



Single-Family Disclosure Guide

Guide to PC, Giant and Tax Reporting Disclosure Information





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INTRODUCTION



INTRODUCTION

This guide is designed to serve as a reference tool for investors in Freddie Mac mortgage securities and vendors of Freddie Mac mortgage-related securities information. It provides timing and frequency of disclosure data transmitted directly from Freddie Mac or through independent information vendors, and file formats of the transmissions currently produced and distributed by Freddie Mac.

This guide also provides technical specifications that include definitions, enumerations, datatypes, formats and maximum attribute lengths for all disclosure files. The file layouts are the same for daily issuance and monthly files, with Loan level and Security level data in separate files.

This guide is divided into five distinct disclosure related sections:

- Loan Level
- Security Level
- Security Supplemental Level
- · Exchange related files
- Tax

Disclosure files are created in text (txt) format with pipe delimiter separated values (except Tax related files). The text files will be compressed in a zipped (zip) format.

Freddie Mac Offering Circulars and their related supplements provide more detailed information on Freddie Mac mortgage securities. For a copy of an Offering Circular, including the Offering Circular Supplement ("OCS"), please visit our website at www.freddiemac.com/mbs.

Investor Inquiry is available to answer any questions related to Freddie Mac's mortgage securities. To contact Investor Inquiry call (800) 336-3672 or send e-mail to Investor_Inquiry@freddiemac.com. Freddie Mac's Mortgage Securities website (www.freddiemac.com/mbs) contains current and historical disclosure data for PCs and REMICs.

Freddie Mac provides mortgage-backed securities disclosure information through several disclosure vendors. For a listing of Freddie Mac's disclosure vendors, please contact Investor Inquiry.

This guide will be updated as changes occur and posted to the Freddie Mac mortgage securities website. Changes from the previous guide are highlighted in yellow.

This document is neither an offer to sell nor a solicitation of an offer to buy any of the securities described herein, which are offered only by the applicable offering circulars and related supplements, which incorporate Freddie Mac's information statement and related supplements.

For the complete description and for important information, please see 'Loan-Level Disclosure – Variable Names and Descriptions' on the Freddie Mac website http://www.freddiemac.com/mbs/docs/fs Ild.pdf



The chart below classifies the prefixes found on each file.

	File 1	File 2	Pseudopool File
Prefix	A0, A1, A2, A3, A4, A5, A6, A7, A8, A9, B0, B1, B2, B3, B4, B5, B6, B7, B8, B9, C0, C1, C2, C3, C4, C5, C6, C7, C8, C9, D0, D1, D2, D3, D4, D5, D6, D7, D8, D9, E0, E1, E2, E3, E4, E5, E6, E7, E8, E9, F5, F6, F7, F9, G0, G1, G2, G3, G6, G7, H0, H1, H2, H8, J0, J1, J2, J3, J4, J5, J6, J7, J8, J9, K0, K3, K9, L0, L1, M2, M3, M4, M5, M6, M7, N2, N3, N4, N5, N6, N7, NA, NB, O2, O3, O5, O6, P0, P1, P2, P3, P4, P5, P6, P9, Q0, Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, S0, S1, S2, S3, S4, S5, S6, S7, S8, S9, T3, T4, T5, T6, U1, U2, U3, U4, U5, U6, U7, U8, U9, V6, V7, V8, Z4, Z5, Z6, 3A, 3B, 3C, 3D, 3E, 3F, 3G, 3H, 3I, 3J, 3K, 3L, 3M, 3N, 3O, 3P, 3Q, 3R, 3S, 3T, 3U, 3V, 3W, 3X, 3Y, 3Z, 4L, 4M, 4N, 4O, 4P, 4Q, 4R, 4S, 4T, 4U, 4V, 5B, 5C, 5D, 5E, 5F, 5G, 5H, 5I, 5J, 5K, 5L, 5M, 5N, 5O, 5P, 5Q, 5R, 5S, 5T, 5U, 5V, 5W, 5X, 5Y, 5Z, 6A, 6B, 6C, 6D, 6E, 6F, 6G, 6H, 6I, 6M, 6N, 6O, 6P, 6Q, 6R, 6S 6T, 6U, 6V, 7D, 7E,7F, 7G, 7H, 7I, 7J, 7K, 7M, 7N, 7O, 7P, 7Q, 7R, 7S, CI, CL, CN, CT, ZI, ZL, ZN, ZT	17, 35, 36, 39, 40, 41, 42, 43, 60, 61, 63, 64, 68, 71, 74, 75, 76, 77, 78, 84, 86, 87, 94, 96, 1A, 1B, 1C, 1E, 1F, 1G, 1H, 1J, 1K, 1L, 1M, 1N, 1Q, 1R, 2B, 53, 54, 55, 5A, 88, 97, HA, HB, MA, MB, R0, 4A, 4B, 4C, 4D, 4E, 4F, 4G, 4H, 4I, 4J, 4K, 8A, 8B, 8C, 8D	X0

For more information regarding PC Prefixes, please refer to our PC Prefix Library: http://www.freddiemac.com/mbs/docs/prefixlibrary.xls



TIMING AND FREQUENCY OF DATA



TIMING AND FREQUENCY OF DISCLOSURE

Transmission Name	Description	Filename/Format Text files will be compressed in a	Day of the Month Publicly
Daily Files	(Lange Constitution of Commission of the control of	zipped format	Available
Daily Issuance Loan Level File 1	(Loan, Security and Supplemental Level) Initial loan-level information on newly issued	flYYMMDD.txt	
Daily location four feet and f	pools	THE THIND BLOKE	6:30 A.M.
Daily Issuance Loan Level File 1_Intraday #2**	Initial loan-level information on newly issued pools	flYYMMDD_2.txt	11:30 AM
Daily Issuance Loan Level File 1_Intraday #3**	Initial loan-level information on newly issued pools	flYYMMDD_3.txt	3:30 PM
Daily Issuance Security File 1	Information on newly issued pools	dnYYMMDD.txt	6:30 A.M.
Daily Issuance Security File 1_Intraday #2**	Information on newly issued pools	dnYYMMDD_2.txt	11:30 AM
Daily Issuance Security File 1_Intraday #3**	Information on newly issued pools	dnYYMMDD_3.txt	3:30 PM
Daily Issuance Security Supplemental File 1	Information on newly issued pools	wfYYMMDD.txt	6:30 A.M.
Daily Issuance Security Supplemental File 1_Intraday #2**	Information on newly issued pools	wfYYMMDD_2.txt	11:30 AM
Daily Issuance Security Supplemental File 1_Intraday #3**	Information on newly issued pools	wfYYMMDD_3.txt	3:30 PM
Daily Issuance Security Supplemental File 2*	Information on newly issued pools	wgYYMMDD.txt	6:30 A.M.
Additional Daily Issuance File (all products, pool-level)	Delinquency and Borrower Assistance Plan data for pools disclosed the prior business day	FRE_FISS_YYYYM MDD.txt	11:30 AM
Daily Issuance Loan Level File 2*	Initial loan-level information on newly issued pools	alYYMMDD.txt	6:30 A.M.
Daily Issuance Security File 2*	Information on newly issued pools	dbYYMMDD.txt	6:30 A.M.
Monthly File	s (Loan, Security and Supplemental Level)	L
Monthly Loan Level File 1	Updated monthly loan-level information	fuYYMMDD.txt	
Monthly Loan Level File 2*	Updated monthly loan-level information	auYYMMDD.txt	
Monthly Security Core File 1	Factors for pools	fdYYMMDD.txt	
Monthly Security Core File 2*	Factors for pools	arYYMMDD.txt	4 th Business
Monthly Security Supplemental File 1	Quartiles for pools & Assorted Data	fqYYMMDD.txt	Day 4:30
Monthly Security Supplemental File 2*	Quartiles for pools & Assorted Data	geYYMMDD.txt	P.M.
Pseudopool Monthly Security Core File	Factors for Pseudopools	xfYYMMDD.txt	
Pseudopool Monthly Security Supplemental File	Quartiles for Pseudopools and Assorted Data	xsYYMMDD.txt	
	Exchange files		
Daily 45-Day to 55-Day Exchange Activity	Daily 45-Day to 55-Day Exchange Activity	edYYMMDD.txt	
Cumulative 45-Day to 55-Day Exchange Activity	Cumulative 45-Day to 55-Day Exchange Activity	ecYYMMDD.txt	6:30 A.M.
Aggregate Level 1 Collateral Exchange Activity	Aggregate Level 1 Collateral Exchange Activity	eaYYMMDD.txt	
	Tax Files		ı
REMIC Original Issue Discount (OID) Tax Information	OID tax information for investors in REMICs		Quarterly
Mortgage Backed Securities Tax Disclosure File	Tax reporting data for investors in mortgage backed securities programs		Annually
Multiclass Tax Type File		FRE_MCTAX_Q#YY YY.typ	Quarterly





Multiclass Tax Factor File	FRE_MCTAX_Q#YY	Quarterly
	YY.fac	
Single Class Tax Type File	FRE_SCTAX_Q#YY YY.typ	Quarterly
Single Class Tax Factor File	FRE_SCTAX_Q#YY YY.fac	Quarterly

Note: Freddie Mac mortgage security data files will not be disseminated on the holidays observed by the Federal Reserve System. Mortgage security data files will be disseminated on the next business day. The Disclosure Holiday Schedule is disclosed in the quick links section of the mortgage securities page (http://www.freddiemac.com/mbs/docs/holiday_schedule.pdf).

^{*}Files specific to ARMS, Reinstated, Modified, and 75 Day Fixed rate mortgages.

^{**} Effective with Single Security (June 3, 2019). These files will be made available 3 times a day, even if the file contains zero records. Intraday file #1 will contain all issuance activity for the prior day. Intraday file #2 and #3 are intended for the preliminary disclosure of FRE Supers and will not be cumulative.



LOAN LEVEL FILE



The daily loan level issuance file and the monthly loan level file contain the aligned loan level data attributes for Freddie Mac mortgage-backed securities. The layout of the files is identical. Original information is calculated based on information available when the security was issued and updated information in the monthly file is calculated based on the mortgage information reported to Freddie Mac by servicers. This data should be considered in conjunction with the information appearing in the applicable Freddie Mac Offering Circulars, as supplemented.

The loan level data file includes the attribute names, definitions, enumerations, data types, formats, max lengths and implementation notes. Freddie Mac will publish two daily loan level files each business day in the morning and two monthly loan level files. Most of Freddie Mac's securities will be in one file, but we will publish a second loan level file with the data for the following securities: Adjustable-Rate Mortgages (ARM), Modified, Reinstated & 75-Day payment delay Fixed-Rate PC securities. To find prefixes included in each file, please refer to the Introduction section.

ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
L-001	Loan Identifier	The unique designation assigned to the loan by the issuer.		String		12	-Daily Loan Level File 1: For pools issued after 10/1/2018, the Loan Identifier is a 10- character string. -Monthly Loan Level File 1: For pools issued after 10/1/2018, the Loan Identifier is a 10- character string. For pools issued prior to that date, the identifier will be a 12- character string. -Daily/Monthly Loan Level Files 2: The Loan Identifier is a 12-character string. The first 6 characters will match the pool number, second 6 characters is a sequential loan count.
L-002	Loan Correction Indicator	The indicator denoting whether any attributes for the loan have changed from previous disclosures.	Y = Yes N = No A = Added D = Deleted	String		1	
L-003	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
L-004	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
L-005	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
L-006	Mortgage Loan Amount	The dollar amount of the loan as stated on the note at the time the loan was originated or modified. For reperforming, modified fixed-rate and modified step-rate loans, this value represents both		Numeric	9.2	12	Privacy Masking: rounded to nearest thousand, if > \$500



		the interest bearing and non- interest bearing amount.					
L-007	Issuance Investor Loan UPB	The unpaid principal balance of the loan as it contributes to the balance of the security at the time the security was issued.		Numeric	9.2	12	Privacy Masking: If loan age <= 6 months, round to nearest thousand if > \$500
L-008	Current Investor Loan UPB	The unpaid principal balance of the loan as it contributes to the current balance of the security.		Numeric	9.2	12	Privacy Masking: If loan age <= 6 months, round to nearest thousand if > \$500
L-009	Amortization Type	The classification of the loan as having either a fixed- or an adjustable-interest rate.	FRM = Fixed-Rate ARM = Adjustable- Rate	String		3	V
L-010	Original Interest Rate	The interest rate of the loan as stated on the note at the time the loan was originated or modified.		Numeric	2.3	6	If value <0 or >25, then the rate is considered not available (securities issued on or after 9/1/2017)
L-011	Issuance Interest Rate	The interest rate of the loan in effect at the time the security was issued.		Numeric	2.3	6	If value <0 or >25, then the rate is considered not available (applicable to securities issued on or after 9/1/2017)
L-012	Current Interest Rate	The interest rate of the loan in effect during the current reporting period.	99.999 = Not Available	Numeric	2.3	6	If value <0 or >25, then the rate is considered not available (securities issued on or after 9/1/2017) Not Available for Freddie Mac ARMs
L-013	Issuance Net Interest Rate	The interest rate of the loan at the time the security was issued less servicing fees and guarantor fees.		Numeric	2.3	6	If value <0 or >25, then the rate is considered not available (securities issued on or after 9/1/2017)
L-014	Current Net Interest Rate	The interest rate of the loan in effect during the current reporting period less servicing fees and guarantor fees.		Numeric	2.3	6	If value <0 or >25, then the rate is considered not available (securities issued on or after 9/1/2017)
L-015	First Payment Date	The month and year that the first scheduled payment on the loan is due.		Date	MMCCYY	6	
L-016	Maturity Date	The month and year that the final scheduled payment on the loan is due.		Date	MMCCYY	6	
L-017	Loan Term	The number of months in which regularly scheduled borrower payments are due.		Numeric		3	
L-018	Remaining Months to Maturity	The number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero.		Numeric		3	Value can be Negative
		For fixed-rate loans, this value takes into account the impact of any curtailments.					





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L-019	Loan Age	The number of scheduled payments from the time the loan was originated or modified up to and including the current		Numeric	3	Value can be Negative
		reporting period.				
L-020	Loan-To-Value (LTV)	The ratio, expressed as a percentage, obtained by dividing the amount of the loan at origination by the value of the property. Property value reflects either the lesser of the sales price or the appraised property value for a purchase, or the appraised property value for a refinance. For reperforming, modified fixed-rate and modified step-rate	999 = Not Available	Numeric	3	If value <1 or >998, then the ratio is considered not available (securities issued on or after 9/1/2017)
		loans, this value will be blank.				
L-021	Combined Loan- To-Value (CLTV)	The ratio, expressed as a percentage, obtained by dividing the amount of all known outstanding loans at origination by the value of the property. Property value reflects either the lesser of the sales price or the appraised property value for a purchase, or the appraised property value for a refinance. For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.	999 = Not Available	Numeric	3	If value <1 or >998, then the ratio is considered not available (securities issued on or after 9/1/2017)
L-022	Debt-To-Income (DTI)	The ratio obtained by dividing the total monthly debt expense by the total monthly income of the borrower at the time the loan	999 = Not Available	Numeric	3	If value <1 or >65, then the ratio is considered not available
L-023	Borrower Credit	was originated or modified. The standardized credit score	9999 = Not Available	Numeric	4	If value <300 or >850,
L-023	Score Credit	used to evaluate the borrower during the loan origination process. For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.	SSSS = INUL AVAIIADIE	Numenc	4	then the score is considered not available
L-024	FILLER					
L-025	FILLER					
L-026	FILLER					
L-027	Number of Borrowers	The number of borrowers who, at the time the loan was originated, are obligated to repay the loan.	1 = 1 2 = 2 3 = 3 4 = 4 5 = 5 6 = 6 7 = 7 8 = 8 9 = 9 10 = 10 99 = Not Available	Numeric	2	If value <1 or >10, then the count is considered not available (securities issued on or after 9/1/2017). Any data corrections made to securities issued prior to that date will align to the new disclosure and may reflect a greater number of borrowers than was initially disclosed.





