.2	2.8
				BV (Tocc							BZ C	Tocc			
				DV	111155							DL (/1a55			
				PSA Pre	payment							PSA Prej	payment			
				PSA Prej Assun	payment ption							PSA Prej Assum	payment ption			
<u>Date</u>	0%	100%	143%	PSA Pre	payment	400%	500%	600%	0%	100%	143%	PSA Prej	payment	400%	500%	600%
Initial Percent	100	100	143% 100	PSA Prej Assum 200% 100	200% 100	100	100	100	100	100	143% 100	PSA Prep Assum 200% 100	payment aption 300%	100	100	100
Initial Percent	100 100	100 100	143% 100 100	PSA Prej Assum 200% 100 100	300% 100 100	100 100	100 100	100 100	100 104	100 104	143% 100 104	PSA Prep Assum 200% 100 104	200% 100 104	100 104	100 104	100 104
Initial Percent November 2019 November 2020	100 100 100	100 100 100	100 100 100 100	PSA Prej Assum 200% 100 100 100	300% 100 100 100	100 100 100	100 100 100	100 100 100	100 104 108	100 104 108	100 104 108	PSA Prej Assum 200% 100 104 108	300% 100 104 108	100 104 108	100 104 108	100 104 108
Initial Percent	100 100 100 100	100 100 100 100	100 100 100 100 100	PSA Prej Assur 200% 100 100 100 100	300% 100 100 100 100	100 100 100 100	100 100 100 100	100 100 100 100	100 104 108 113	100 104 108 113	143% 100 104 108 113	PSA Prej Assum 200% 100 104 108 113	300% 100 104 108 113	100 104 108 113	100 104 108 113	100 104 108 113
Initial Percent November 2019 November 2020 November 2021 November 2022	100 100 100 100 100	100 100 100 100 100	143% 100 100 100 100 100	PSA Prej Assum 200% 100 100 100 100 100	300% 100 100 100 100 100 100	100 100 100 100 100	100 100 100 100 100	100 100 100 100 100 5	100 104 108 113 117	100 104 108 113 117	143% 100 104 108 113 117	PSA Prej Assum 200% 100 104 108 113 117	300% 100 104 108 113 117	100 104 108 113 117	100 104 108 113 117	100 104 108 113 117
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2023	100 100 100 100	100 100 100 100	100 100 100 100 100	PSA Prej Assur 200% 100 100 100 100	300% 100 100 100 100	100 100 100 100	100 100 100 100	100 100 100 100	100 104 108 113	100 104 108 113	143% 100 104 108 113	PSA Prej Assum 200% 100 104 108 113	300% 100 104 108 113	100 104 108 113	100 104 108 113	100 104 108 113
Initial Percent November 2019 November 2020 November 2021 November 2022	100 100 100 100 100 100	100 100 100 100 100 100	143% 100 100 100 100 100 100	PSA Prej Assum 200% 100 100 100 100 100 100	300% 100 100 100 100 100 100 100	100 100 100 100 100 100 86	100 100 100 100 100 100	100 100 100 100 5 0	100 104 108 113 117 122	100 104 108 113 117 122	143% 100 104 108 113 117 122	PSA Prej Assum 200% 100 104 108 113 117 122	200% 100 104 108 113 117 122	100 104 108 113 117 122	100 104 108 113 117 111	100 104 108 113 117 75
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2023 November 2024 November 2024 November 2025 November 2026	100 100 100 100 100 100 100 100	100 100 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100 10	PSA Prej Assum 200% 100 100 100 100 100 100 100 100	300% 100 100 100 100 100 100 100	100 100 100 100 100 100 86 0	100 100 100 100 100 100 0 0	100 100 100 100 100 5 0 0	100 104 108 113 117 122 127 132 138	100 104 108 113 117 122 127 132 138	143% 100 104 108 113 117 122 127 132 138	200% 100 104 108 113 117 122 127 132 138	200% 100 104 108 113 117 122 127 132 114	100 104 108 113 117 122 119 88 65	100 104 108 113 117 111 76 52 35	100 104 108 113 117 75 47 29 18
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2023 November 2024 November 2025 November 2025 November 2026 November 2027	100 100 100 100 100 100 100 100 100	100 100 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100 10	PSA Prej Assum 200% 100 100 100 100 100 100 100 100 100	300% 100 100 100 100 100 100 100	100 100 100 100 100 100 86 0 0	100 100 100 100 100 100 0 0 0	100 100 100 100 100 5 0 0	100 104 108 113 117 122 127 132 138 143	100 104 108 113 117 122 127 132 138 143	143% 100 104 108 113 117 122 127 132 138 143	PSA Prej Assum 200% 100 104 108 113 117 122 127 132 138 143	300% 100 104 108 113 117 122 127 132 114 91	100 104 108 113 117 122 119 88 65 48	100 104 108 113 117 111 76 52 35 24	100 104 108 113 117 75 47 29 18
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2023 November 2024 November 2025 November 2026 November 2026 November 2027 November 2028	100 100 100 100 100 100 100 100 100 100	100 100 100 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100 10	PSA Prej Assum 200% 100 100 100 100 100 100 100 100 100	300% 100 100 100 100 100 100 100	100 100 100 100 100 100 86 0 0	100 100 100 100 100 100 0 0 0	100 100 100 100 100 5 0 0 0	100 104 108 113 117 122 127 132 138 143 149	100 104 108 113 117 122 127 132 138 143 149	143% 100 104 108 113 117 122 127 132 138 143 149	200% 100 104 108 113 117 122 127 132 138 143 141	300% 100 104 108 113 117 122 127 132 114 91 72	100 104 108 113 117 122 119 88 65 48 35	100 104 108 113 117 111 76 52 35 24 16	100 104 108 113 117 75 47 29 18 11 7
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2023 November 2023 November 2024 November 2025 November 2026 November 2027 November 2028 November 2028 November 2029	100 100 100 100 100 100 100 100 100 100	100 100 100 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100 10	PSA Prej Assum 200% 100 100 100 100 100 100 100 100 100	300% 100 100 100 100 100 100 100 100 0 0 0	100 100 100 100 100 100 86 0 0 0	100 100 100 100 100 100 0 0 0 0	100 100 100 100 100 5 0 0 0 0	100 104 108 113 117 122 127 132 138 143 149 155	100 104 108 113 117 122 127 132 138 143 149 155	143% 100 104 108 113 117 122 127 132 138 143 149 155	PSA Prej Assum 200% 100 104 108 113 117 122 127 132 138 143 141 120	300% 100 104 108 113 117 122 127 132 134 91 72 57	100 104 108 113 117 122 119 88 65 48 35 26	100 104 108 113 117 111 76 52 35 24 16 11	100 104 108 113 117 75 47 29 18 11 7
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2023 November 2024 November 2025 November 2026 November 2026 November 2027 November 2028 November 2028 November 2029 November 2030	100 100 100 100 100 100 100 100 100 100	100 100 100 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100 10	PSA Prej Assum 200% 100 100 100 100 100 100 100 100 100	300% 100 100 100 100 100 100 100 100 0 0 0	100 100 100 100 100 100 86 0 0 0 0	100 100 100 100 100 100 0 0 0 0 0	100 100 100 100 100 5 0 0 0 0 0 0	100 104 108 113 117 122 127 132 138 143 149 155 161	100 104 108 113 117 122 127 132 138 143 149 155	143% 100 104 108 113 117 122 127 132 138 143 149 155 157	PSA Prej Assum 200% 100 104 108 113 117 122 127 132 138 143 143 141 120 101	300% 100 104 108 113 117 122 127 132 114 91 72 57 45	100 104 108 113 117 122 119 88 65 48 35 26	100 104 108 113 117 111 76 52 35 24 16 11	100 104 108 113 117 75 47 29 18 11 7 4 3
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2023 November 2023 November 2024 November 2025 November 2026 November 2027 November 2028 November 2028 November 2029	100 100 100 100 100 100 100 100 100 100	100 100 100 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100 10	PSA Prej Assum 200% 100 100 100 100 100 100 100 100 100	300% 100 100 100 100 100 100 100 100 0 0 0	100 100 100 100 100 100 86 0 0 0	100 100 100 100 100 100 0 0 0 0	100 100 100 100 100 5 0 0 0 0	100 104 108 113 117 122 127 132 138 143 149 155	100 104 108 113 117 122 127 132 138 143 149 155	143% 100 104 108 113 117 122 127 132 138 143 149 155	PSA Prej Assum 200% 100 104 108 113 117 122 127 132 138 143 141 120	300% 100 104 108 113 117 122 127 132 134 91 72 57	100 104 108 113 117 122 119 88 65 48 35 26	100 104 108 113 117 111 76 52 35 24 16 11	100 104 108 113 117 75 47 29 18 11 7
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2023 November 2023 November 2024 November 2025 November 2026 November 2027 November 2027 November 2028 November 2029 November 2030 November 2031 November 2032 November 2033	100 100 100 100 100 100 100 100 100 100	100 100 100 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100 10	PSA Prej Assum 200% 100 100 100 100 100 100 100 100 0 0 0 0 0 0 0 0	300% 100 100 100 100 100 100 100 100 0 0 0	100 100 100 100 100 100 86 0 0 0 0 0	100 100 100 100 100 100 0 0 0 0 0 0 0	100 100 100 100 100 5 0 0 0 0 0 0	100 104 108 113 117 122 127 132 138 143 149 155 161 168	100 104 108 113 117 122 127 132 138 143 149 155 161 168	143% 100 104 108 113 117 122 127 132 138 143 149 155 157 138	PSA Prej Assum 200% 100 104 108 113 117 122 127 132 138 143 141 120 101 85	200% 100 104 108 113 117 122 127 132 114 91 72 57 45 35	100 104 108 113 117 122 119 88 65 48 35 26 19	100 104 108 113 117 111 76 52 35 24 16 11 7	100 104 108 113 117 75 47 29 18 11 7 4 3 2
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2023 November 2024 November 2025 November 2025 November 2026 November 2027 November 2027 November 2028 November 2029 November 2030 November 2031 November 2031 November 2033 November 2033 November 2033	100 100 100 100 100 100 100 100 100 100	100 100 100 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100 10	PSA Prej Assum 200% 100 100 100 100 100 100 100 100 100	300% 100 100 100 100 100 100 100 100 0 0 0	100 100 100 100 100 100 86 0 0 0 0 0 0 0	100 100 100 100 100 0 0 0 0 0 0 0 0 0 0	100 100 100 100 100 5 0 0 0 0 0 0 0 0 0	100 104 108 113 117 122 127 132 138 143 149 155 161 168 175 182 189	100 104 108 113 117 122 127 132 138 143 149 155 161 168 175 157 139	143% 100 104 108 113 117 122 127 132 138 143 149 155 157 138 120 105 90	PSA Prej Assum 200% 100 104 108 113 117 122 127 132 138 143 141 120 101 85 72 60 50	300% 100 104 108 117 122 127 132 114 91 72 57 45 35 28 22	100 104 108 113 117 122 119 88 65 48 35 26 19 14 10 7	100 104 108 113 117 7111 76 52 35 24 16 111 7 5 3	100 104 108 113 117 75 47 29 18 11 7 4 3 2