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L-028	First Time Home Buyer Indicator	The indicator denoting whether a borrower on the loan qualifies as a first-time homebuyer.	Y = Yes N = No 9 = Not Available	String	1	
L-029	Loan Purpose	The classification describing the purpose of the loan.	C = Refinance - Cash Out N = Refinance - No Cash Out R = Refinance - Not Specified P = Purchase M = Modified - Loss Mitigation 9 = Not Available	String	1	
L-030	Occupancy Status	The classification describing the property occupancy status at the time the loan was originated. For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.	P = Primary Residence S = Second Home I= Investment Property 9 = Not Available	String	1	
L-031	Number of Units	The number of dwelling units in the mortgaged property at the time the loan was originated.	1 = 1 2 = 2 3 = 3 4 = 4 99 = Not Available	Numeric	2	If value <1 or >4, then the count is considered not available
L-032	Property Type	The classification describing the type of property that secures the loan.	CP = Cooperative CO = Condominium PU = Planned Unit Development SF = Single-Family MH = Manufactured Housing 99 = Not Available	String	2	For securities issued prior to 8/28/2017, Property Types "Leasehold" and "1-4 Fee Simple" are mapped to "Single Family"
L-033	Channel	The origination channel used by the party that delivered the loan to the issuer. For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.	R = Retail B = Broker C = Correspondent T = Third Party Origination - Not Specified 9 = Not Available	String	1	
L-034	Property State	The abbreviation denoting the location of the property securing the loan.	See Appendix A	String	2	
L-035	Seller Name	The name of the entity that sold the loan to the issuer.		String	100	Will not be updated after issuance, regardless of mergers or acquisitions. Will no longer be compressed with entity's city and state and may also include punctuation and spaces.
L-036	Servicer Name	The name of the entity that services the loan during the current reporting period.		String	100	Will no longer be compressed with entity's city and state and may also include punctuation and spaces.





L-037	Mortgage Insurance Percent	The percentage of mortgage insurance coverage obtained at origination in effect at the time the security was issued.	000= No MI 999= Not Available	String		3	If value <0 or >55, then the percentage is considered not available. If MI is cancelled or expired, the value will be 0 in the monthly file.
L-038	Mortgage Insurance Cancellation Indicator	The indicator denoting whether the mortgage insurance has been cancelled after the security was issued.	Y = Yes N = No 7 = Not Applicable	String		1	
L-039	Government Insured Guarantee	The classification describing the Government Insured/Guarantee Program, if any, covering the loan.	FH = FHA VA = Veterans Affair RH = Rural Housing IH = Section 184 Indian Home 99 = Not Available	String		2	Government Insured/Guarantee loans.
L-040	Assumability Indicator	The indicator denoting whether the loan is assumable by another borrower.	Y = Yes N = No	String		1	
L-041	Interest Only Loan Indicator	The indicator denoting whether the loan only requires interest payments for a specified period beginning with the first payment date.	Y = Yes N = No	String		1	
L-042	Interest Only First Principal and Interest Payment Date	For interest-only loans, the month and year that the first monthly scheduled fully amortizing principal and interest payment is due.		Date	MMCCYY	6	
L-043	Months to Amortization	For interest-only loans, the number of months from the current month to the first scheduled principal and interest payment date.		Numeric		3	
L-044	Prepayment Penalty Indicator	The indicator denoting whether the borrower is subject to a penalty for early payment of principal.	Y = Yes N = No	String		1	
L-045	Prepayment Penalty Total Term	The total number of months that the prepayment penalty may be in effect.	06 = 6 Months 12 = 1 Year 24 = 2 Years 36 = 3 Years 99 = Not Available	String		2	If Prepayment Penalty Indicator = Y, value will be set to "99"
L-046	Index	For adjustable-rate loans, the description of the index on which adjustments to the interest rate are based.	See Appendix A	String		3	As of 8/28/17, the Index description string will no longer be disclosed, only the index code; see Appendix A.
L-047	Mortgage Margin	For adjustable-rate loans, the number of percentage points to be added to the index to arrive at the new interest rate.	77.777 - Not Applicable	Numeric	2.3	6	
L-048	MBS/PC Margin	For adjustable-rate loans, the mortgage margin less servicing fees and guarantor fees.	77.777 - Not Applicable	Numeric	2.3	6	
L-049	Interest Rate Adjustment Frequency	For adjustable-rate loans, the number of months, excluding any fixed-rate period, between scheduled rate changes.		Numeric		3	



L-050	Interest Rate Lookback	For adjustable-rate loans, the number of calendar days prior to the rate change date used to determine the effective index value required to calculate the next interest rate.		Numeric		3	
L-051	Interest Rate Rounding Method	For adjustable-rate loans, the designation of how the interest rate is rounded when a new interest rate is calculated.	DN = Down NE = Nearest UP = Up NO = No Rounding	String		2	Set to "NE"
L-052	Interest Rate Rounding Method Percent	For adjustable-rate loans, the percentage to which the interest rate is rounded when a new interest rate is calculated.	01 = 0.25 02 = 0.125 03 = .01	String		2	Set to "02"
L-053	Convertibility Indicator	The indicator denoting whether the loan has a feature that allows the borrower to convert from an adjustable rate to a fixed rate.	Y = Yes N = No	String		1	Adjustable-rate mortgages only
L-054	Initial Fixed Rate Period	For adjustable-rate loans, the number of calendar months between the first full month the loan accrues interest and the first interest rate change date.	00 = <=6 Months 01 = 7-18 Months 02 = 19-30 Months 03 = 31-42 Months 04 = 43-54 Months 05 = 55-66 Months 06 = 67-78 Months 07 = 79-90 Months 08 = 91-102 Months 10 = 115-126 Months 11 = 127-138 Months 12 = 139-150 Months 13 = 151-162 Months 14 = 163-174 Months 15 = 175-186 Months 16 = >186 Months	String		2	
L-055	Next Interest Rate Adjustment Date	For adjustable-rate loans, the month and year that the interest rate is next subject to change.		Date	MMCCYY	6	
L-056	Months to Next Interest Rate Adjustment Date	For adjustable-rate loans, the number of months from the current month to the next interest rate change date.		Numeric		3	
L-057	Life Ceiling Interest Rate	For adjustable-rate loans, the lifetime maximum interest rate.	77.777 - Not Applicable	Numeric	2.3	6	
L-058	Life Ceiling Net Interest Rate	For adjustable-rate loans, the maximum interest rate less servicing fees and guarantor fees.	77.777 - Not Applicable	Numeric	2.3	6	
L-059	Life Floor Interest Rate	For adjustable-rate loans, the lifetime minimum interest rate.	77.777 - Not Applicable	Numeric	2.3	6	
L-060	Life Floor Net Interest Rate	For adjustable-rate loans, the minimum interest rate less servicing fees and guarantor fees.	77.777 - Not Applicable	Numeric	2.3	6	
L-061	Initial Interest Rate Cap Up Percent	For adjustable-rate loans, the maximum percentage points the interest rate can adjust upward at the first interest rate change date.	77.777 - Not Applicable	Numeric	2.3	6	





L-062	Initial Interest Rate	For adjustable-rate loans, the	77.777 - Not	Numeric	2.3	6	
	Cap Down Percent	maximum number of percentage points the interest rate can adjust downward at the first interest rate change date.	Applicable			-	
L-063	Periodic Interest Rate Cap Up Percent	For adjustable-rate loans, the maximum percentage points the interest rate can adjust upward at each interest rate change date after the first interest rate change date.	77.777 - Not Applicable	Numeric	2.3	6	
L-064	Periodic Interest Rate Cap Down Percent	For adjustable-rate loans, the maximum percentage points the interest rate can adjust downward at each interest rate change date after the first interest rate change date.	77.777 - Not Applicable	Numeric	2.3	6	
L-065	Modification Program	For reperforming, modified fixed-rate and modified step-rate loans, the program under which the loan was modified.	A = Alternative B = HAMP Backup C = Classic D = Payment Deferral E = Extend F = Flex H = HAMP O = Other P = Cap and Extend R = Regular S = Standard T = Streamlined U = Underwater 9 = Not Available	String		1	Effective beginning 9/21/2020
L-066	Modification Type	For reperforming, modified fixed-rate and modified step-rate loans, the classification describing the type of modification.	B = Rate & Term C = Capitalization D = Deferred Amount F = Rate, Term & Deferred Amount O = Other R = Rate T = Term S = Rate & Deferred Amount U = Term & Deferred Amount	String		1	Effective beginning 9/21/2020
L-067	Number of Modifications	For reperforming, modified fixed-rate and modified step-rate loans, the number of times the loan has been modified, at the time security was issued.		Numeric		3	
L-068	Total Capitalized Amount	For reperforming, modified fixed-rate and modified step-rate loans, the amount of interest and non-interest arrearages added to the principal balance as of the most recent modification.		Numeric	9.2	12	
L-069	Interest Bearing Mortgage Loan Amount	For reperforming, modified fixed-rate and modified step-rate loans, the interest bearing unpaid principal balance at the time of modification.		Numeric	9.2	12	Privacy Masking: Round to nearest thousand if > \$500





L-070	Original Deferred	For reperforming, modified		Numeric	9.2	12	Privacy Masking:
	Amount	fixed-rate and modified step-rate loans, the non-interest bearing unpaid principal balance at the time of modification.					Round to nearest thousand if > \$500
		The deferred amount is not included in the unpaid principal balance of the security and is not payable to the certificate holder.					
L-071	Current Deferred UPB	For reperforming, modified fixed-rate and modified step-rate loans, the current non-interest bearing unpaid principal balance.		Numeric	9.2	12	Privacy Masking: Round to nearest thousand if > \$500
		The deferred amount is not included in the unpaid principal balance of the security and is not payable to the certificate holder.					
L-072	Loan Age as Of Modification	For reperforming, modified fixed-rate and modified step-rate loans, the number of scheduled payments from the time the loan was originated up to the date of modification.		Numeric		3	
L-073	Estimated Loan-To- Value (ELTV)	For reinstated, reperforming, modified fixed-rate and modified step-rate loans, the ratio obtained by dividing the outstanding balance of the mortgage loan by the estimated current value of the property obtained by the issuer, at the time of issuance.	999 = Not Available	Numeric		3	If value <1 or >998, then the ratio is considered not available (securities issued on or after 9/1/2017)
L-074	Updated Credit Score	For reinstated, reperforming, modified fixed-rate and modified step-rate loans, the most recently available standardized credit score provided at the time of issuance.	9999 = Not Available	Numeric		4	If value <300 or >850, then the score is considered not available
L-075	FILLER						
L-076	Interest Rate Step Indicator	The indicator denoting whether the modification includes a step rate.	Y = Yes N = No	String		1	
L-077	Initial Step Fixed- Rate Period	For reperforming, modified steprate loans, the number of months between the first payment date of the modified loan and the first step rate adjustment date.	00 = <=6 Months 01 = 7-18 Months 02 = 19-30 Months 03 = 31-42 Months 04 = 43-54 Months 05 = 55-66 Months 06 = 67-78 Months 07 = 79-90 Months 08 = 91-102 Months 09 = 103-114 Months 10 = 115-126 Months 11 = 127-138 Months 12 = 139-150 Months 13 = 151-162 Months 14 = 163-174 Months 15 = 175-186 Months 16 = >186 Months	Numeric		3	





L-078	Total Number of Steps	For reperforming, modified step- rate loans, the number of upward interest rate adjustments per the modification agreement.	Numeric		2	
L-079	Number of Remaining Steps	For reperforming, modified step- rate loans, the number of upward interest rate adjustments remaining.	Numeric		2	
L-080	Next Step Rate	For reperforming, modified step- rate loans, the scheduled interest rate in effect at the next step-rate date.	Numeric	2.3	6	
L-081	Terminal Step Rate	For reperforming, modified step- rate loans, the maximum interest rate in effect following the final scheduled interest rate adjustment date. Once the interest rate reaches the Terminal Step Rate, it is fixed for the remaining term of the mortgage.	Numeric	2.3	6	
L-082	Terminal Step Date	For reperforming, modified step- rate loans, the final scheduled date on which the mortgage interest rate is scheduled to increase to its terminal step rate.	Date	MMCCYY	6	
L-083	Step Rate Adjustment Frequency	For reperforming, modified step- rate loans, the number of months between each interest rate adjustment.	Numeric		3	
L-084	Next Step Rate Adjustment Date	For reperforming, modified step- rate loans, the month and year that the interest rate is scheduled to increase.	Date	MMCCYY	6	
L-085	Months to Next Step Rate Adjustment Date	For reperforming, modified step- rate loans, the number of months from the current month to the next date on which the mortgage interest rate increases.	Numeric		3	
L-086	Periodic Step Cap Up Percent	For reperforming, modified step- rate loans, the maximum percentage points the interest rate may increase at each step rate adjustment date.	Numeric	2.3	6	
L-087	Origination Mortgage Loan Amount	For reperforming, modified fixed-rate and modified step-rate loans, the dollar amount of the loan in the security as stated on the note at the time the loans were originated or modified.	Numeric	9.2	12	Privacy Masking: Round to nearest thousand if > \$500
L-088	Origination Interest Rate	For reperforming, modified fixed-rate and modified step-rate loans, the interest rate of the loan as stated on the note at the time the loan was originated.	Numeric	2.3	6	If value <0 or >25, then the rate is considered not available (securities issued on or after 9/1/2017)



L-089	Origination Amortization Type	For reperforming, modified fixed-rate and modified step-rate loans, the classification of the loan as having either a fixed- or an adjustable-interest rate as stated on the note at the time the loan was originated.	FRM = Fixed-Rate ARM = Adjustable- Rate	String		3	
L-090	Origination Interest Only Loan Indicator	For reperforming, modified fixed-rate and modified step-rate loans, the indicator denoting whether the loan only required interest payments for a specified period beginning with the first payment date as stated on the note at the time the loan was originated.	Y = Yes N = No	String		1	
L-091	Origination First Payment Date	For reperforming, modified fixed-rate and modified step-rate loans, the month and year that the first scheduled payment on the loan was due as stated on the note at the time the loan was originated.		Date	MMCCYY	6	
L-092	Origination Maturity Date	For reperforming, modified fixed-rate and modified step-rate loans, the month and year in which the final payment on the loan was scheduled to be made at the time the loan was originated.		Date	MMCCYY	6	
L-093	Origination Loan Term	For reperforming, modified fixed-rate and modified step-rate loans, the number of months in which regularly scheduled borrower payments are due as stated on the note at the time the loan was originated.		Numeric		3	
L-094	Origination Loan- To-Value (LTV)	For reperforming, modified fixed-rate and modified step-rate loans, the ratio, expressed as a percentage, obtained by dividing the amount of the loan at origination by the value of the property. Property value reflects either the lesser of the sales price or the appraised property value for a purchase, or the appraised property value for a refinance.	999 = Not Available	Numeric		3	If value <1 or >998, then the ratio is considered not available (securities issued on or after 9/1/2017)
L-095	Origination Combined Loan- To-Value (CLTV)	For reperforming, modified fixed-rate and modified step-rate loans, the ratio, expressed as a percentage, obtained by dividing the amount of all known outstanding loans at origination by the value of the property. Property value reflects either the lesser of the sales price or the appraised property value for a purchase, or the appraised property value for a refinance.	999 = Not Available	Numeric		3	If value <1 or >998, then the ratio is considered not available (securities issued on or after 9/1/2017)





L-096	Origination Debt- To-Income Ratio Origination Credit	For reperforming, modified fixed-rate and modified step-rate loans, the ratio obtained by dividing the total monthly debt expense by the total monthly income of the borrower at the time the loan was originated. For reperforming, modified	999 = Not Available 9999 = Not Available	Numeric Numeric	3	If value <1 or >65, then the ratio is considered not available
E-091	Score	fixed-rate and modified step-rate loans, the standardized credit score used to evaluate the borrower during the loan origination process.	5555 - Not Available	Numenc	-	then the score is considered not available
L-098	FILLER					
L-099	FILLER					
L-100	FILLER					
L-101	Origination Loan Purpose	For reperforming, modified fixed-rate and modified step-rate loans, the classification of the loan as either a purchase money mortgage or a refinance mortgage at the time the loan was originated.	C = Refinance - Cash Out N = Refinance - No Cash Out R = Refinance - Not Specified P = Purchase 9 = Not Available	String	1	
L-102	Origination Occupancy Status	For reperforming, modified fixed-rate and modified step-rate loans, the classification describing the property occupancy status at the time the loan was originated.	P= Primary Residence S= Second Home I= Investment Property 9= Not Available	String	1	
L-103	Origination Channel	For reperforming, modified fixed-rate and modified step-rate loans, the origination channel used by the party that delivered the loan to the issuer.	R = Retail B = Broker C = Correspondent T = Third Party Origination - Not Specified 9 = Not Available	String	1	
L-104	Days Delinquent	The number of days for which a mortgage loan has been reported delinquent.	0 = Current 1 = 30-59 2 = 60-89 3 = 90-119 4 = 120+	Numeric	1	Applicable for monthly disclosure only
L-105	Loan Performance History	For reperforming, modified and modified step-rate loans, the coded string of values that describes the previous payment performance of the loan at the time of issuance. This string will contain 36 months of history for reperforming modified and modified step rate loans and 12 months for reinstated loans.		String	150	Not applicable for Freddie Mac securities



L-106	Loan Participation	The percentage of the loan that	1	Numeric	3.2	6	Populated for loans
L-100	Percent	is contributing to the security		Numeric	3.2	0	backing securities issued on or after 10/1/2017
							Date Effective: 7/2/2018
L-107	Property Valuation Method	Indicates the method by which the value of the subject property was obtained.	Appraisal (A) - The property value was obtained through an appraisal that was completed by a licensed or certified appraiser. Onsite Property Data Collection (P) - The property data collected onsite by a licensed or certified appraiser or other third-party and validated through a proprietary automated valuation model. GSE Targeted Refinance Programs (R) - The programs implemented by the GSEs for targeted refinance products. Includes Relief Refinance and Enhanced Relief Refinance and Enhanced Relief Refinance program loans. Commingled Supers may contain Fannie Mae Refi Plus or High LTV Refinance loans. Appraisal Waiver (W) - The appraisal is waived per applicable Selling Guide or negotiated terms. Appraisal waiver granted under Freddie Mac's Automated Collateral Evaluation (ACE) program.	String		1	Disclosure will be effective for loans backing pools issued as June 1, 2017. This disclosure will first appear with March 2020 issuances
			Commingled				



Company man
Supers may
contain loans with
appraisal waivers
granted under
Fannie Mae's
<u>Property</u>
Inspection Waiver
(<u>PIW)</u> program.
• Other (O) - Any
property valuation
method not
provided within
the other
enumerations.
Not Available (9)
- The Property
Valuation Method
is not available for
disclosure. Default
value for loans
backing pools
issued prior to
June 1, 2017.
Not Applicable (7) -
The Property
Valuation Method is
not applicable to the
loan product. The
disclosure is not
applicable for
modified fixed-rate
and step-rate loans.
and step-rate toans.

ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
L-108	Alternative Delinquency Resolution	Loss mitigation solution that resolves delinquencies and help homeowners remain in their homes in accordance with the servicer's contractual obligation, while allowing the loan to remain in the security.	• Payment Deferral (P) - For borrowers who have resolved a temporary hardship and can resume making their monthly mortgage payment but cannot afford either a full reinstatement or repayment plan to bring the loan current. The borrower can defer up to two months of missed principal and interest (P&I) payments. The amount is deferred into a non-interest- bearing balance due at mortgage loan maturity, or earlier upon the sale or	String		1	Applicable for monthly disclosure only. Effective beginning with the December 2020 factor date. Discloses the latest ADR plan completed by the borrower.



ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
			transfer of the				
			property, refinance				
			of the mortgage				
			loan, or payoff of the interest-bearing				
			UPB.				
			• COVID-19				
			Payment Deferral				
			(C) - For borrowers				
			who experienced a				
			COVID-19 related				
			hardship and can				
			resume making				
			their monthly				
			mortgage payment. The borrower can				
			defer up to 12				
			months of missed				
			P&I payments, out-				
			of-pocket escrow				
			advances paid to				
			third parties;				
			servicing advances				
			paid to third parties				
			in the ordinary				
			course of business				
			and not retained by				
			the servicer, if allowed by state				
			law. The amount is				
			deferred into a non-				
			interest-bearing				
			balance due at				
			mortgage loan				
			maturity or earlier				
			upon the sale or				
			transfer of the				
			property, refinance				
			of the mortgage				
			loan, or payoff of the interest-bearing				
			UPB.				
			Disaster Payment				
			Deferral (D) - For				
			borrowers who				
			experienced a				
			disaster related				
			hardship and can				
			resume making				
			their monthly				
			mortgage payment.				
			The borrower can				
			defer up to 12 months of missed				
			P&I payments, out-				
			of-pocket escrow				
			advances paid to				



ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
			third parties; servicing advances paid to third parties in the ordinary course of business and not retained by the servicer, if allowed by state law. The amount is deferred into a non-interest-bearing balance due at mortgage loan maturity or earlier upon the sale or transfer of the property, refinance of the mortgage loan, or payoff of the interest-bearing UPB. • Other (O) - The borrower has executed an Alternative Delinquency Resolution program other than the other provided enumerations. • Not Applicable (7) - An Alternative Delinquency Resolution is not applicable for the related mortgage loan. • Not Available (9) - The Alternative Delinquency Resolution is not available for disclosure.				
L-109	Number of Alternative Delinquency Resolutions	The total number of Alternative Delinquency Resolutions as reported by the servicer for a specific loan.	0-99	Numeric		2	Applicable for monthly disclosure only. Effective beginning with the December 2020 factor date.
L-110	Total Deferral Amount	The total non-interest-bearing deferral amount related to one or more Alternative Delinquency Resolutions.		Numeric	9.2	12	Privacy Masking: Round to nearest thousand if > \$500 Applicable for monthly disclosure only. Effective beginning with the





ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
							December 2020 factor date.
L-111	Borrower Assistance Plan	The type of assistance plan that the borrower is enrolled in that provides temporary mortgage payment relief or an opportunity to cure a mortgage delinquency over a defined period.	F = Forbearance Plan R = Repayment Plan T = Trial Period Plan O = Other Workout Plan N = No Workout Plan 7 = Not Applicable 9 = Not Available	Numeric		1	Applicable for monthly disclosure only.



SECURITY LEVEL FILE

Security Level File



The daily security level issuance file contains security level data including the pool factor and weighted averages for the mortgage-backed securities, including single-class resecuritizations. Information is provided as of the time of the issuance of the security. The monthly security level file has the same file layout. The monthly security level file provides updated information calculated based on the mortgage information reported to Freddie Mac by servicers. The same mortgage information is used by Freddie Mac to calculate monthly pool factors for the month in which the disclosure is provided. This data should be considered in conjunction with the information appearing in the applicable Freddie Mac Offering Circulars, as supplemented. The security data file includes the attribute names, definitions, enumerations, data types, formats, max lengths and implementation notes. In the case of single-class resecuritizations, information on the collateral backing the single-class securitization will be provided. Freddie Mac will publish three daily security files each business day in the morning and three monthly security level files. Most of Freddie Mac's securities will be in one file, but we will publish a second security file with the data for the following securities: Adjustable-Rate Mortgages (ARM), Modified, Reinstated & 75-Day payment delay Fixed-Rate PC securities.

ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Len gth	Precision	Implementation Notes
S-01	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3		
S-02	Security Identifier	The unique designation assigned to the security by the issuer.		String		6		
S-03	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9		
S-04	Security Factor Date	The month and year on which the corresponding factor is effective.		Date	MMCCYY	6		
S-05	Security Factor	The decimal value that, when multiplied by the Issuance Investor Security UPB amount, equals the Current Investor Security UPB amount.		Numeric	1.8	10	Rounded to the 8th decimal	For 55-Day Mirror Exchanges, the Security Factor will be < 1 in the Daily Issuance files.
S-06	Payment Delay Days	The indicator used to denote that the loans in the security participate in a 45 Day, 55 Day, or a 75 Day payment delay period at the time the security was issued.	45 = 45 Days 55 = 55 Days 75 = 75 Days	Numeric		2		
S-07	Security Data Correction Indicator	The indicator used to denote the data correction status of the security based on the current reporting period.	Y = Yes N = No	String		1		Applicable at Issuance & Monthly Disclosure
S-08	Security Status Indicator	The indicator used to denote the status of the security based on the current reporting period.	A = Active P = Paid Off C = Collapsed D = Dissolved	String		1		
S-09	Security Notification Indicator	The indicator used to denote whether the disclosure is preliminary and subject to change or final.	P = Preliminary F = Final 7 = Not Applicable	String		1		Applicable at Issuance & Monthly Disclosure





ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Len gth	Precision	Implementation Notes
S-10	Security Description	The unique designation of the security including abbreviated FED CODE, WA Net Interest Rate, Prefix and Security Identifier.		String		22		For Pseudopools only, Max Length is 23 characters
S-11	Issuer	The name of the entity that issued the security.	FNM = Fannie Mae FRE = Freddie Mac	String		3		
S-12	Issue Date	The date on which the security was issued.		Date	MMDDCCYY	8		Day value will be defaulted to "01"
S-13	Maturity Date	The month and year in which the final payment on the security is scheduled to be made at the time the security was issued.		Date	MMCCYY	6		
S-14	Updated Longest Maturity Date	The updated month and year in which the final payment on the security is scheduled to be made based on the longest maturity date of the remaining loans in the security.		Date	MMCCYY	6		Updated monthly, based on the longest loan level maturity date
S-15	Issuance Investor Security UPB	The aggregate unpaid principal balance of the loans as they contribute to the balance of the security at the time the security was issued.		Numeric	14.2	17	Truncated to whole number	
S-16	Current Investor Security UPB	The aggregate unpaid principal balance of the loans as they contribute to the current balance of the security.		Numeric	14.2	17		For 55-Day Mirror Exchanges, at issuance, the Current Investor Security UPE will be set to the current UPB of the underlying 45-day PC
S-17	WA Net Interest Rate	The weighted average interest rate of the loans less servicing fees and guarantor fees.		Numeric	2.3	6	Rounded to the 3rd decimal	For Pseudopools only, Format is 2.5, Max Length is 8, and Precision is rounded to the 5 th decimal.
S-18	WA Issuance Interest Rate	The weighted average interest rate of the loans in effect at the time the security was issued.		Numeric	2.3	6	Rounded to the 3rd decimal	
S-19	WA Current Interest Rate	The weighted average interest rate of the loans in effect during the current reporting period.		Numeric	2.3	6	Rounded to the 3rd decimal	Not applicable for Freddie Mac ARM For 55-Day Mirror Exchanges, at issuance, the WA Current Interest Rate will be set to the WA Current Interest Rate of the underlying 45-day PC.
S-20	WA Net Accrual Interest Rate	For adjustable-rate loans, the weighted average Interest Rate less servicing fees and quarantor fees.		Numeric	2.3	6	Rounded to the 3rd decimal	Not applicable for Freddie Mac ARMs





ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data	Format	Max		Implementation
				Туре	2 2 3 3 3 3 3	Len gth	Precision	Notes
S-21	WA Loan Term	The weighted average number of months in which regularly scheduled borrower payments are due.		Numeric		3		
S-22	WA Issuance Remaining Months to Maturity	The weighted average number of scheduled monthly payments that will reduce the Investor Loan UPB to zero, at the time the security was issued. For fixed-rate loans, this value takes into account the impact of any		Numeric		3		
S-23	WA Current Remaining Months to Maturity	curtailments. The weighted average number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero. For fixed-rate loans, this value takes into account the impact of any curtailments.		Numeric		3		For 55-Day Mirror Exchanges, at issuance, the WA Current RMM will be set to the WA Current RMM of the underlying 45-day PC. Value can be negative
S-24	WA Loan Age	The weighted average number of scheduled payments from the time the loans were originated or modified up to and including the current reporting period.		Numeric		3	Rounded to nearest integer	Value can be negative
S-25	WA Mortgage Loan Amount	The weighted average dollar amount of the loans as stated on the notes at the time the loans were originated or modified. For reperforming, modified fixed-rate and modified step-rate loans, this value represents both the interest bearing and non-interest bearing amount.		Numeric	9.2	12	Rounded to the 2nd decimal	
S-26	Average Mortgage Loan Amount	The simple average dollar amount of the loans as stated on the notes at the time the loans were originated or modified. For reperforming, modified fixed-rate and modified step-rate loans, this value represents both the interest bearing and non-interest bearing amount.		Numeric	9.2	12	Rounded to the 2nd decimal	





ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data	Format	Max	Precision	Implementation
				Туре		Len gth	Precision	Notes
S-27	WA Loan-To-Value (LTV)	The weighted average ratio, expressed as a percentage, obtained by dividing the amount of the loans at origination by the value of the properties. Property value reflects either the lesser of the sales price or the appraised property value for a purchase, or the appraised property value for a refinance. For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.		Numeric		3	Rounded to the nearest integer	If value <1 or >998, then the ratio is considered not available (securities issued on or after 9/1/2017)
S-28	WA Combined Loan- To-Value (CLTV)	The weighted average ratio, expressed as a percentage, obtained by dividing the amount of all known outstanding loans at origination by the value of the properties. Property value reflects either the lesser of the sales price or the appraised property value for a purchase, or the appraised property value for a refinance. For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.		Numeric		3	Rounded to the nearest integer	If value <1 or >998, then the ratio is considered not available (securities issued on or after 9/1/2017)
S-29	WA Debt-To-Income (DTI)	The weighted average ratio obtained by dividing the total monthly debt expenses by the total monthly incomes of the borrowers at the time the loans were originated or modified.		Numeric		3	Rounded to the nearest integer	If value <1 or >65, then the ratio is considered not available
S-30	WA Borrower Credit Score	The weighted average standardized credit score used to evaluate the borrower during the loan origination process. For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.	9999 = Not Available	Numeric		4	Rounded to the nearest integer	If value <300 or >850, then the score is considered not available
S-31	FILLER							
S-32	FILLER							
S-33	Loan Count	The total number of loans in the security.		Numeric		9		





ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data	Format	Max		Implementation
		7		Туре		Len	Precision	Notes
S-34	Third Party Origination UPB Percent	The percentage of the aggregate Investor Loan UPB that were originated by a third party, to include Broker and Correspondent originations. For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.		Numeric	3.2	6	Rounded to the 2nd decimal	
S-35	Seller Name	The name of the entity that sold the loans to the issuer.		String		100		For Multilenders this field will be MULTIPLE For Giants, this field will be e SCR (Single-Class Resecuritization) For 55-day Mirror Exchanges, this field will be SCR-MIRROR Field will not be updated after issuance, for mergers and acquisitions
S-36	Seller City	The city of the address of the entity that sold the loans to the issuer.		String		50		For Multilenders and Giants, this field will be blank.
S-37	Seller State	The state or territory of the address of the entity that sold the loans to the issuer.		String		2		For Multilenders and Giants this field will be blank.
S-38	Servicer Name	The name of the entity that services the loan during the current reporting period.		String		100		For Multilenders this field will be MULTIPLE For Giants, this field will be SCR (Single-Class Resecuritization) - For 55-day Mirror Exchanges, this field will reflect SCR-MIRROR Field will not be updated after issuance, regardless of mergers and acquisitions.
S-39	Servicer City	The city of the address of the entity that services the loan.		String		50		For Multilenders and Giants, this field will be blank
S-40	Servicer State	The state or territory of the address of the entity that services the loan.		String		2		For Multilenders and Giants this field will be blank
S-41	Involuntary Loan Purchases (Prior Month UPB) Formerly Known As: Delinquent Loans Purchased (Prior Month UPB)	The aggregate prior period Investor Loan UPB of the loans that were removed from the security due to involuntary reasons during the current reporting period. Involuntary reasons include loan		Numeric	14.2	17		Monthly Security file only Effective June 2019 (BD4) Attribute label will be updated after June 2019





ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data	Format	Max		Implementation
	Attribute Hame	Addition Delinition	Couco, Enumerations	Type	Tomat	Len	Precision	Notes
		delinquencies, loss mitigation efforts and lender repurchases.						
S-42	Involuntary Loan Purchases (Loan Count) Formerly Known As: Delinquent Loans Purchased (Loan Count)	The number of loans that were removed from the security due to involuntary reasons during the current reporting period. Involuntary reasons include loan delinquencies, loss mitigation efforts and lender repurchases.		Numeric		9		Monthly Security file only Effective June 2019 (BD4) Attribute label will be updated after June 2019
S-43	Eligible for Resecuritization	The indicator used to denote that the security is eligible for resecuritization.	Y = Yes N = No	String		1		
S-44	Notes	Additional information about the loans in the security.		String		204 8		
S-45	Notes Ongoing	Additional information about the loans in the security.		String		204 8		Monthly Security file only
S-46	Interest Only Security Indicator	The indicator denoting whether the loans only require interest payments for a specified period beginning with the first payment date.	Y = Yes N = No	String		1		
S-47	WA Months to Amortization	For interest-only loans, the weighted average number of months from the current month to the first scheduled principal and interest payment date.		Numeric		3	Rounded to nearest whole number	If Interest Only Security Indicator = "Y"
S-48	Prepayment Penalty Indicator	The indicator denoting whether the security is subject to a penalty for early payment of principal.	Y = Yes N = No 9 = Not Available	String		1		
S-49	Reduced Minimum Servicing Indicator	The indicator denoting whether the loans in the security may have a reduced servicing fee.	Y = Yes N = No 9 = Not Available	String		1		
S-50	Subtype	For an adjustable-rate mortgage, the code that identifies ARM product characteristics and features.		String		20		Not applicable for Freddie Mac ARMs
S-51	Index	For adjustable-rate loans, the description of the index on which adjustments to the interest rate are based.	See Appendix A	String		3		As of 8/28/17, the Index description string will no longer be disclosed, only the index code; see Appendix A.
S-52	WA Mortgage Margin	For adjustable-rate loans, the weighted average number of percentage points to be added to the	77.777 - Not Applicable	Numeric	2.3	6	Rounded to the 3rd decimal place	Issuance value will be populated in the monthly files.





ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data	Format	Max	Dragician	Implementation
				Туре		Len gth	Precision	Notes
		index to arrive at the new interest rate.						
S-53	WA MBS PC Margin	For adjustable-rate loans, the weighted average mortgage margin less servicing fees and guarantor fees.	77.777 - Not Applicable	Numeric	2.3	6	Rounded to the 3rd decimal place	If all loan level values = 77.777, then set to 77.777; else exclude from weighted average calculation.
S-54	Interest Rate Adjustment Frequency	For adjustable-rate loans, the number of months, excluding any fixed-rate period, between scheduled rate changes.	55.555 = Mixed	Numeric		3		
S-55	Interest Rate Lookback	For adjustable-rate loans, the number of calendar days prior to the interest rate change date used to determine the effective index value required to calculate the next interest rate.	55.555 = Mixed	Numeric		3		
S-56	Payment Adjustment Frequency	For adjustable-rate loans, the number of months between scheduled payment changes. For a security with an initial fixed-rate period, the payment adjustment frequency is the number of months between subsequent payment changes.	555 = Mixed	Numeric		3		
S-57	Payment Lookback	For negative amortizing adjustable-rate loans, the number of days prior to a payment effective date used to determine value when calculating a principal and interest payment.		Numeric		3		
S-58	Convertibility Indicator	For adjustable-rate loans, the indicator denoting whether the loans in the security have a feature that allows the borrower to convert from an adjustable rate to a fixed rate.	Y = Yes N = No 9 = Not Available	String		1		
S-59	Negative Amortization Indicator	For adjustable-rate loans, the indicator used to denote that the loans in the security allow negative amortization.	Y = Yes N = No 9 = Not Available	String		1		
S-60	Negative Amortization Factor	For negative amortizing adjustable-rate loans, the decimal value that, when multiplied by the Issuance Investor Security UPB amount, equals the Negative Amortization amount.		Numeric	1.8	10	Rounded to the 8th decimal place	If Negative Amortization Indicator = "Y"
S-61	WA Negative Amortization Limit	For negative amortizing adjustable-rate loans, the weighted average Negative Amortization	99.999 = Not Available	Numeric	2.3	6		Not applicable to Freddie Mac ARMs





ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Len gth	Precision	Implementation Notes
		Limit of the loans in the security.				3*		
S-62	Initial Fixed Rate Period	For adjustable-rate loans, the number of calendar months between the first full month the loans accrue interest and the first interest rate change date.	00 = <=6 Months 01 = 7-18 Months 02 = 19-30 Months 03 = 31-42 Months 04 = 43-54 Months 05 = 55-66 Months 06 = 67-78 Months 07 = 79-90 Months 08 = 91-102 Months 10 = 115-126 Months 11 = 127-138 Months 12 = 139-150 Months 13 = 151-162 Months 14 = 163-174 Months 15 = 175-186 Months 16 = >186 Months 16 = >186 Months	String		2		
S-63	First Rate Adjustment Date	For adjustable-rate loans, the earliest First Rate Adjustment Date of the loans in the security.		Date	MMCCYY	6		Not applicable for Freddie Mac ARMs
S-64	First Payment Adjustment Date	For adjustable-rate loans, the earliest First Payment Adjustment Date of the loans in the security.		Date	MMCCYY	6		Not applicable for Freddie Mac ARMs
S-65	WA Months to Next Rate Adjustment Date	For adjustable-rate loans, the weighted average number of months from the current month to the next interest rate change date.		Numeric		3	Rounded to nearest whole number	
S-66	WA Life Interest Rate Ceiling	For adjustable-rate loans, the weighted average lifetime maximum interest rate.	77.777 - Not Applicable	Numeric	2.3	6	Rounded to the 3rd decimal	Issuance value will be populated in the monthly files. If all loan level values = 77.777, then set to 77.777; else exclude from weighted average calculation
S-67	WA Net Life Interest Rate Ceiling	For adjustable-rate loans, the weighted average maximum interest rate less servicing fees and guarantor fees.	77.777 - Not Applicable	Numeric	2.3	6	Rounded to the 3rd decimal	If all loan level values = 77.777, then set to 77.777; else exclude from weighted average calculation
S-68	WA Life Interest Rate Floor	For adjustable-rate loans, the weighted average lifetime minimum interest rate.	77.777 - Not Applicable	Numeric	2.3	6	Rounded to the 3rd decimal	Issuance field, will be populated with 77.777 in monthly files. If any loan level values = 77.777, then set to 77.777; else exclude from weighted average calculation





ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data	Format	Max		Implementation
ID.	Attribute Name	Attribute Definition	Codes / Enumerations	Type	Format	Len	Precision	Notes
S-69	WA Net Life Interest Rate Floor	For adjustable-rate loans, the weighted average minimum interest rate less servicing fees and guarantor fees.	77.777 - Not Applicable	Numeric	2.3	6	Rounded to the 3rd decimal	If any loan level value = 77.777, set value to 77.777; else exclude from weighted average calculation
S-70	Initial Interest Rate Cap Up %	For adjustable-rate loans, the maximum percentage points the interest rate can adjust upward at the first interest rate change date.	55.555 = Mixed 77.777 - Not Applicable	Numeric	2.3	6		
S-71	Initial Interest Rate Cap Down %	For adjustable-rate loans, the maximum percentage points the interest rate can adjust downward at the first interest rate change date.	55.555 = Mixed 77.777 - Not Applicable	Numeric	2.3	6		
S-72	Periodic Interest Rate Cap Up %	For adjustable-rate loans, the maximum percentage points the interest rate can adjust upward at each interest rate change date after the first interest rate change date.	55.555 = Mixed 77.777 - Not Applicable	Numeric	2.3	6		
S-73	Periodic Interest Rate Cap Down %	For adjustable-rate loans, the maximum percentage points the interest rate can adjust downward at each interest rate change date after the first interest rate change date.	55.555 = Mixed 77.777 - Not Applicable	Numeric	2.3	6		
S-74	Initial Step Fixed- Rate Period	For reperforming, modified step-rate loans, the number of months between the first payment date of the modified loan and the first step rate adjustment.	00 = <=6 Months 01 = 7-18 Months 02 = 19-30 Months 03 = 31-42 Months 04 = 43-54 Months 05 = 55-66 Months 06 = 67-78 Months 07 = 79-90 Months 08 = 91-102 Months 09 = 103-114 Months 10 = 115-126 Months 11 = 127-138 Months 12 = 139-150 Months 13 = 151-162 Months 14 = 163-174 Months 15 = 175-186 Months 16 =>186 Months 16 =>186 Months 17 = 175-186 Months 18 = 186 Months 19 = 186 Months 10 = 186 Months 10 = 186 Months 11 = 186 Months 12 = 186 Months	String		2		
S-75	Step Rate Adjustment Frequency	For reperforming, modified step-rate loans, the number of months between each interest rate adjustment.	555 = Mixed	Numeric		3		
S-76	Next Step Rate Adjustment Date	For reperforming, modified step-rate loans, the month and year that the interest rate is scheduled to increase.		Date	MMCCYY	6		
S-77	WA Months to Next Step Rate Adjustment	For reperforming, modified step-rate loans, the weighted average number of months from the current month to the next date on which the mortgage interest rate increases.		Numeric		3	Rounded to whole number	





ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data	Format	Max		Implementation
				Туре		Len gth	Precision	Notes
S-78	Periodic Step Rate Cap Up %	For reperforming, modified step-rate loans, the maximum percentage points the interest rate may increase at each step rate adjustment date.	55.555 = Mixed	Numeric	2.3	6		
S-79	WA Origination Mortgage Loan Amount	For reperforming, modified fixed-rate and modified step-rate loans, the weighted average dollar amount of the loans in the security as stated on the notes at the time the loans were originated.		Numeric	9.2	12	Rounded to the 2nd decimal	
S-80	Average Origination Mortgage Loan Amount	For reperforming, modified fixed-rate and modified step-rate loans, the simple average dollar amount of the loans in the security as stated on the notes at the time the loans were originated. This value represents both the interest bearing and non-interest bearing amount.		Numeric	9.2	12	Rounded to the 2nd decimal	
S-81	WA Origination Interest Rate	For reperforming, modified fixed-rate and modified step-rate loans, the weighted average interest rate of the loans as stated on the note at the time the loans were originated.		Numeric	2.3	6	Rounded to the 3rd decimal	
S-82	WA Origination Loan Term	For reperforming, modified fixed-rate and modified step-rate loans, the weighted average number of months in which regularly scheduled borrower payments are due as stated on the note at the time the loans were originated.		Numeric		3		
S-83	WA Origination Loan-To-Value (LTV)	For reperforming, modified fixed-rate and modified step-rate loans, the weighted average ratio, expressed as a percentage, obtained by dividing the amount of the loans at origination by the values of the properties. Property values reflect either the lesser of the sales price or the appraised property value for a purchase, or the appraised property value for a refinance.		Numeric		3		If value <1 or >998, then the ratio is considered not available (securities issued on or after 9/1/2017)





ID	Attable at a Managa	Attailmet Definition	0-1/5	D-1-	F	1 14		l
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Len gth	Precision	Implementation Notes
S-84	WA Origination Combined Loan-To- Value (CLTV)	For reperforming, modified fixed-rate and modified step-rate loans, the weighted average ratio, expressed as a percentage, obtained by dividing the amount of all known outstanding loans at origination by the value of the property. Property values reflect either the lesser of the		Numeric		3		If value <1 or >998, then the ratio is considered not available (securities issued on or after 9/1/2017)
		sales price or the appraised property value for a purchase, or the appraised property value for a refinance.						
S-85	WA Origination Debt-To-Income (DTI)	For reperforming, modified fixed-rate and modified step-rate loans, the weighted average ratio obtained by dividing the total monthly debt expense by the total monthly income of the borrower at the time the loan was originated.		Numeric		3		If value <1 or >65, then the ratio is considered not available
S-86	WA Origination Credit Score	For reperforming, modified fixed-rate and modified step-rate loans, the weighted average standardized credit score used to evaluate the borrower during the loan origination process.		Numeric		4		If value <300 or >850, then the score is considered not available
S-87	FILLER							
S-88	FILLER							
S-89	Origination Third Party Origination UPB Percent	For reperforming, modified fixed-rate and modified step rate loans, the percentage of the aggregate Investor Loan UPB that was originated by a third party, to include Broker and Correspondent originations.		Numeric	3.2	6		
S-90	WA Estimated Loan- To-Value (ELTV)	For reinstated, reperforming, modified fixed-rate and modified step-rate loans, the weighted average ratio obtained by dividing the outstanding balance of the mortgage loan by the estimated current value of the property obtained by the issuer, at the time of issuance.		Numeric		3		If value <1 or >998, then the ratio is considered not available (only applicable to securities issued on or after 9/1/2017)
S-91	WA Updated Credit Score	For reinstated, reperforming, modified fixed-rate and modified step-rate loans, the weighted average most recently available standardized credit score		Numeric		4		If value <300 or >850, then the score is considered not available





ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Len gth	Precision	Implementation Notes
		provided at the time of issuance.						



SECURITY SUPPLEMENTAL FILE



The daily security supplemental file combines several different types of records within a single file. The file contains quartile information and the stratifications for the mortgage-backed securities, including single-class resecuritizations. Information is provided as of the time of the issuance of the security. The monthly security supplemental file has updated information calculated based on the mortgage information reported to Freddie Mac by servicers. This data should be considered in conjunction with the information appearing in the applicable Freddie Mac Offering Circulars, as supplemented.

The security supplemental data file includes the attribute names, definitions, enumerations, data types, formats, max lengths and implementation notes. In the case of single-class resecuritizations, information on the collateral backing the single-class securitization will be provided. Freddie Mac will publish two daily security supplemental files each business day in the morning and two monthly security supplemental files. Most of Freddie Mac's securities will be in one file, but we will publish a second security supplemental file with the data for the following securities: Adjustable-Rate Mortgages (ARM), Modified, Reinstated & 75-Day payment delay Fixed-Rate PC securities. To find prefixes included in each file, please refer to the Introduction section.