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2023 November 2024 November 2025 November 2026 November 2026 November 2027 November 2028 November 2029 November 2030 November 2031 November 2031 November 2032 November 2033 November 2034 November 2034 November 2034 November 2034	100 100 100 100 100 100 100 100 100 100	100 100 100 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100 10	PSA Prej Assum 200% 100 100 100 100 100 100 100 100 0 0 0 0 0 0 0 0 0 0 0	200 20 20 20 20 20 20 20 20 20 20 20 20	100 100 100 100 100 100 86 0 0 0 0 0 0 0 0 0	100 100 100 100 100 0 0 0 0 0 0 0 0 0 0	100 100 100 100 100 5 0 0 0 0 0 0 0 0 0	100 104 108 113 117 122 127 132 138 143 149 155 161 168 175 182 189	100 104 108 113 117 122 127 132 138 143 149 155 161 168 175 157 139 123	143% 100 104 108 113 117 122 127 138 143 149 155 157 138 120 105 90 78	PSA Prej Assum 200% 100 104 108 113 117 122 127 138 143 141 120 101 85 72 60 50 41	100 104 108 117 122 127 132 114 91 72 57 45 35 28 22 17	100 104 108 113 117 122 119 88 65 48 35 26 19 14 10 7	100 104 108 113 117 111 76 52 35 24 16 11 7 5 3	100 104 108 113 117 75 47 29 18 11 7 4 3 2
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2023 November 2024 November 2025 November 2026 November 2026 November 2027 November 2028 November 2029 November 2030 November 2031 November 2031 November 2032 November 2033 November 2033 November 2034 November 2034 November 2035 November 2035 November 2035 November 2035	100 100 100 100 100 100 100 100 100 100	100 100 100 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100 10	PSA Prej Assum 200% 100 100 100 100 100 100 100 100 100	200% 100 100 100 100 100 100 100 0 0 0 0	100 100 100 100 100 100 86 0 0 0 0 0 0 0 0 0 0 0 0 0	100 100 100 100 100 0 0 0 0 0 0 0 0 0 0	100 100 100 100 100 5 0 0 0 0 0 0 0 0 0	100 104 108 113 117 122 127 132 138 143 149 155 161 168 175 182 189 197 200	100 104 108 113 117 122 127 132 138 143 149 155 161 168 175 157 139 123 108	143% 100 104 108 113 117 122 127 132 138 149 155 157 138 120 105 90 78 66	PSA Prej Assum 200% 100 104 108 113 117 122 127 132 138 143 141 120 101 85 72 60 50 41 34	100 104 108 113 117 122 127 132 114 91 72 57 45 28 22 17 13 11 10	100 104 108 113 117 122 119 88 65 48 35 26 19 14 10 7	100 104 108 113 117 7111 76 52 35 24 16 111 7 5 3	100 104 108 113 117 75 47 29 18 11 7 4 3 2
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2023 November 2024 November 2025 November 2026 November 2026 November 2027 November 2027 November 2029 November 2030 November 2031 November 2031 November 2032 November 2033 November 2033 November 2034 November 2035 November 2035 November 2036 November 2036 November 2037	100 100 100 100 100 100 100 100 100 100	100 100 100 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100 100 100 10	PSA Prej Assum 200% 100 100 100 100 100 100 100 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0	200% 200% 100 100 100 100 100 100 100 0 0 0 0	100 100 100 100 100 100 86 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	100 100 100 100 100 0 0 0 0 0 0 0 0 0 0	100 100 100 100 100 5 0 0 0 0 0 0 0 0 0	100 104 108 113 117 122 127 132 138 143 149 155 161 168 175 182 189 197 200 200	100 104 108 113 117 122 127 132 138 143 149 155 161 168 175 157 139 123 108 94	143% 100 104 108 113 117 122 127 132 138 143 149 155 157 138 120 105 90 78 86 66 56	PSA Prej Assum 200% 100 104 108 113 117 122 127 132 138 143 141 120 101 85 72 60 50 41 34 28	200% 100 104 108 117 122 127 132 114 91 72 57 45 35 28 22 17 13 10 8	100 104 108 113 117 122 119 88 65 48 35 26 19 14 10 7 5 4 3 3	100 104 108 113 117 76 52 35 24 16 11 7 5 3 3 2 1 1	100 104 108 113 117 75 47 29 18 11 7 4 3 2
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2023 November 2024 November 2025 November 2026 November 2026 November 2027 November 2028 November 2029 November 2030 November 2031 November 2031 November 2032 November 2033 November 2033 November 2034 November 2034 November 2035 November 2035 November 2035 November 2035	100 100 100 100 100 100 100 100 100 100	100 100 100 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100 10	PSA Prej Assum 200% 100 100 100 100 100 100 100 100 100	200% 100 100 100 100 100 100 100 0 0 0 0	100 100 100 100 100 100 86 0 0 0 0 0 0 0 0 0 0 0 0 0	100 100 100 100 100 0 0 0 0 0 0 0 0 0 0	100 100 100 100 100 5 0 0 0 0 0 0 0 0 0	100 104 108 113 117 122 127 132 138 143 149 155 161 168 175 182 189 197 200	100 104 108 113 117 122 127 132 138 143 149 155 161 168 175 157 139 123 108	143% 100 104 108 113 117 122 127 132 138 149 155 157 138 120 105 90 78 66	PSA Prej Assum 200% 100 104 108 113 117 122 127 132 138 143 141 120 101 85 72 60 50 41 34	100 104 108 113 117 122 127 132 114 91 72 57 45 28 22 17 13 11 10	100 104 108 113 117 122 119 88 65 48 35 26 19 14 10 7	100 104 108 113 117 76 52 35 24 16 11 7 5 3 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	100 104 108 113 117 75 47 29 18 11 7 4 3 2