Record Type #	Security Supplemental File Record Type Description
46	Alternative Delinquency Resolution
47	Number of Alternative Delinquency Resolutions
48	Borrower Assistance Plan History





			Quartile	es			
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-001	Record Type = 1	Quartiles		String		2	
SS-002	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-003	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-004	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-005	Quartile	Based on the Current Investor UPB for all the active loans in a security, distributed across the following quartile data points: MIN, 25%, MED, 75%, MAX	MIN 25% MED 75% MAX	String		3	
SS-006	Mortgage Loan Amount	The dollar amount of the loan as stated on the note at the time the loan was originated or modified. For reperforming, modified fixed-rate and modified step-rate loans, this value represents both the interest bearing and non-interest bearing amount.		Numeric	14.2	17	
SS-007	Interest Rate	The interest rate of the loan in effect during the current reporting period.		Numeric	2.3	6	Not applicable to ARMs
SS-008	Current Net Interest Rate	The interest rate of the loan in effect during the current reporting period less servicing fees and quarantor fees.		Numeric	2.3	6	
SS-009	Loan Term	The number of months in which regularly scheduled borrower payments are due.		Numeric		3	
SS-010	Remaining Months to Maturity	The number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero. For fixed-rate loans, this value takes into account the impact of any curtailments.		Numeric		3	
SS-011	Loan Age	The number of scheduled payments from the time the loan was originated and modified up to and including the current reporting period.		Numeric		4	





			Quarti	les			
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-012	Loan-To-Value (LTV)	The ratio, expressed as a percentage, obtained by dividing the amount of the loan at origination by the value of the property. Property value reflects either the lesser of the sales price or the appraised property value for a purchase, or the appraised property value for a refinance.		Numeric		3	
		For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.					
SS-013	Combined Loan- To-Value (CLTV)	The ratio, expressed as a percentage, obtained by dividing the amount of all known outstanding loans at origination by the value of the property.		Numeric		3	
		Property value reflects either the lesser of the sales price or the appraised property value for a purchase, or the appraised property value for a refinance.					
		For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.					
SS-014	Debt-To-Income (DTI)	The ratio obtained by dividing the total monthly debt expense by the total monthly income of the borrower at the time the loan was originated or modified.		Numeric		3	
SS-015	Borrower Credit Score	The standardized credit score used to evaluate the borrower during the loan origination process. For reperforming, modified fixed-rate and		Numeric		4	
		modified step-rate loans, this value will be blank.					
SS-016	FILLER						
SS-017 SS-018	FILLER Updated Credit Score	For reinstated, reperforming, modified fixed-rate and modified step-rate loans, the most recently available standardized credit score provided at the time of issuance.		Numeric		4	
			Quarti	les			



ID	Attribute Name	Attribute Definition	Codes /	Data	Format	Max	Implementation Notes
			Enumerations	Type		Length	
SS-019	Estimated Loan- To-Value (ELTV)	For reinstated, reperforming, modified fixed-rate and modified step-rate loans, the ratio obtained by dividing the outstanding balance of		Numeric		3	
		the mortgage loan by the estimated current value of the property obtained by the issuer, at the time of issuance.					
			Next Rate Change	Date (NRCD)			
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-020	Record Type = 2	Next Rate Change Date (NRCD)		String		2	
SS-021	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-022	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-023	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-024	Next Interest Rate Adjustment Date	For adjustable-rate loans, the month and year that the interest rate is next subject to change.		Date	MMCCYY	6	
SS-025	Months to Next Interest Rate Adjustment Date	For the stratified attribute of adjustable-rate loans, the number of months from the current month to the next interest rate change date.		Numeric		3	Rounded to the nearest integer
SS-026	Interest Only First Principal and Interest Payment Date	For the stratified attribute for interest only adjustable-rate loans, the month and year that the first monthly scheduled fully amortizing principal and interest payment is due.		Date	MMCCYY	6	
SS-027	Aggregate Investor Loan UPB	For the stratified attribute of adjustable-rate loans, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-028	Percentage Investor Security UPB	For the stratified attribute of adjustable-rate loans, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-029	Aggregate Loan Count	For the stratified attribute of adjustable-rate loans, the total number of loans in the security.		Numeric		9	
			Next Rate Change	Date (NRCD)			



ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
S-030	Percentage Loan Count	For the stratified attribute of adjustable-rate loans, the percentage of loans in the security.		Numeric	3.2	6	
S-031	WA Current Interest Rate	For the stratified attribute of adjustable-rate loans, the weighted average interest rate of the loans in effect during the current reporting period.		Numeric	2.3	6	Not Available
S-032	Current High Interest Rate	For the stratified attribute of adjustable-rate loans, the highest interest rate of the loans in effect during the current reporting period.		Numeric	2.3	6	Not Available
S-033	Current Low Interest Rate	For the stratified attribute of adjustable-rate loans, the lowest interest rate of the loans in effect during the current reporting period.		Numeric	2.3	6	Not Available
S-034	WA Current Net Interest Rate	For the stratified attribute of adjustable-rate loans, the weighted average interest rate of the loans in effect during the current reporting period less servicing fees and quarantor fees.		Numeric	2.3	6	
S-035	Current High Net Interest Rate	For the stratified attribute of adjustable-rate loans, the highest value interest rate of the loans in effect during the current reporting period less servicing fees and guarantor fees.		Numeric	2.3	6	
S-036	Current Low Net Interest Rate	For the stratified attribute of adjustable-rate loans, the lowest value interest rate of the loans in effect during the current reporting period less servicing fees and guarantor fees.		Numeric	2.3	6	
SS-037	WA Mortgage Margin	For the stratified attribute of adjustable-rate loans, the weighted average number of percentage points to be added to the index to arrive at the new interest rate.		Numeric	2.3	6	Not Available
S-038	High Mortgage Margin	For the stratified attribute of adjustable-rate loans, the highest number of percentage points to be added to the index to arrive at the new interest rate.		Numeric	2.3	6	Not Available





ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-039	Low Mortgage Margin	For the stratified attribute of adjustable-rate loans, the lowest number of percentage points to be added to the index to arrive at the new interest rate.		Numeric	2.3	6	Not Available
SS-040	WA MBS PC Margin	For the stratified attribute of adjustable-rate loans, the weighted average mortgage margin less servicing fees and guarantor fees.		Numeric	2.3	6	
SS-041	MBS PC Margin High	For the stratified attribute of adjustable-rate loans, the highest value mortgage margin less servicing fees and guarantor fees.		Numeric	2.3	6	
SS-042	MBS PC Margin Low	For the stratified attribute of adjustable-rate loans, the lowest value mortgage margin less servicing fees and guarantor fees.		Numeric	2.3	6	
SS-043	WA Life Ceiling Interest Rate	For the stratified attribute of adjustable-rate loans, the weighted average lifetime maximum interest rate.		Numeric	2.3	6	Not Available
SS-044	Life Ceiling High Interest Rate	For the stratified attribute of adjustable-rate loans, the highest value lifetime maximum interest rate.		Numeric	2.3	6	Not Available
SS-045	Life Ceiling Low Interest Rate	For the stratified attribute of adjustable-rate loans, the lowest value lifetime maximum interest rate.		Numeric	2.3	6	Not Available
SS-046	WA Life Ceiling Net Interest Rate	For the stratified attribute of adjustable-rate loans, the weighted average maximum interest rate, less servicing fees and guarantor fees.		Numeric	2.3	6	
SS-047	Life Ceiling High Net Interest Rate	For the stratified attribute of adjustable-rate loans, the highest value maximum interest rate, less servicing fees and guarantor fees.		Numeric	2.3	6	
SS-048	Life Ceiling Low Net Interest Rate	For the stratified attribute of adjustable-rate loans, the lowest value maximum interest rate, less servicing fees and guarantor fees.		Numeric	2.3	6	
SS-049	WA Life Floor Interest Rate	For the stratified attribute of adjustable-rate loans, the weighted average lifetime minimum interest rate.		Numeric	2.3	6	Not Available



ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-050	Life Floor High Interest Rate	For the stratified attribute of adjustable-rate loans, the highest value lifetime minimum interest rate.		Numeric	2.3	6	Not Available
SS-051	Life Floor Low Interest Rate	For the stratified attribute of adjustable-rate loans, the lowest value lifetime minimum interest rate.		Numeric	2.3	6	Not Available
SS-052	WA Life Floor Net Interest Rate	For the stratified attribute of adjustable-rate loans, the weighted average minimum interest rate less servicing fees and quarantor fees.		Numeric	2.3	6	Will be blank if any loan level =77.777
SS-053	Life Floor High Net Interest Rate	For the stratified attribute of adjustable-rate loans, the highest value minimum interest rate less servicing fees and quarantor fees.		Numeric	2.3	6	Will be blank if any loan level =77.777
SS-054	Life Floor Low Net Interest Rate	For the stratified attribute of adjustable-rate loans, the highest value minimum interest rate less servicing fees and guarantor fees.		Numeric	2.3	6	Will be blank if any loan level =77.777



	Loan-To-Value (LTV) Not Available Stratification									
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes			
SS-055	Record Type = 3	Loan-To-Value (LTV) Not Available Stratification For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.		String		2	If security characteristics apply			
SS-056	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3				
SS-057	Security Identifier	The unique designation assigned to the security by the issuer.		String		6				
SS-058	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9				
SS-059	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17				
SS-060	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6				
SS-061	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9				
SS-062	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6				



	I				ID Attribute Name Attribute Definition Codes / Date Formet May Implementation Nates										
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes								
SS-063	Record Type = 4	Combined Loan-To-Value (CLTV) Not Available Stratification		String		2	If security characteristics apply								
		For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.													
SS-064	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3									
SS-065	Security Identifier	The unique designation assigned to the security by the issuer.		String		6									
SS-066	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9									
SS-067	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17									
SS-068	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6									
SS-069	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9									
SS-070	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6									



	Debt-To-Income (DTI) Not Available Stratification									
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes			
SS-071	Record Type = 5	Debt-To-Income (DTI) Not Available Stratification		String		2	If security characteristics apply			
SS-072	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3				
SS-073	Security Identifier	The unique designation assigned to the security by the issuer.		String		6				
SS-074	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9				
SS-075	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17				
SS-076	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6				
SS-077	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9				
SS-078	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6				



		Borrowe	er Credit Score Not A	vailable Stratifi	ication		
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-079	Record Type = 6	Borrower Credit Score Not Available Stratification		Numeric		4	
SS-080	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-081	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-082	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-083	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric		17	
SS-084	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric		6	
SS-085	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-086	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric		6	





			Days Delinquent S	tratification			
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-087	Record Type = 7	Days Delinquent Stratification		String		2	Monthly disclosure
SS-088	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-089	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-090	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-091	Days Delinquent	The number of days for which a mortgage loan has been reported delinquent.	1 = 30-59 2 = 60-89 3 = 90-119 4 = 120+	String		1	
SS-092	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-093	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-094	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-095	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	





			Number of Borrowers	Stratification			
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-096	Record Type = 8	Number of Borrowers Stratification		String		2	
SS-097	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-098	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS- 099	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-100	Number of Borrowers	The number of borrowers who, at the time the loan is originated, are obligated to repay the loan.	1 2 > 2 99 = Not Available	String		2	
SS-101	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-102	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-103	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-104	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	





			First Time Home Buye	er Stratification			
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-105	Record Type = 9	First Time Home Buyer Stratification		String		2	
SS-106	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-107	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-108	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-109	First Time Home Buyer	The indicator denoting whether a borrower on the loan qualifies as a first-time homebuyer.	Y = Yes N = No 9 = Not Available	String		1	
SS-110	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-111	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-112	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-113	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	





			Loan Purpose Stra	atification			
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-114	Record Type = 10	Loan Purpose Stratification		String		2	
SS-115	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-116	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-117	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-118	Loan Purpose	The classification describing the purpose of the loan.	C = Refinance - Cash Out N = Refinance - No Cash Out R = Refinance - Not Specified P = Purchase M = Modified - Loss Mitigation 9 = Not Available	String		1	
SS-119	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.	o = 11007 (Validable)	Numeric	14.2	17	
SS-120	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-121	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-122	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	



			Occupancy Status S	Stratification			
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-123	Record Type = 11	Occupancy Status Stratification		String		2	
SS-124	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-125	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-126	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-127	Occupancy Status	The classification describing the property occupancy status at the time the loan was originated. For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.	P = Primary Residence S = Second Home I = Investment Property 9 = Not Available	String		1	
SS-128	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-129	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-130	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-131	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

	Number of Units Stratification										
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes				
SS-132	Record Type = 12	Number of Units Stratification		String		2					
SS-133	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3					
SS-134	Security Identifier	The unique designation assigned to the security by the issuer.		String		6					
SS-135	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9					





SS-136 SS-137 SS-138	Aggregate Investor Loan UPB Percentage Investor Loan UPB Aggregate Loan	The number of dwelling units in the mortgaged property at the time the loan was originated. For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security. For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security. For the stratified attribute,	1 = 1 2 = 2 3 = 3 4 = 4 99 = Not Available	Numeric Numeric Numeric	3.2	17 6	
SS-140	Percentage Loan Count	the total number of loans in the security. For the stratified attribute, the percentage of loans in		Numeric	3.2	6	
		the security.					
			Property Type Stra				
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-141	Record Type = 13	Property Type Stratification		String		2	
SS-142	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-143	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-144	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-145	Property Type	The classification describing the type of property that secures the loan.	CP = Cooperative CO = Condominium PU = Planned Unit Development SF = Single-Family MH = Manufactured Housing 99 = Not Available	String		2	
SS-146	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-147	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-148	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-149	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	





			Channel Stratif	fication			
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-150	Record Type = 14	Channel Stratification		String		2	
SS-151	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-152	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-153	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-154	Channel	The origination channel used by the party that delivered the loan to the issuer. For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.	R = Retail B = Broker C = Correspondent T = Third Party Origination - Not Specified 9 = Not Available	String		1	
SS-155	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-156	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-157	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-158	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	





			Property State St	ratification			
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-159	Record Type = 15	Property State Stratification		String		2	
SS-160	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-161	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-162	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-163	Property State	The abbreviation denoting the location of the property securing the loan.	See Appendix A	String		2	
SS-164	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-165	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-166	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-167	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	



			Seller Name Stra	tification			
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-168	Record Type = 16	Seller Name Stratification		String		2	
SS-169	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-170	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-171	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-172	Seller Name	The name of the entity that sold the loan to the issuer.		String		100	Will not be updated after issuance, regardless of mergers/acquisitions
SS-173	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-174	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-175	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-176	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	
SS-177	Minimum Loan Age	For the stratified attribute, the minimum number of scheduled payments from the time the loan was originated or modified up to and including the current reporting period.		Numeric		3	
SS-178	Maximum Loan Age	For the stratified attribute, the maximum number of scheduled payments from the time the loan was originated or modified to and including the current reporting period.		Numeric		3	
SS-179	Minimum Interest Rate	For the stratified attribute, the minimum interest rate of the loan in effect during the current reporting period.		Numeric	2.3	6	
SS-180	Maximum Interest Rate	For the stratified attribute, the maximum interest rate of the loan in effect during the current reporting period.		Numeric	2.3	6	
SS-181	Minimum Remaining Months to Maturity	For the stratified attribute, the minimum number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero.		Numeric		3	



			Seller Name Stra	tification			
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-182	Maximum Remaining Months to Maturity	For the stratified attribute, the maximum number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero.		Numeric		3	
SS-183	WA Loan Age	For the stratified attribute, the weighted average number of scheduled payments from the time the loan was originated or modified up to and including the current reporting period.		Numeric		3	
SS-184	WA Interest Rate	For the stratified attribute, the weighted average interest rate of the loan in effect during the current reporting period.		Numeric	2.3	6	
SS-185	WA Remaining Months to Maturity	For the stratified attribute, the weighted average number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero.		Numeric		3	





			Servicer Name St	ratification			
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-186	Record Type = 17	Servicer Name Stratification		String		2	
SS-187	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-188	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-189	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-190	Servicer Name	The name of the entity that services the loan during the current reporting period. Will reflect servicer names contributing > 1% of the Current Investor		String		100	
SS-191	Aggregate Investor Loan UPB	Security UPB. For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-192	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-193	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-194	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	
SS-195	Minimum Loan Age	For the stratified attribute, the minimum number of scheduled payments from the time the loan was originated or modified up to and including the current reporting period.		Numeric		3	
SS-196	Maximum Loan Age	For the stratified attribute, the maximum number of scheduled payments from the time the loan was originated or modified up to and including the current reporting period.		Numeric		3	
SS-197	Minimum Interest Rate	For the stratified attribute, the minimum interest rate of the loan in effect during the current reporting period.		Numeric	2.3	6	
SS-198	Maximum Interest Rate	For the stratified attribute, the maximum interest rate of the loan in effect during the current reporting period.		Numeric	2.3	6	



			Servicer Name St	ratification			
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-199	Minimum Remaining Months to Maturity	For the stratified attribute, the minimum number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero.		Numeric		3	
SS-200	Maximum Remaining Months to Maturity	For the stratified attribute, the maximum number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero.		Numeric		3	
SS-201	WA Loan Age	For the stratified attribute, the weighted average number of scheduled payments from the time the loan was originated or modified to and including the current reporting period.		Numeric		3	
SS-202	WA Interest Rate	For the stratified attribute, the weighted average interest rate of the loan in effect during the current reporting period.		Numeric	2.3	6	
SS-203	WA Remaining Months to Maturity	For the stratified attribute, the weighted average number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero.		Numeric		3	





		Mor	tgage Insurance Cover	rage Stratificat	tion		
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-204	Record Type = 18	Mortgage Insurance Coverage Stratification		String		2	
SS-205	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-206	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-207	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-208	Mortgage Insurance Coverage	The mortgage insurance coverage in effect at the time the security was issued.	WithMI = Loans with Mortgage Insurance NoMI = Loans Without Mortgage Insurance 99 = Not Available	String		6	
SS-209	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-210	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-211	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-212	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	





		Mortgage	Insurance Cancellatio	n Indicator Stra	atification		
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-213	Record Type = 19	Mortgage Insurance Cancellation Indicator Stratification		String		2	
SS-214	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-215	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-216	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-217	Mortgage Insurance Cancellation Indicator	The indicator denoting whether the mortgage insurance has been cancelled after the security was issued.	Y = Yes N = No 7 = Not Applicable	String		1	
SS-218	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-219	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-220	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-221	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	





		Gov	ernment Insured/Guara	ntee Stratifica	tion		
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-222	Record Type = 20	Government Insured/Guarantee Stratification		String		2	Government Insured/Guarantee loans
SS-223	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-224	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-225	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-226	Government Insured /Guarantee	The classification describing the Government Insured/Guarantee Program, if any, covering the loan.	FH = FHA VA = Veterans Affair RH = Rural Housing IH = Section 184 Indian Home 99 = Not Available	String		2	
SS-227	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-228	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-229	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-230	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	





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ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-231	Record Type = 21	Interest Only First Principal and Interest Payment Date Stratification		String		2	
SS-232	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-233	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-234	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-235	Interest Only First Principal and Interest Payment Date	For interest-only loans, the month and year that the first monthly scheduled fully amortizing principal and interest payment is due.		Date	MMCCYY	6	
SS-236	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-237	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-238	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-239	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	
SS-240	Minimum Loan Age	For the stratified attribute, the minimum number of scheduled payments from the time the loan was originated or modified up to and including the current reporting period.		Numeric		3	
SS-241	Maximum Loan Age	For the stratified attribute, the maximum number of scheduled payments from the time the loan was originated or modified up to and including the current reporting period.		Numeric		3	
SS-242	Minimum Interest Rate	For the stratified attribute, the minimum interest rate of the loan in effect during the current reporting period.		Numeric	2.3	6	
SS-243	Maximum Interest Rate	For the stratified attribute, the maximum interest rate of the loan in effect during the current reporting period.		Numeric	2.3	6	





		Interest Only Firs	t Principal and Intere	est Payment Da	te Stratification	l	
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-244	Minimum Remaining Months to Maturity	For the stratified attribute, the minimum number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero.		Numeric		3	
SS-245	Maximum Remaining Months to Maturity	For the stratified attribute, the maximum number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero.		Numeric		3	
SS-246	WA Loan Age	For the stratified attribute, the weighted average number of scheduled payments from the time the loan was originated or modified up to and including the current reporting period.		Numeric		3	
SS-247	WA Interest Rate	For the stratified attribute, the weighted average interest rate of the loan in effect during the current reporting period.		Numeric	2.3	6	
SS-248	WA Remaining Months to Maturity	For the stratified attribute, the weighted average number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero.		Numeric		3	
SS-249	WA Months to Amortization	For the stratified attribute, the weighted average number of months from the current month to the first scheduled principal and interest payment date.		Numeric		3	





		Not Paying	g Principal in First Dis	stribution Strati	fication		
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-250	Record Type = 22	Not Paying Principal in First Distribution Stratification. Loans that will not receive a principal distribution in the first investor payment.		String		2	Applicable only at issuance for Single - Class (no resecuritizations)
SS-251	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-252	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-253	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-254	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-255	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-256	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-257	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	
			Origination Year St	ratification			
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-258	Record Type = 23	Origination Year Stratification		String		2	
SS-259	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-260	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-261	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-262	Origination Year	The year of origination of the loans in the security.		Date	CCYY	4	All loans originated prior to 1985 will be disclosed as 1984.
SS-263	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-264	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the		Numeric	3.2	6	



		Investor Loan UPB for the loans in the security.					
SS-265	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-266	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	
		<u> </u>	Origination Channel S	Stratification			
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-267	Record Type = 24	Origination Channel Stratification		String		2	If security characteristics apply
SS-268	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-269	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-270	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-271	Origination Channel	For reperforming, modified fixed-rate and modified step-rate loans, the origination channel used by the party that delivered the loan to the issuer.	R = Retail B = Broker C = Correspondent T = Third Party Origination - Not Specified 9 = Not Available	String		1	
SS-272	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-273	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-274	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-275	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	





		N	Ion-Standard Loan Typ	e Stratificatio	n		
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-276	Record Type = 25	Non-Standard Loan Type Stratification		String		2	Applicable only at issuance for Single - Class (no resecuritizations). Totals may exceed 100%. Effective 10/17/2017, this stratification will no longer be populated.
SS-277	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-278	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-279	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-280	Non-Standard Loan Type	The non-standard loan characteristics included in the security.	COOP = Cooperative HIGH = FHFA High Cost Area BYDN = Interest-rate buydown RELO = Relocation	String		4	
SS-281	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-282	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-283	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-284	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	





			Modification Program	Stratification			
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-285	Record Type = 26	Modification Program Stratification		String		2	If security characteristics apply
SS-286	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-287	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-288	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-289	Modification Program	For reperforming, modified fixed-rate and modified step-rate loans, the program under which the loan was modified.	A = Alternative B = HAMP Backup C = Classic D = Payment Deferral E = Extend F = Flex H = HAMP O = Other P = Cap and Extend R = Regular S = Standard T = Streamlined U = Underwater 9 = Not Available	String		1	Effective beginning 9/21/2020
SS-290	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.	7,101,1101,110	Numeric	14.2	17	If security characteristics apply
SS-291	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-292	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-293	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

Modification Type Stratification							
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-294	Record Type = 27	Modification Type Stratification		String		2	
SS-295	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-296	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-297	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	





SS-298	Modification Type	For reperforming,	B = Rate & Term	String		1	Effective beginning
		modified fixed-rate and modified step-rate loans, the classification describing the type of modification.	C = Capitalization D = Deferred Amount F = Rate, Term & Deferred Amount O = Other R = Rate S = Rate & Deferred				9/21/2020
			Amount T = Term U = Term & Deferred Amount				
SS-299	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-300	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-301	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-302	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	
		N	Modification Information	n Stratification	n		
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-303	Record Type = 28	Modification Information Stratification		String		2	If security characteristics apply
SS-304	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-305	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-306	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-307	Modification Information	For reperforming, modified fixed-rate and modified step-rate loans, the Total Capitalized Amounts and Deferred Unpaid Principal Balances of the loans in the security.	Total Capitalized Amount Deferred Unpaid Principal Balance	Numeric	9.2	12	
SS-308	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-309	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-310	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-311	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	





		N	lumber of Modification	ns Stratification	1		
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-312	Record Type = 29	Number of Modifications Stratification		String		2	
SS-313	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-314	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-315	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-316	Number of Modifications	For reperforming, modified fixed-rate and modified step-rate loans, the number of times the loan has been modified.	1 2 >2	Numeric		2	
SS-317	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-318	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-319	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-320	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	



		Deferi	red Unpaid Principal Ba	lance Stratific	ation		
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-321	Record Type = 30	Deferred Unpaid Principal Balance Stratification		String		2	If security characteristics apply
SS-322	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-323	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-324	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-325	Deferred UPB Type	For reperforming, modified fixed-rate and modified step-rate loans, denotes if the reported unpaid principal balance includes any deferred amount.	WithDefUPB = With Deferred UPB NoDefUPB = Without Deferred UPB 99 = Not Available	String		10	
SS-326	Interest-Bearing UPB	For reperforming, modified fixed-rate and modified step-rate loans, the aggregate interest bearing unpaid principal balance at the time of modification.		Numeric	14.2	17	
SS-327	Deferred UPB	For reperforming, modified fixed-rate and modified step-rate loans, the aggregate non-interest bearing amount at the time of modification. This amount does not contribute to MBS.		Numeric	14.2	17	
SS-328	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-329	Weighted Average Interest Rate	For the stratified attribute, the weighted average interest rate of the loans in effect during the current reporting period.		Numeric	3.2	6	
SS-330	Weighted Average Estimated LTV (ELTV)	For the stratified attribute in reinstated, reperforming, modified fixed-rate and modified step-rate loans, the weighted average ratio obtained by dividing the outstanding balance of the mortgage loan by the estimated current value of the property obtained by the issuer, at the time of issuance.		Numeric		3	





		Deferi	ed Unpaid Principal I	Balance Stratific	cation		
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-331	Weighted Average Updated Credit Score	For the stratified attribute in reinstated, reperforming, modified fixed-rate and modified step-rate loans, the weighted average most recently available standardized credit score provided at the time of issuance.		Numeric		4	
SS-332	Weighted Average Debt to Income (DTI) Ratio	For the stratified attribute in reinstated, reperforming, modified fixed-rate and modified step-rate loans, the weighted average ratio obtained by dividing the total monthly debt expense by the total monthly income of the borrower at the time the loan was originated or modified.		Numeric		3	
SS-333	Average Mortgage Loan Amount	For the stratified attribute in reinstated, reperforming, modified fixed-rate and modified step-rate loans, the simple average dollar amount of the loan as stated on the note at the time the loan was originated or modified. For reperforming, modified fixed-rate and modified step-rate loans, this value represents both the interest bearing amount.		Numeric	9.2	12	
SS-334	Property State 1	The abbreviation denoting the location of the property securing the loan for the stratified attribute. Ranked #1 by Investor Loan UPB	See Appendix A	String		2	
SS-335	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security that are associated with Property State #1 (ranked by Investor Loan UPB).		Numeric	14.2	17	
SS-336	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security that are associated with Property State #1 (ranked by Investor Loan UPB).		Numeric	3.2	6	





		Deteri	red Unpaid Principal B	salance Stratific	ation		
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-337	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security that are associated with Property State #1 (ranked by Investor Loan UPB).		Numeric		9	
SS-338	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security with Property State #1 (ranked by Investor Loan UPB).		Numeric	3.2	6	
SS-339	Property State 2	The abbreviation denoting the location of the property securing the loan for the stratified attribute. Ranked #2 by Investor Loan UPB	See Appendix A	String		2	
SS-340	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security that are associated with Property State #2 (ranked by Investor Loan UPB).		Numeric	14.2	17	
SS-341	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security that are associated with Property State #2 (ranked by Investor Loan UPB).		Numeric	3.2	6	
SS-342	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security that are associated with Property State #2 (ranked by Investor Loan UPB).		Numeric		9	
SS-343	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security with Property State #2 (ranked by Investor Loan UPB).		Numeric	3.2	6	
SS-344	Property State 3	The abbreviation denoting the location of the property securing the loan for the stratified attribute. Ranked #3 by Investor Loan UPB	See Appendix A	String		2	
SS-345	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security that are associated with Property State #3 (ranked by Investor Loan UPB).		Numeric	14.2	17	
SS-346	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security that are associated with Property State #3 (ranked by Investor Loan UPB).		Numeric	3.2	6	



		Deferre	ed Unpaid Principal B	alance Stratific	ation		
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-347	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security that are associated with Property State #3 (ranked by Investor Loan UPB).		Numeric		9	
SS-348	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security with Property State #3 (ranked by Investor Loan UPB).		Numeric	3.2	6	
		Estimated Lo	oan-to-Value (ELTV) N	Not Available S	tratification		
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-349	Record Type = 31	Estimated Loan-to-Value (ELTV) Not Available Stratification		String		2	If security characteristics apply
SS-350	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-351	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-352	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-353	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		String	14.2	17	
SS-354	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-355	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric	3.2	6	
SS-356	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric		9	





		Update	d Credit Score Not Av	/ailable Stratific	cation		
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-357	Record Type = 32	Updated Credit Score Not Available Stratification For non-reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.		String		2	If security characteristics apply
SS-358	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-359	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-360	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-361	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-362	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-363	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-364	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	





		Nun	nber of Remaining St	eps Stratification	on		
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-365	Record Type = 33	Number of Remaining Steps Stratification		String		2	If security characteristics apply
SS-366	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-367	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-368	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-369	Number of Remaining Steps	For reperforming, modified step-rate loans, the number of upward interest rate adjustments remaining.		Numeric		2	
SS-370	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-371	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-372	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-373	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	





		Numbe	er of Steps - At Modif	ication Stratific	ation		
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-374	Record Type = 34	Number of Steps - At Modification Stratification		String		2	Freddie Mac Modified Step securities
SS-375	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-376	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-377	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-378	Number of Steps - At Modification	For reperforming, modified step-rate loans, the number of upward interest rate adjustments at the time of modification.		Numeric		2	
SS-379	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-380	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-381	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-382	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	



			Step Rate Adjustmen	t Date Stratifica			
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-383	Record Type = 35	Next Step Rate Adjustment Date Stratification		String		2	Freddie Mac Modified Step securities
SS-384	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-385	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-386	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-387	Next Step Rate Adjustment Date	For reperforming, modified step-rate loans, the month and year that the interest rate is scheduled to increase.		Date	MMCCYY	6	
SS-388	Projected WA Interest Rate	For reperforming, modified fixed-rate and modified step-rate loans, the projected weighted average of the expected interest rates in effect on the associated adjustment date, not accounting for prepayments.		Numeric	2.3	6	
SS-389	Projected WA Net Interest Rate	For reperforming, modified fixed-rate and modified step-rate loans, the projected weighted average of the expected interest rates in effect on the associated adjustment date, not accounting for prepayments less servicing fees and guarantor fees.		Numeric	2.3	6	
SS-390	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-391	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-392	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-393	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	





	Origination Loan-To-Value (LTV) Not Available Stratification									
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes			
SS-394	Record Type = 36	Origination Loan-To- Value (LTV) Not Available Stratification For non- reperforming, modified fixed-rate and		String		2	If security characteristics apply			
		modified step-rate loans, this value will be blank.								
SS-395	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3				
SS-396	Security Identifier	The unique designation assigned to the security by the issuer.		String		6				
SS-397	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9				
SS-398	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17				
SS-399	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6				
SS-400	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9				
SS-401	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6				





		Origination Combir	ned Loan-To-Value (C	LTV) Not Avail	able Stratificati	on	
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-402	Record Type = 37	Origination Combined Loan-To-Value (CLTV) Not Available Stratification		String		2	If security characteristics apply
		For non- reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.					
SS-403	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-404	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-405	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-406	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-407	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-408	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-409	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	





	Origination Debt-To-Income (DTI) Not Available Stratification									
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes			
SS-410	Record Type = 38	Origination Debt-To-Income (DTI) Not Available Stratification For non-reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.		String		2	If security characteristics apply			
SS-411	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3				
SS-412	Security Identifier	The unique designation assigned to the security by the issuer.		String		6				
SS-413	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9				
SS-414	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17				
SS-415	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6				
SS-416	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9				
SS-417	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6				