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2023 November 2024 November 2025 November 2026 November 2027 November 2027 November 2028 November 2029 November 2030 November 2031 November 2031 November 2032 November 2033 November 2033 November 2034 November 2035 November 2035 November 2035 November 2036 November 2036 November 2037 November 2037 November 2038	100 100 100 100 100 100 100 100 100 100	100 100 100 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100 100 100 10	PSA Prej Assum 200% 100 100 100 100 100 100 100 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	200% 100 100 100 100 100 100 100 100 0 0 0	100 100 100 100 100 100 86 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	100 100 100 100 100 0 0 0 0 0 0 0 0 0 0	100 100 100 100 100 5 0 0 0 0 0 0 0 0 0	100 104 108 113 117 122 127 132 138 149 155 161 168 175 182 189 197 200 200 200	100 104 108 113 117 122 127 138 143 149 155 161 168 175 157 139 123 108 94	143% 100 104 108 113 117 122 127 132 138 143 149 155 157 138 120 105 90 78 66 56 47	PSA Prej Assum 200% 100 104 108 113 117 122 127 132 138 143 141 120 101 85 72 60 50 41 34 28	300% 100 104 108 113 117 122 127 132 114 91 72 57 35 28 22 17 13 10 8 6	100 104 108 113 117 122 119 88 65 48 35 26 19 14 10 7 5 4	100 104 108 113 117 76 52 35 24 16 11 7 5 3 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	100 104 108 113 117 75 47 29 18 11 7 4 3 2
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2023 November 2024 November 2025 November 2025 November 2026 November 2027 November 2027 November 2028 November 2029 November 2030 November 2031 November 2031 November 2032 November 2033 November 2034 November 2035 November 2035 November 2036 November 2036 November 2037 November 2038 November 2038 November 2039 November 2039 November 2039 November 2040 November 2041	100 100 100 100 100 100 100 100 100 100	100 100 100 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100 100 100 10	PSA Prej Assum 200% 100 100 100 100 100 100 100 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	200% 200% 100 100 100 100 100 100 100 0 0 0 0	100 100 100 100 100 100 86 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	100 100 100 100 100 0 0 0 0 0 0 0 0 0 0	100 100 100 100 100 5 0 0 0 0 0 0 0 0 0	100 104 108 113 117 122 127 132 138 143 149 155 161 168 175 182 189 197 200 200 200 200 200 200	100 104 108 113 117 122 127 138 143 149 155 161 168 175 157 139 123 108 81 69 84 81	143% 100 104 108 113 117 122 127 138 143 149 155 157 138 120 105 90 78 66 47 39 32 25	PSA Prej Assum 200% 100 104 108 113 117 122 127 132 138 143 141 120 101 85 72 60 50 41 34 28 22 18 14 11	300% 100 104 108 113 117 122 127 132 114 91 72 57 45 35 28 22 17 13 10 8 6 4 3 2	100 104 108 113 117 122 119 88 65 48 35 26 19 14 10 7 5 4 3 2	100 104 108 113 117 111 76 52 35 24 16 11 7 5 3 3 2 1 1 1 1 *************************	100 104 108 113 117 75 47 29 18 11 7 4 3 2
Initial Percent November 2019 November 2020 November 2021 November 2022 November 2023 November 2024 November 2025 November 2025 November 2027 November 2027 November 2028 November 2029 November 2030 November 2031 November 2031 November 2031 November 2033 November 2033 November 2034 November 2035 November 2036 November 2036 November 2037 November 2038 November 2039 November 2039 November 2039 November 2040 November 2040 November 2041 November 2041	100 100 100 100 100 100 100 100 100 100	100 100 100 100 100 100 100 100 100 100	143% 100 100 100 100 100 100 100 100 100 10	PSA Prej Assum 200% 100 100 100 100 100 100 100 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Description 100 10	100 100 100 100 100 100 86 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	100 100 100 100 100 0 0 0 0 0 0 0 0 0 0	100 100 100 100 100 5 0 0 0 0 0 0 0 0 0	100 104 108 113 117 122 127 132 138 143 149 155 161 168 175 189 197 200 200 200 200 200 200	100 104 108 113 117 122 127 138 143 149 155 161 168 175 123 108 94 81 69 58 48 48	143% 100 104 108 113 117 122 127 138 143 149 155 157 138 120 105 90 78 66 56 47 39 32 25 20	PSA Prej Assum 200% 100 104 108 113 117 122 127 132 138 143 141 120 101 85 72 60 50 41 34 28 22 18 14 11 8	200% 100 104 108 113 117 122 127 132 114 91 72 57 45 35 28 22 17 13 10 8 6 4 3 2 2	100 104 108 113 117 122 119 88 65 48 35 26 19 14 10 7 5 4 3 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	100 104 108 113 117 76 52 35 24 16 111 7 5 3 3 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	100 104 108 113 117 75 47 29 18 11 7 4 3 2
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BA Class PSA Prepayment VB Class