	Origination Borrower Credit Score Not Available Stratification									
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes			
SS-418	Record Type = 39	Origination Borrower Credit Score Not Available Stratification		String		2	If security characteristics apply			
SS-419	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3				
SS-420	Security Identifier	The unique designation assigned to the security by the issuer.		String		6				
SS-421	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9				
SS-422	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17				
SS-423	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6				
SS-424	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9				
SS-425	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6				



		Origina	ntion Loan Purpose Str	atification			
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS- 426	Record Type = 40	Origination Loan Purpose Stratification		String		2	If security characteristics apply
SS- 427	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	SPP.
SS- 428	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS- 429	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS- 430	Origination Loan Purpose Stratification	For reperforming, modified fixed-rate and modified step-rate loans, the classification of the loan as either a purchase money mortgage or a refinance mortgage at the time the loan was originated.	C = Refinance - Cash Out N = Refinance - No Cash Out R = Refinance - Not Specified P = Purchase M = Modified - Loss Mitigation 9 = Not Available	String		1	
SS- 431	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS- 432	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS- 433	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS- 434	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	
		Originatio	on Occupancy Status S	Stratification			·
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS- 435	Record Type = 41	Origination Occupancy Status Stratification		String		2	If security characteristics apply
SS- 436	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS- 437	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS- 438	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	





SS- 439	Origination Occupancy Status	For reperforming, modified fixed-rate and modified step rate loans, the classification describing the property occupancy status at the time the loan was originated.	P = Primary Residence S = Second Home I = Investment Property 9 = Not Available	String		1	
SS- 440	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS- 441	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS- 442	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS- 443	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

		the security.	L				
		В	orrower Payment Hist	tory Stratificati	on		
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS- 444	Record Type = 42	Borrower Payment History Stratification		String		2	Applicable at issuance for Modified Fixed and Step and Reinstated
SS- 445	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS- 446	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS- 447	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS- 448	Days Delinquent	For reperforming, modified and modified step-rate loans, the number of days for which a mortgage loan was reported delinquent.	0 = Current 1 = 30-59 2 = 60-89 3 = 90-119 4 = 120+	String		1	
SS- 449	Borrower Payment Date	The month and year that the borrower was scheduled to remit payment.		Date	MMCCYY	6	
SS- 450	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS- 451	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS- 452	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS- 453	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	





			Collateral I	_ist			
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS- 454	Record Type = 43	Collateral List		String		2	Applicable at Issuance for Single Class Resecuritizations
SS- 455	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS- 456	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS- 457	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS- 458	Collateral Prefix	For each security that directly underlies the resecuritization, the designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS- 459	Collateral Security Identifier	For each security that directly underlies the resecuritization, the unique designation assigned to the security by the issuer.		String		6	
SS- 460	Collateral CUSIP	For each security that directly underlies the resecuritization, the unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS- 461	Collateral Current WA Net Interest Rate	For each security that directly underlies the resecuritization, the weighted average interest rate of the loans in effect during the current reporting period less servicing fees and guarantor fees.		Numeric	2.3	6	
SS- 462	Collateral Issue Date	For each security that directly underlies the resecuritization, the date on which the security was issued.		Date	MMDDCCYY	8	
SS- 463	Collateral Issuer	The issuer for each security that directly underlies the resecuritization.		String		3	
SS- 464	Collateral Maturity Date	The month and year in which the final payment on the underlying security is scheduled to be made at the time the underlying security was issued.		Date	MMCCYY	6	
SS- 465	Collateral Issuance Investor Security UPB	For each security that directly underlies the resecuritization, the unpaid principal balance of the loans as they contribute to the balance of the security.		Numeric	12.2	15	





			Collateral L	.ist			
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS- 466	Collateral Issuance Contributing Investor Security UPB	For each security that directly underlies the resecuritization, the prorata share of the Investor Security UPB - Issuance amount		Numeric	12.2	15	
SS- 467	Collateral Current Contributing Investor Security UPB	For each security that directly underlies the resecuritization, the prorata share of the Investor Security UPB - Current amount.		Numeric	12.2	15	
SS- 468	Collateral WA Interest Rate at Settlement	For each security that directly underlies the resecuritization, the weighted average interest rate at the time of resecuritization.		Numeric	2.3	6	
SS- 469	Collateral WA Remaining Months to Maturity at Settlement	For each security that directly underlies the resecuritization, the weighted average number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero at the time of resecuritization.		Numeric		3	
SS- 470	Collateral WA Loan Age at Settlement	For each security that directly underlies the resecuritization, the weighted average number of scheduled payments from the time the loan was originated or modified up to and including the current reporting period at the time of resecuritization.		Numeric		3	
SS- 471	Collateral Trust Identifier	An identifier assigned to the trust when established into a multiclass resecuritization.		String		50	
SS- 472	Collateral Class Identifier	An identifier assigned to the class when established into a multiclass resecuritization.		String		4	
SS- 473	Group Identifier	An identifier assigned to the group when established into a multiclass resecuritization.		String		5	



	Property Valuation Method									
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes			
SS- 474	Record Type = 44	Property Valuation Method Stratification		String		2	Disclosure will be effective for loans backing pools issued as June 1, 2017. This disclosure will first appear with March 2020 issuances.			
SS- 475	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3				
SS- 476	Security Identifier	The unique designation assigned to the security by the issuer.		String		6				
SS- 477	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9				
SS- 478	Property Valuation Method	Indicates the method by which the value of the subject property was obtained.	A = Appraisal P = Onsite Property Data Collection R = GSE Targeted Refinance Programs W = Appraisal Waiver O = Other 9 = Not Available 7 = Not Applicable	String		1	Please reference the loan-level file specification for enumeration definitions (L-107).			
SS- 479	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17				
SS- 480	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6				
SS- 481	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9				
SS- 482	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6				

	Borrower Assistance Plan									
ID	Attribute Name	Attribute Definition	Codes /	Data	Forma	Max	Implementation Notes			
			Enumerations	Type	t	Length				
SS-483	Record Type =	Borrower Assistance Plan		String		2				
	45	Stratification								
SS-484	Prefix	The designation assigned		String		3				
		by the issuer denoting the								
		type of the loans and the								
		security.								





SS-485	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-486	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-487	Borrower Assistance Plan	The type of assistance plan that the borrower is enrolled in that provides temporary mortgage payment relief or an opportunity to cure a mortgage delinquency over a defined period.	F = Forbearance Plan R = Repayment Plan T = Trial Period Plan O = Other Workout Plan N = No Workout Plan 7 = Not Applicable 9 = Not Available	String		1	The data in this stratification will be published on a one-month delay due to the timing of our servicing reporting cycle. For example, the values in this stratification published in July 2020 correspond to the delinquency status in the Days Delinquent Stratification published in June 2020. For non-delinquent loans without a borrower assistance plan reported will be disclosed as "7-Not Applicable" while delinquent loans without a borrower assistance plan reported will be disclosed as "N-No Workout Plan".
SS-488	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-489	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-490	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-491	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

	Alternative Delinquency Resolution										
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes				
SS-492	Record Type = 46			String		2	Applicable for monthly disclosure only. Effective beginning with the December 2020 factor date.				
SS-493	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3					
SS-494	Security Identifier	The unique designation assigned to the security by the issuer.		String		6					
SS-495	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9					
SS-496	Alternative Delinquency Resolution	Loss mitigation solution that resolves delinquencies and help homeowners remain in their homes in	P = Payment Deferral C = COVID-19 Payment Deferral	String		1	Please reference the loan-level file specification for enumeration definitions (L-108).				



		accordance with the servicer's contractual obligation, while allowing the loan to remain in the security.	D = Disaster Payment Deferral M = Multiple O = Other 7 = Not Applicable 9 = Not Available				Loans that have completed multiple ADR plans will be disclosed as "Multiple" at the pool level.
SS-497	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-498	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-499	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-500	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	
SS-501	Total Deferral Amount	The total non-interest- bearing deferral amount related to one or more Alternative Delinquency Resolutions.		Numeric	9.2	12	

	Number of Alternative Delinquency Resolutions								
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes		
SS-502	Record Type = 47			String		2	Applicable for monthly disclosure only. Effective beginning with the December 2020 factor date.		
SS-503	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3			
SS-504	Security Identifier	The unique designation assigned to the security by the issuer.		String		6			
SS-505	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9			
SS-506	Number of Alternative Delinquency Resolutions	The total number of Alternative Delinquency Resolutions as reported by the servicer for a specific loan.	01 02 03 04 05 >5	String		2	May not represent 100% of the pool		
SS-507	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17			
SS-508	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6			
SS-509	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9			



SS-510	Percentage	For the stratified attribute,	Numeric	3.2	6	
	Loan Count	the percentage of loans in				
		the security.				
SS-511	Total Deferral	The total non-interest-	Numeric	9.2	12	
	Amount	bearing deferral amount				
		related to one or more				
		Alternative Delinquency				
		Resolutions.				

			Borrower Assistance	e Plan Histo	ry		
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-512	Record Type = 48	Borrower Assistance Plan History Stratification		String		2	Applicable for issuance disclosure only Effective as of 2/22/2021
SS-513	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-514	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-515	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-516	Borrower Assistance Plan History	For a reperforming or modified loan in a newly issued security, the type of borrower assistance plan that the borrower was enrolled in at any time during the 36 months prior to issuance of such security.	F = Forbearance Plan R = Repayment Plan T = Trial Period Plan O = Other Workout Plan N = No Workout Plan 7 = Not Applicable 9 = Not Available	String		1	
SS-517	Borrower Payment Date	The month and year that the borrower was scheduled to remit payment.		Date	MMCC YY	6	
SS-518	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-519	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-520	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-521	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	



Additional Daily Issuance File



Additional Daily Issuance File

The following file format is specific to the additional daily issuance file that provides investors with the Days Delinquent (record type 7) and the Borrower Assistance Plan (record type 45) stratifications for all securities issued the prior business day. At issuance, the disclosure is applicable for all level-1 and multi-lender securities disclosed as of May 1, 2020.

		Days Do	elinquent Strati	fication		
Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
Record Type = 7	Days Delinquent Stratification		String		2	
Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
Days Delinquent	The number of days for which a mortgage loan has been reported delinquent.	1 = 30-59 2 = 60-89 3 = 90-119 4 = 120+	String		1	
Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

		Borro	wer Assistar	ice Plan		
Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
Record Type = 45	Borrower Assistance Plan Stratification		String		2	
Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities		String		9	



Additional Daily Issuance File

	Identification Procedures (CUSIP).					
Borrower Assistance Plan	The type of assistance plan that the borrower is enrolled in that provides temporary mortgage payment relief or an opportunity to cure a mortgage delinquency over a defined period.	F = Forbearance Plan R = Repayment Plan T = Trial Period Plan O = Other Workout Plan N = No Workout Plan 7 = Not Applicable 9 = Not Available	String		1	The data in this stratification will be published on a one-month delay due to the timing of our servicing reporting cycle. For example, the values in this stratification published in July 2020 correspond to the delinquency status in the Days Delinquent Stratification published in June 2020. For non-delinquent loans without a borrower assistance plan reported will be disclosed as "7-Not Applicable" while delinquent loans without a borrower assistance plan reported will be disclosed as "N-No Workout Plan".
Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	



EXCHANGE FILES



Daily 45-Day to 55-Day Exchange Activity

This disclosure contains one row for every exchange transaction where a Freddie Mac 45-day payment delay security exchanged directly to its corresponding 55-day "mirror" security on a given "As of Date." The report includes the details about the corresponding pairs of 45 and 55-day securities and the amount of "Issuance Investor Security UPB" (Original Par) exchanged and settled as part of each transaction on the "As of Date."

ID	Attribute Name	Attribute Definition	Data Type	Format	Max Length	Implementation Notes
01	Freddie Mac 45 Day Security Identifier	The unique designation assigned to the 45-day security	Alpha- Numeric		6	
02	Freddie Mac 45 Day Security CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).	Alpha- Numeric		9	
03	Freddie Mac 55 Day Security Identifier	The unique designation assigned to the 55-day security.	Alpha- Numeric		6	
		This security is identical to the 45-day PCs except for payment delay, Security Identifier, CUSIP and, in most cases, issuance date.				
		The 45-day PC is the collateral for the 55-day MBS.				
04	Freddie Mac 55 Day Security CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).	Alpha- Numeric		9	
		The 55-day MBS CUSIP was created as a "mirror" of the 45-day PC.				
05	Issuance Investor Security UPB	The aggregate unpaid principal balance of the loans as they contribute to the balance of the security at the time the security was issued.	Numeric	14.2	17	Truncated to whole number
06	Exchanged Issuance Investor Security UPB	The aggregate unpaid principal balance of the loans as they contribute to the balance of the security at the time the security was issued.	Numeric	14.2	17	Truncated to whole number
		Reflects the amount of the security that was exchanged directly to its' corresponding 55-day security.				
07	Cumulative Exchanged Issuance Investor Security UPB	The total of the Issuance Investor Security UPB (Original Par) of the 45-day PC that has been exchanged directly to its corresponding 55-day MBS to date, including all current daily exchange activity.	Numeric	14.2	17	Truncated to whole number
08	As of Date	The Settlement Date through which the	Date	MMDDCCYY	8	





ID	Attribute Name	Attribute Definition	Data Type	Format	Max Length	Implementation Notes
		exchange activity is included in this disclosure.				



Cumulative 45-Day to 55-Day Exchange Activity

This disclosure contains one row for every Freddie Mac 45-day payment delay security eligible to be exchanged, i.e. those that are not 100% committed to resecuritizations and for which a corresponding 55-day "mirror" security has been issued. The report includes one row per exchange eligible security, regardless of whether any exchange activity has occurred to date, with details about the corresponding pairs of 45 and 55-day securities and the amount of "Issuance Investor Security UPB" (Original Par) exchanged and settled to date.

ID	Attribute Name	Attribute Definition	Data Type	Format	Max Length	Implementation Notes
01	Freddie Mac 45 Day Security Identifier	The unique designation assigned to the 45-day security	Alpha- Numeric		6	
02	Freddie Mac 45 Day Security CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).	Alpha- Numeric		9	
03	Freddie Mac 55 Day Security Identifier	The unique designation assigned to the 55-day security. This security is identical to the 45-day PCs except for payment delay, Security Identifier, CUSIP and, in most cases, issuance date. The 45-day PC is the collateral for the 55-day MBS.	Alpha- Numeric		6	
04	Freddie Mac 55 Day Security CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP). The 55-day MBS CUSIP was created as a "mirror" of the 45-day PC.	Alpha- Numeric		9	
05	Issuance Investor Security UPB	The aggregate unpaid principal balance of the loans as they contribute to the balance of the security at the time the security was issued.	Numeric	14.2	17	Truncated to whole number
06	Cumulative Exchanged Issuance Investor Security UPB	The total of the Issuance Investor Security UPB (Original Par) of the 45-day PC that has been exchanged directly to its corresponding 55-day MBS to date, including all current daily exchange activity.	Numeric	14.2	17	Truncated to whole number
07	As of Date	The Settlement Date through which the exchange activity is included in this disclosure.	Date	MMDDCCYY	8	



Aggregate Level 1 Collateral Exchange Activity.

This disclosure contains one row for every Freddie Mac 45-day payment delay Level 1 PC, even if the PC is not eligible to be exchanged. Because exchanges can be done on Level 1 or at Level 2 securities, this report breaks out all exchanges on the basis of the lowest Level 1 PC collateral, i.e. allocating all exchanges of Giants back to their original Level 1 PC collateral and adding that to any exchanges from a Level 1 PC directly to its corresponding "mirror." This report can be used to determine the 45- day and 55-day supply and prepayments across any Legacy cohort.