PSA Prepayment

^{*} Indicates an outstanding balance greater than 0% and less than 0.5% of the original principal balance.

** Determined as specified under "Yield, Maturity and Prepayment Considerations - Weighted Average Lives and Final Distribution Dates" in the REMIC Prospectus.

	BW Class								V Class										
		PSA Prepayment Assumption									PSA Prepayment Assumption								
Date	0%	100%	143%	200%	300%	400%	500%	600%	0%	100%	143%	200%	300%	400%	500%	600%			
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100			
November 2019	100	100	100	100	100	100	100	100	96	96	96	96	96	96	96	96			
November 2020	100	100	100	100	100	100	100	100	92	92	92	92	92	92	92	92			
November 2021	100	100	100	100	100	100	100	95	87	87	87	87	87	87	87	78			
November 2022	100	100	100	100	100	100	81	60	83	83	83	83	83	83	45	2			
November 2023	100	100	100	100	100	80	56	37	78	78	78	78	78	38	0	0			
November 2024	100	100	100	100	90	59	38	23	73	73	73	73	52	0	0	0			
November 2025	100	100	100	100	72	44	26	15	68	68	68	68	11	0	0	0			
November 2026	100	100	100	97	57	32	18	9	62	62	62	56	0	0	0	0			
November 2027	100	100	100	83	45	24	12	6	57	57	57	22	0	0	0	0			
November 2028	100	100	100	70	36	18	8	3	51	51	51	0	0	0	0	0			
November 2029	100	100	89	60	29	13	5	2	45	45	23	0	0	0	0	0			
November 2030	100	100	78	51	23	9	4	1	39	39	0	0	0	0	0	0			
November 2031	100	97	69	43	18	7	2	1	32	27	0	0	0	0	0	0			
November 2032	100	88	60	36	14	5	2	*	25	*	0	0	0	0	0	0			
November 2033	100	78	52	30	11	4	1	*	18	0	0	0	0	0	0	0			
November 2034	100	70	45	25	8	3	1	*	11	0	0	0	0	0	0	0			
November 2035	100	62	39	21	6	2	*	*	3	0	0	0	0	0	0	0			
November 2036	100	54	33	17	5	1	*	*	0	0	0	0	0	0	0	0			
November 2037	100	47	28	14	4	1	*	*	0	0	0	0	0	0	0	0			
November 2038	100	41	24	11	3	1	*	*	0	0	0	0	0	0	0	0			
November 2039	100	35	20	9	2	*	*	*	0	0	0	0	0	0	0	0			
November 2040	100	29	16	7	2	*	*	*	0	0	0	0	0	0	0	0			
November 2041	100	24	13	5	1	*	*	*	0	0	0	0	0	0	0	0			
November 2042	100	19	10	4	1	*	*	*	0	0	0	0	0	0	0	0			
November 2043	98	15	7	3	1	*	*	*	0	0	0	0	0	0	0	0			
November 2044	81	10	5	2	*	*	*	*	0	0	0	0	0	0	0	0			
November 2045	63	7	3	1	*	*	*	*	0	0	0	0	0	0	0	0			
November 2046	43	3	1	*	*	*	*	*	0	0	0	0	0	0	0	0			
November 2047	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
November 2048	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Weighted Average																			
Life (years)**	27.6	19.3	16.5	13.4	9.8	7.6	6.1	5.1	9.7	9.1	8.2	7.1	5.5	4.5	3.7	3.2			

^{*} Indicates an outstanding balance greater than 0% and less than 0.5% of the original principal balance.

** Determined as specified under "Yield, Maturity and Prepayment Considerations - Weighted Average Lives and Final Distribution Dates" in the REMIC Prospectus.

Characteristics of the Residual Class

A Residual Certificate will be subject to certain transfer restrictions. See "Description of the Certificates-Special Characteristics of the Residual Certificates" and "Material Federal Income Tax Consequences-Taxation of Beneficial Owners of Residual Certificates" in the REMIC Prospectus.

Treasury Department regulations (the "Regulations") provide that a transfer of a "noneconomic residual interest" will be disregarded for all federal tax purposes unless no significant purpose of the transfer is to impede the assessment or collection of tax. A Residual Certificate will constitute a noneconomic residual interest under the Regulations. Having a significant purpose to impede the assessment or collection of tax means that the transferor of a Residual Certificate had "improper knowledge" at the time of the transfer. See "Description of the Certificates-Special Characteristics of the Residual Certificates" in the REMIC Prospectus. You should consult your own tax advisor regarding the application of the Regulations to a transfer of a Residual Certificate.

CERTAIN ADDITIONAL FEDERAL INCOME TAX CONSEQUENCES

The Certificates and payments on the Certificates are not generally exempt from taxation. Therefore, you should consider the tax consequences of holding a Certificate before you acquire one. The following tax discussion supplements the discussion under the caption "Material Federal Income Tax Consequences" in the REMIC Prospectus. When read together, the two discussions describe the current federal income tax treatment of beneficial owners of Certificates. These two tax discussions do not purport to deal with all federal tax consequences applicable to all categories of beneficial owners, some of which may be subject to special rules. In addition, these discussions may not apply to your particular circumstances for one of the reasons explained in the REMIC Prospectus. You should consult your own tax advisors regarding the federal income tax consequences of holding and disposing of Certificates as well as any tax consequences arising under the laws of any state, local or foreign taxing jurisdiction.

REMIC Elections and Special Tax Attributes

We will make a REMIC election with respect to the REMIC set forth in the table under "Description of the Certificates-General-*Structure*." The Regular Classes will be designated as "regular interests" and the Residual Class will be designated as the "residual interest" in the REMIC as set forth in that table. Thus, the REMIC Certificates and any related RCR Certificates generally will be treated as "regular or residual interests in a REMIC" for domestic building and loan associations, as "real estate assets" for real estate investment trusts, and, except for the Residual Class, as "qualified mortgages" for other REMICs. See "Material Federal Income Tax Consequences-REMIC Election and Special Tax Attributes" in the REMIC Prospectus.

Taxation of Beneficial Owners of Regular Certificates

The Accrual Classes will be issued with original issue discount ("OID"), and certain other Classes of Regular Certificates may be issued with OID. If a Class is issued with OID, a beneficial owner of a Certificate of that Class generally must recognize some taxable income in advance of the receipt of the cash attributable to that income. See "Material Federal Income Tax Consequences-Taxation of Beneficial Owners of Regular Certificates - *Treatment of Original Issue Discount* " in the REMIC Prospectus. In addition, certain Classes of Regular Certificates may be treated as having been issued at a premium. See "Material Federal Income Tax Consequences-Taxation of Beneficial Owners of Regular Certificates-*Regular Certificates Purchased at a Premium* " in the REMIC Prospectus.

The Prepayment Assumptions that will be used in determining the rate of accrual of OID will be as follows:

<u>Group</u>	Prepayment Assumption				
1	143% PSA				
2	131% PSA				
3	143% PSA				

See "Material Federal Income Tax Consequences-Taxation of Beneficial Owners of Regular Certificates-*Treatment of Original Issue Discount*" in the REMIC Prospectus. No representation is made as to whether the Mortgage Loans underlying the MBS will prepay at either of those rates or at any other rate. See "Description of the Certificates-Weighted Average Lives of the Certificates" in this prospectus supplement and "Yield, Maturity and Prepayment Considerations-Weighted Average Lives and Final Distribution Dates" in the REMIC Prospectus.

The law informally known as the Tax Cuts and Jobs Act ("TCJA"), which was enacted on December 22, 2017, generally requires a beneficial owner of a Regular Certificate that uses an accrual method of accounting for tax purposes to include certain amounts in income no later than the time such amounts are reflected on certain financial statements. Although the precise application of this rule is unclear, it might require the accrual of income earlier than is the case under the general tax rules described under "Material Federal Income Tax Consequences-Taxation of Beneficial Owners of Regular Certificates" in the REMIC Prospectus. This rule is generally effective for tax years beginning after December 31, 2017, or for Regular Certificates issued with original issue discount, for tax years beginning after December 31, 2018. The IRS issued Notice 2018-80, stating its intention to exclude market discount from the application of this rule, effective January 1, 2018. Prospective investors in Regular Certificates that use an accrual method of accounting for tax purposes are urged to consult with their tax advisors regarding the potential applicability of this legislation to their particular situations.

Taxation of Beneficial Owners of Residual Certificates

The Holder of a Residual Certificate will be considered to be the holder of the "residual interest" in the related REMIC. Such Holder generally will be required to report its daily portion of the taxable income or net loss of the REMIC to which that Certificate relates. In certain periods, a Holder of a Residual Certificate may be required to recognize taxable income without being entitled to receive a corresponding amount of cash. Pursuant to the Trust Agreement, we will be obligated to provide to the Holder of a Residual Certificate (i) information necessary to enable it to prepare its federal income tax returns and (ii) any reports regarding the Residual Class that may be required under the Code. See "Material Federal Income Tax Consequences-Taxation of Beneficial Owners of Residual Certificates" in the REMIC Prospectus.

The TCJA generally denies a deduction for an individual, trust or estate that holds a Residual Certificate of its allocable share of the REMIC's fees or expenses under Section 212 of the Code for any taxable year beginning after December 31, 2017, and before January 1, 2026. Prospective investors in Residual Certificates are urged to consult with their tax advisors regarding the potential applicability of this legislation to their particular situations.

Taxation of Beneficial Owners of RCR Certificates

The RCR Classes will be created, sold and administered pursuant to an arrangement that will be classified as a grantor trust under subpart E, part I of subchapter J of the Code. The Regular Certificates that are exchanged for RCR Certificates set forth in Schedule 1 (including any exchanges effective on the Settlement Date) will be the assets of the trust, and the RCR Certificates will represent an ownership interest of the underlying Regular Certificates. For a general discussion of the federal income tax treatment of beneficial owners of Regular Certificates, see "Material Federal Income Tax Consequences" in the REMIC Prospectus.

Generally, the ownership interest represented by an RCR certificate will be one of two types. A certificate of a Combination RCR Class (a "Combination RCR Certificate") will represent beneficial ownership of undivided interests in one or more underlying Regular Certificates. A certificate of a Strip RCR Class (a "Strip RCR Certificate") will represent the right to receive a disproportionate part of the principal or interest payments on one or more underlying Regular Certificates. All of the RCR Certificates are Combination RCR Certificates. See "Material Federal Income Tax Consequences-Taxation of Beneficial Owners of RCR Certificates" in the REMIC Prospectus for a general discussion of the federal income tax treatment of beneficial owners of RCR Certificates.

Tax Audit Procedures

The Bipartisan Budget Act of 2015, which was enacted on November 2, 2015, repeals and replaces the rules applicable to certain administrative and judicial proceedings regarding a partnership's tax affairs, effective beginning with the 2018 taxable year. Under the new rules, a partnership, including for this purpose a REMIC for a taxable year in which it has multiple Residual Owners, appoints one person to act as its sole representative in connection with IRS audits and related procedures. The representative's actions, including the representative's agreeing to adjustments to taxable income, will bind partners or Residual Owners to a greater degree than would actions of the tax matters partner ("TMP") under the rules in effect prior to the 2018 taxable year. See "Material Federal Income Tax Consequences-Reporting and Other Administrative Matters" in the REMIC Prospectus for a discussion of the TMP. Under the new rules, a REMIC having multiple Residual Owners in a taxable year, unless such REMIC elects otherwise, will be required to pay taxes arising from IRS audit adjustments rather than its Residual Owners. The Trustee, as representative, will have the authority to utilize, and will be directed to utilize, any exceptions available under the new provisions (including changes) and Regulations so that the Residual Owners, to the fullest extent possible, rather than the REMIC itself, will be liable for any

taxes arising from audit adjustments to the REMIC's taxable income. An adjustment to the REMIC's taxable income following an IRS audit may have to be taken into account by those Residual Owners in the taxable year in which the adjustment is made rather than in the taxable year to which the adjustment relates, and otherwise in different and potentially less advantageous ways than under the rules in effect prior to the 2018 taxable year. The new rules apply to existing and future REMICs having multiple Residual Owners in a taxable year. The new rules are complex and may be clarified and possibly revised. Residual Owners should discuss with their own tax advisors the possible effect of the new rules on them.

Foreign Investors

Beginning on January 1, 2019, a 30-percent United States withholding tax ("FATCA withholding") will apply to gross proceeds from the sale or other disposition of a Regular Certificate that are paid to a non-U.S. entity that is a "financial institution" and fails to comply with certain reporting and other requirements or to a non-U.S. entity that is not a "financial institution" but fails to disclose the identity of its direct or indirect "substantial U.S. owners" or to certify that it has no such owners. FATCA withholding currently applies to payments treated as interest on a Regular Certificate paid to such persons. Various exceptions may apply. You should consult your own tax advisor regarding the potential application and impact of this withholding tax based on your particular circumstances. See "Material Federal Income Tax Consequences-Foreign Investors" in the REMIC Prospectus.

ADDITIONAL ERISA CONSIDERATIONS

The following discussion supplements the discussion under "ERISA Considerations" in the REMIC Prospectus regarding important considerations for investors subject to ERISA or section 4975 of the Code. Due to the possibility that Fannie Mae, any Dealer or any of their respective affiliates may receive certain benefits in connection with the sale or holding of the Certificates, the purchase of the Certificates using "assets of a plan" (as described in 29 C.F.R. Section 2510.3-101, as modified by Section 3(42) of ERISA) over which any of these parties or their affiliates has investment authority, or renders investment advice for a fee with respect to the assets of the plan, or is the employer or other sponsor of the plan, might be deemed to be a violation of a provision of Title I of ERISA or Section 4975 of the Code. Accordingly, the Certificates may not be purchased using the assets of any plan if Fannie Mae, any Dealer or any of their respective affiliates has investment authority, or renders investment advice for a fee with respect to the assets of the plan, or is the employer or other sponsor of the plan, unless an applicable prohibited transaction exemption is available to cover the purchase or holding of the Certificates or the transaction is not otherwise prohibited.

PLAN OF DISTRIBUTION

We are obligated to deliver the Certificates to Wells Fargo Bank, N.A. (the "Dealer") in exchange for the MBS. The Dealer proposes to offer the Certificates directly to the public from time to time in negotiated transactions at varying prices to be determined at the time of sale. The Dealer may effect these transactions to or through other dealers.

EUROPEAN ECONOMIC AREA RISK RETENTION

Prospective investors whose investment activities are subject to investment laws and regulations, regulatory capital requirements or review by regulatory authorities may be subject to restrictions on investment in the certificates. Prospective investors should consult legal, tax and accounting advisers for assistance in determining the suitability of and consequences of the purchase, ownership and sale of the certificates.

The application of Articles 404-410 of the European Union Capital Requirements Regulation 575/2013 and similar European Economic Area ("EEA") legislation on risk retention requirements (the "EEA Risk Retention Regulations") to the certificates transaction (the "Transaction") is unclear.

Our exposure to the credit risk related to the Transaction is in the form of our guaranty obligations on the certificates (the "Guaranty Obligations"). Our Guaranty Obligations represent general unsecured obligations. Obligations similar to our Guaranty Obligations have long been a central feature to our mortgage-backed securities issuance programs and our Guaranty Obligations were undertaken in the ordinary course of our business.

In determining the extent to which the EEA Risk Retention Regulations apply to the Transaction, investors subject to the EEA Risk Retention Regulations may wish to consider the guidance appearing in the preamble to the regulatory technical standards contained in Commission Delegated Regulation (EU) No. 625/2014 of March 13, 2014, which provides in relevant part: "Where an entity securitises its own liabilities, alignment of interest is established automatically, regardless

of whether the final debtor collateralises its debt. Where it is clear that the credit risk remains with the originator the retention of interest by the originator is unnecessary, and would not improve on the pre-existing position." We will remain fully liable under the Guaranty Obligations. We do not intend to collateralize any of our credit exposure under the Guaranty Obligations or the certificates.

In order to assist Applicable Investors (as defined below) in evaluating a potential investment in the certificates, we will enter into a letter agreement on the settlement date pursuant to which we will irrevocably undertake to the certificateholders that, in connection with the EEA Risk Retention Regulations, at the origination and on an ongoing basis, so long as any certificates remain outstanding:

- we will, as originator (for purposes of the EEA Risk Retention Regulations), retain a material net economic interest (the "Retained Interest") in the exposure related to the Transaction of not less than 5% through the Guaranty Obligations;
- neither we nor our affiliates will sell, hedge or otherwise mitigate our credit risk under or associated with the
 Retained Interest or the mortgage loans, except to the extent permitted in accordance with the EEA Risk
 Retention Regulations; accordingly, neither we nor our affiliates will, through this transaction or any
 subsequent transactions, enter into agreements that transfer or hedge more than a 95% pro rata share of the
 credit risk corresponding to any of the certificates;
- we will, upon written request and further subject to any applicable duty of confidentiality, provide such
 information in our possession as may reasonably be required to assist the certificateholders to satisfy the due
 diligence obligations set forth in the EEA Risk Retention Regulations as of the settlement date and at any time
 prior to maturity of the certificates;
- we will confirm to the trustee for reporting to certificateholders our continued compliance with the
 undertakings set out at the first and second bullet points above (which confirmation may be by email): (i) on a
 monthly basis; and (ii) following our determination that the performance of the certificates or the risk
 characteristics of the certificates or of the mortgage loans has materially changed; and
- we will promptly notify the trustee in writing if for any reason: (i) we cease to hold the Retained Interest in
 accordance with the first bullet point above; or (ii) we or any of our affiliates fails to comply with the
 covenants set out in the second and third bullet points above in any way.

"Applicable Investor" means each holder of a beneficial interest in any certificates that is (i) an EEA credit institution or investment firm, (ii) an EEA insurer or reinsurer or (iii) an alternative investment fund to which Directive 2011/61/EU applies.

Prospective investors should also be aware that a new regulatory regime (the "Securitization Regulation") will generally apply from and after January 1, 2019 to securitizations in which securities are issued after that date. The Securitization Regulation will apply to the types of regulated investors covered by the EEA Risk Retention Regulations and also to (a) an EEA undertaking for collective investment in transferable securities ("UCITS") and UCITS management companies, and (b) institutions for occupational retirement provision falling within the scope of Directive (EU) 2016/2341 (subject to certain exceptions), and certain investment managers and authorized entities appointed by such institutions (together, "IORPs"). With regard to securitizations in respect of which the relevant securities are issued before January 1, 2019 ("Pre-2019 Securitizations"), investors that are subject to the EEA Risk Retention Regulations will continue to be subject to the risk retention and due diligence requirements of the EEA Risk Retention Regulations, including on and after that date. The Securitization Regulation makes no express provision for the application of any requirements of the EEA Risk Retention Regulations or of the Securitization Regulation to UCITS or IORPs that hold or acquire any interest in respect of a Pre-2019 Securitization and, accordingly, it is not clear what requirements (if any) will be applicable to those investors. Prospective investors are themselves responsible for monitoring and assessing changes to the EEA Risk Retention Regulations and their regulatory capital requirements.

Each prospective investor in the certificates is required independently to assess and determine whether our disclosure regarding risk retention contained in this prospectus supplement and the prospectus is sufficient for purposes of complying with any applicable risk retention requirements. Neither we nor the trustee or any other person makes any representation or provides any assurance to the effect that the information described in this prospectus supplement or in the prospectus is sufficient for such purposes. Each prospective investor in the certificates that is subject to any retention requirements should consult with its own legal, accounting and other advisors and/or its national regulator in determining the extent to which such information is sufficient for such purpose.

THE CERTIFICATES ARE NOT INTENDED TO BE OFFERED, SOLD OR OTHERWISE MADE AVAILABLE TO, AND SHOULD NOT BE OFFERED, SOLD OR OTHERWISE MADE AVAILABLE TO, ANY RETAIL INVESTOR IN THE EEA. FOR THESE PURPOSES, A RETAIL INVESTOR MEANS A PERSON WHO IS ONE (OR MORE) OF: (I) A RETAIL CLIENT AS DEFINED IN POINT (11) OF ARTICLE 4(1) OF DIRECTIVE 2014/65/EU (AS AMENDED, "MIFID II"); OR (II) A CUSTOMER WITHIN THE MEANING OF DIRECTIVE 2002/92/EC, WHERE THAT CUSTOMER WOULD NOT QUALIFY AS A PROFESSIONAL CLIENT AS DEFINED IN POINT (10) OF ARTICLE 4(1) OF MIFID II; OR (III) NOT A QUALIFIED INVESTOR AS DEFINED IN DIRECTIVE 2003/71/EC, CONSEQUENTLY NO KEY INFORMATION DOCUMENT REQUIRED BY REGULATION (EU) NO1286/2014 (AS AMENDED, THE "PRIIPS REGULATION") FOR OFFERING OR SELLING THE CERTIFICATES OR OTHERWISE MAKING THEM AVAILABLE TO RETAIL INVESTORS IN THE EEA HAS BEEN PREPARED AND THEREFORE OFFERING OR SELLING THE CERTIFICATES OR OTHERWISE MAKING THEM AVAILABLE TO ANY RETAIL INVESTOR IN THE EEA MAY BE UNLAWFUL UNDER THE PRIIPS REGULATION.

LEGAL MATTERS

Katten Muchin Rosenman LLP will provide legal representation for Fannie Mae. K&L Gates LLP will provide legal representation for the Dealer.

Available Recombinations(1)

REMIC Certificates RCR Certificates

Classes	Original Balances	RCR Classes	Original Balances	Principal Type(2)	Interest Rate	Interest Type(2)	CUSIP Number	Final Distribution Date
Recombin	nation 1							
VB	\$ 20,159,000	BW (3)	\$ 72,232,247	SEQ	4.00%	FIX	3136B3PZ7	December 2048
BV	15,957,000							
BZ	36,116,247							
Recombin	nation 2							
VB	20,159,000	V	36,116,000	SEQ/AD	4.00	FIX	3136B3QA1	May 2036
BV	15,957,000							·

⁽¹⁾ REMIC Certificates and RCR Certificates in each Recombination may be exchanged only in the proportions of original principal or notional principal balances for the related Classes shown in this Schedule 1 (disregarding any retired Classes). For example, if a particular Recombination includes two REMIC Classes and one RCR Class whose original principal balances shown in the schedule reflect a 1:1:2 relationship, the same 1:1:2 relationship among the *original* principal balances of those REMIC and RCR Classes must be maintained in any exchange. This is true even if, as a result of the applicable payment priority sequence, the relationship between their current principal balances has changed over time. Moreover, if as a result of a proposed exchange, a Certificateholder would hold a REMIC Certificate or RCR Certificate of a Class in an amount less than the applicable minimum denomination for that Class, the Certificateholder will be unable to effect the proposed exchange. See "Description of the Certificates-General- Authorized Denominations" in this prospectus supplement.

See "Description of the Certificates-Class Definitions and Abbreviations" in the REMIC Prospectus.

Principal payments on the REMIC Certificates in Recombination 1 from the BZ Accrual Amount will be paid as interest on the related RCR Certificates, and thus will not reduce the principal balances of those RCR Certificates.

No one is authorized to give information or to make representations in connection with the Certificates other than the information and representations contained in or incorporated into this Prospectus Supplement and the additional Disclosure Documents. We take no responsibility for any unauthorized information or representation. This Prospectus Supplement and the additional Disclosure Documents do not constitute an offer or solicitation with regard to the Certificates if it is illegal to make such an offer or solicitation to you under state law. By delivering this Prospectus Supplement and the additional Disclosure Documents at any time, no one implies that the information contained herein or therein is correct after the date hereof or thereof.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved the Certificates or determined if this Prospectus Supplement is truthful and complete. Any representation to the contrary is a criminal offense.

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\$402,196,333



Guaranteed REMIC Pass-Through Certificates

Fannie Mae REMIC Trust 2018-88

PROSPECTUS SUPPLEMENT

Wells Fargo Securities

November 26, 2018