ID	Attribute Name	Attribute Definition	Data Type	Format	Max Length	Implementation Notes
01	Level 1 Security Identifier	The unique designation assigned to the 45-day Level 1 security.	Alpha- Numeric		6	
02	Level 1 Security CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).			9	
03	Issuance Investor Security UPB	nvestor The aggregate unpaid		14.2	17	Truncated to whole number
04	Resecuritized Issuance Investor Security UPB	The total original issuance UPB (Original Par) of this PC that is committed to REMICs and/or Giants.	Numeric	14.2	17	Truncated to whole number
05	Cumulative Exchanged Issuance Investor Security UPB	The total of the Issuance Investor Security UPB (Original Par) of the 45-day PC that has been exchanged directly to its corresponding 55-day MBS to date, including all current daily exchange activity.	Numeric	14.2	17	Truncated to whole number
06	Issuance Investor Security UPB Remaining Eligible for Exchange	The amount of Issuance Investor Security UPB (Original Par) that has not yet been exchanged or resecuritized, and therefore remains eligible for exchange.	Numeric	14.2	17	Investor Security UPB at Issuance - Resecuritized Investors Security UPB at Issuance - Cumulative Exchanged Investor Security UPB at Issuance
07	Cumulative Issuance Investor Security UPB Exchanged through Resecuritizations	The amount of Issuance Investor Security UPB (Original Par) that is committed to a Giant, which has been exchanged to date as a result of the Giant's exchange activity (REMICs are not exchange eligible). This includes the current daily exchange settlement activity, if any.	Numeric	14.2	17	Truncated to whole number
08	Aggregate Exchanged Issuance Investor Security UPB	The total of the Issuance Investor Security UPB (Original Par) of the 45-day PC that has been exchanged directly to its corresponding 55-day MBS to date, including all current daily exchange activity.	Numeric	14.2	17	Cumulative Exchanged Investor Security UPB at Issuance + Cumulative Investor UPB at Issuance Exchanged through Resecuritizations





ID	Attribute Name	Attribute Definition	Data Type	Format	Max Length	Implementation Notes
09	Aggregate Issuance Investor Security UPB Remaining Eligible for Exchange	The total Issuance Investor Security UPB (Original Par) that has not yet been exchanged either directly to its corresponding 55-day MBS or through the exchange of a Giant that has this PC as underlying collateral, and therefore remains eligible for exchange.	Numeric	14.2	17	Investor Security UPB at Issuance - Aggregate Exchanged Investor Security UPB at Issuance
10	Security Factor			1.8	10	Rounded to the 8th decimal position.
11	Security Factor Date	The month and year on which the corresponding factor is effective.	Date	MMCCYY	6	
12	As of Date	The Settlement Date through which the exchange activity is included in this disclosure.	Date	MMDDCCYY	8	



REMIC ORIGINAL ISSUE DISCOUNT (OID) TAX INFORMATION FILE

REMIC OID Tax Information File



This file contains selected data about Freddie Mac's REMIC program. This data should be considered in conjunction with information appearing in the applicable Freddie Mac Offering Circulars, as supplemented.

The file provides Original Issue Discount (OID) information, which may be used by investors to complete the necessary tax filings for their Freddie Mac REMIC investments.

The REMIC files will be available on a quarterly basis, on the 30th calendar day of the month following the end of the quarter (e.g. Q1 data is transmitted on the last business day in April). Files are cumulative on a year-to-date basis.



Record Length: 200

POS	LEN	DEC	Data Type	Description
1	6		Alpha-num	REMIC SERIES NUMBER – A six digit alphanumeric designation used to
				identify a Freddie Mac REMIC.
7	1			FILLER
8	6		Alpha-num	CLASS CODE – A six digit alphanumeric designation used to identify the collateral that backs a REMIC.
14	1			FILLER
15	10		Alpha-num	TAX IDENTIFICATION NUMBER - Unique identifier used to identify each
			Alpha Ham	REMIC series for tax purposes.
25	1			FILLER
26	9		Alpha-num	CUSIP NUMBER - Unique nine-character alphanumeric designation assigned to each REMIC.
35	1			FILLER
36	13	2	Numeric	CLASS ORIGINAL UPB -Original Principal amount of the class.
49	1			FILLER
50	1		Numeric	OID TYPE INDICATOR - (0=All OID, 1=Part OID, 2=Premium, 3=Part Premium, 4=No OID)
51	1			FILLER
52	1		Numeric	<u>DEMINIMUS INDICATOR</u> - (0=No, 1=Yes)
53	1		Talliono	FILLER
54	8		Numeric -	ACCRUAL PERIOD START DATE - Date on which the accrual period
"	Ü		MM/DD/YY	begins.
62	1		, = =,	FILLER
63	2		Numeric	NUMBER OF DAYS IN ACCRUAL PERIOD - Number of days from the
				beginning of the accrual period to the end of the accrual period, this is
				generally 30 days except in the case of new issues.
65	1			FILLER
66	13	2	Numeric	QUALIFIED PERIODIC INTEREST ACCRUAL - The amount of Qualified
				Periodic Interest earned for the above accrual period.
79	1			FILLER
80	17	8	Numeric	DAILY-QUALIFIED PERIODIC INTEREST ACCRUED PER \$1,000 OF FACE - The Qualified Periodic Interest earned in the accrual period in a
97	1			daily factor form.
98	17	8	Numeric	ORIGINAL ISSUE DISCOUNT ACCRUED - Represents the change in
30	17		Numeric	value at the beginning of the month taking into account the projected future
445	4			cash flows and the current prepayments.
115	1	0	Niversonia	FILLER OPIGINAL ISSUE DISCOUNT ASSERTED ALL OCATED DAILY PER
116	17	8	Numeric	ORIGINAL ISSUE DISCOUNT ACCRUED ALLOCATED DAILY PER \$1,000 OF FACE - The Original Issue Discount Accrued in the accrual
				period in a daily factor form.
133	1			FILLER
134	15	8	Numeric	ADJUSTED ISSUE PRICE AT BEGINNING OF PERIOD PER \$1.000 OF
134	15		Numeric	FACE - The value of the security for tax purposes as of the beginning of the
140	1			period. FILLER
149 150	1 15	8	Numeric	MARKET DISCOUNT ACCRUAL RATIO - The rate used for amortizing the
		٥	Numeno	investor's market discount or premiums.
165	2			FILLER
167	1		Numeric	RANDOM LOT INDICATOR - Indicates whether or not the REMIC bond is subject to Random Lot Procedures. (0=No, 1=Yes)
168	2			FILLER
170	15	8	Numeric	REDEEMED BONDS OID DAILY AMOUNT - Provides the Original Issue
				Discount Accrued in the period for Retail Random Lot bonds that have been
				terminated during the accrual period.
185	1			FILLER
186	15	8	Numeric	DAILY 212 EXPENSE - The allocated 212 Expenses to the regular REMIC
				interest applicable when a REMIC issues only one class of debt.



MORTGAGE BACKED SECURITIES TAX DISCLOSURE FILE





This file contains selected tax reporting data about Freddie Mac's securities programs other than REMICs. This data should be considered in conjunction with information appearing in the applicable Freddie Mac Offering Circulars, as supplemented.

The file provides disclosure of tax reporting amounts that are to be used to complete the necessary tax filings for holders of Freddie Mac issued non-REMIC securities.

The FM Tax Disclosure file will be available on an annual basis, on the 30th calendar day of the month following the end of the calendar year. For each security, the file contains a master record and monthly historical records that include tax reportable amounts for the prior tax year.

Master Record Record Length: 228

DOC	LEN	DEC	Data Tura	Description
POS	LEN	DEC	Data Type	Description OAL ENDAR TAX VEAR A Constitution of the Color description
1	4		Integer	<u>CALENDAR TAX YEAR</u> – A four digit integer used to identify the Calendar Year to which the data relates.
5	1			FILLER
6	9		Alpha-num	<u>CUSIP</u> – Unique nine digit alphanumeric designation used to identify the
				security.
15	1			FILLER
16	6		Alpha-num	<u>POOL OR SERIES NUMBER</u> – A six digit alphanumeric designation used by Freddie Mac to identify the security or a set of associated securities.
22	3			FILLER
25	6		Alpha-num	<u>CLASS</u> – A six digit alphanumeric designation used by Freddie Mac to identify a particular security within a set of associated securities.
31	3			FILLER
34	15		Alpha-num	TAX REPORTING TYPE - (0=All OID, 1=Part OID, 2=Deminimis OID, 3=Premium, 4=No OID)
49	1			FILLER
50	10		Alpha-num	INTEREST ACCRUAL METHOD- (30/360, Act/360, Act/365, Act/Act)
60	1			FILLER
61	15	2	Numeric	ORIGINAL AMOUNT - The Principal or Notional amount of the security at origination
76	1			FILLER
77	10		Alpha-num	TAX IDENTIFICATION NUMBER - Unique identifier received from the
• • •			, upila riam	Internal Revenue Service and used to identify each security for tax
07				purposes.
87	1		A1 1	FILLER
88	30		Alpha-num	ISSUER'S NAME 1 – An alphanumeric designation used to identify the issuing entity.
118	1			FILLER
119	40		Alpha-num	ISSUER'S NAME 2 – An alphanumeric designation used to identify the issuing entity.
159	1			FILLER
160	30		Alpha-num	ISSUER ADDRESS – Street number and name of the location of the Issuing entity.
190	1			FILLER
191	10		Alpha-num	ISSUER CITY – Geographic area of the location of the Issuing entity.
201	10		/ πριια παιπ	FILLER
202	10		Alpha-num	ISSUER STATE - Name for the geographic area of America of the location of the Issuing entity.
212	1			FILLER
213	10		Alpha-num	ISSUER ZIP CODE – Postal code for the location of the Issuing entity.
223	10		Aipila-liulii	FILLER
223	5		Alpha num	
224	5		Alpha-num	<u>SECURITY CLASSIFICATION</u> – (WHMT= widely held fixed investment trust), NWHMT = non-mortgage widely held fixed investment trust)



Mortgage Backed Securities Tax Disclosure File

Detail Record Record Length: 228

POS	LEN	DEC	Data Type	Description
1	2		Numeric	NUMBER OF DAYS IN ACCRUAL PERIOD - Number of days from the
				beginning of the accrual period to the end of the accrual period within the
				current tax year.
3	1			FILLER
4	8		Numeric -	ACCRUAL PERIOD START DATE - Date on which the accrual period
			CCYYMMDD	begins.
12	1			FILLER
13	13	8	Numeric	ENDING UNPAID BALANCE FACTOR - The remaining principal or
				notional factor.
26	1			FILLER
27	13	8	Numeric	<u>DAILY QSI ACCRUED</u> - The Qualified Stated Interest accrued in the
				accrual period expressed in a daily factor form per \$1000 unit.
40	1			FILLER
41	13	2	Numeric	QUALIFIED STATED INTEREST ACCRUAL - The Daily QSI Accrued
				multiplied by the number of days in the accrual period and the original
				amount/1000.
54	1			FILLER
55	13	8	Numeric	<u>DAILY OID ACCRUED</u> – The Original Issue Discount accrued in the
				accrual period expressed in a daily factor form per \$1000 unit.
68	1			FILLER
69	13	2	Numeric	ORIGINAL ISSUE DISCOUNT ACCRUAL - The Daily OID Accrued
				multiplied by the number of days in the period and the original
				amount/1000.
82	1			FILLER
83	13	8	Numeric	DAILY OTHER INC/(EXP) ACCRUED - The Other Income or Expense
				accrued in the accrual period expressed in a daily factor form per \$1000
				unit.
96	1	_		FILLER
97	13	8	Numeric	DAILY SECTION 212 EXPENSE ACCRUED – The Section 212 expenses
				accrued in the accrual period expressed in a daily factor form per \$1000
440	4			unit.
110	1		.	FILLER
111	18	8	Numeric	ADJUSTED ISSUE PRICE AT BEGINNING OF PERIOD PER \$1,000 OF
				FACE - The value of the security for tax purposes as of the beginning of the
120	1			period. FILLER
129	1	0	Ni. ma a ni a	
130	13	8	Numeric	MARKET DISCOUNT ACCRUAL RATIO - The rate used for amortizing the
1.12	06			investor's market discount or premium.
143	86			FILLER



For Multiclass Tax Files:

These files contain selected tax reporting data about Freddie Mac's Multiclass securities programs. This data should be considered in conjunction with information appearing in the applicable Freddie Mac Offering Circulars, as supplemented.

The files provide disclosure of tax reporting amounts that are to be used to complete the necessary tax filings for holders of Freddie Mac issued Multiclass securities.

The Tax Disclosure files will be available on a quarterly basis, on the 30th calendar day of the month following the end of the quarter (e.g. Q1 data is transmitted on the last business day in April). The factor files are cumulative on a year-to-date basis.

For Single Class Tax Files:

These files contain selected tax reporting data about Freddie Mac's Single Class securities programs. This data should be considered in conjunction with information appearing in the applicable Freddie Mac Offering Circulars, as supplemented.

The files provide disclosure of tax reporting amounts that are to be used to complete the necessary tax filings for holders of Freddie Mac issued Multiclass securities.

The Tax Disclosure files will be available on a quarterly basis, on the 30th calendar day of the month following the end of the quarter (e.g. Q1 data is transmitted on the last business day in April). The factor files are cumulative on a year-to-date basis.

Type File Record

Field	Data Type	Length	End Position	Format	Example
CUSIP	character	9	9		3136055Y9
filler	space	1	10		
Pool or series number	character	8	18		002098, 2012-102
filler	space	1	19		
Class	character	8	27	MC Tranche Name	MC only, Blank for SC; ex. ZA, AB, A1
filler	space	1	28		
Security Classification	character	5	33		WHMT, REMIC
filler	space	1	34		
Class Issued With	character	13	47		OID, PAR, DEMINIMUS, PREMIUM
filler	space	1	48		
Interest Class	character	13	61		NON-QUALIFIED, QUALIFIED
filler	space	1	62		
Interest accrual method	character	7	69		30/360
filler	space	1	70		
Original amount	integer	12	82		4784368
filler	space	1	83		
Issuer's TIN	character	10	93		xx-xxxxxx



filler	space	1	94		
Issuer name1	character	50	144	Issue Name	Federal National Mortgage Association, FHLMC Trust
filler	space	1	145	133de Hume	7 issociation, There it use
Issuer name2	character	50	195	Attention line	Blank
filler	space	1	196		
		50	246	Church Addure	1100 15TH STREET NW WASHINGTON DC 20005 1551 PARK RUN DRIVE MCLEAN
Issuer address1	character	50	246	Street Address	VA 22102-3110

Factor File Record

Field	Data Type	Length	End Position	Format	Example
CUSIP	character	9	9		3136055Y9
filler	space	1	10		
Days In Period	integer	3	13		30
filler	space	1	14		
Beginning Of Accrual Period	date	10	24	YYYYMMDD	20180831
filler	space	1	25		
End Of Accrual Period	date	10	35	YYYYMMDD	20180831
filler	space	1	36		
Payment Date	date	10	46	YYYYMMDD	20180831
filler	space	1	47		
Ending UPB Factor	Number(13,8)	14	61		12345.12345678
filler	space	1	62		
QSI Factor	Number(13,8)	14	76		12345.12345678
filler	space	1	77		
OID Factor	Number(13,8)	14	91		12345.12345678
filler	space	1	92		
Other Inc(Exp) Factor	Number(13,8)	14	106		12345.12345678
filler	space	1	107		
Section 212 Expense Factor	Number(13,8)	14	121		12345.12345678
filler	space	1	122		
AIP at Beginning of Period	Number(13,8)	14	136		12345.12345678 *If Interest Class is Qualified or calculated value exceeds field length, then blank, else show value.
filler	space	1	137		value.
Market Discount Accrual Ratio	Number(13,8)	14	151		12345.12345678
filler	space	1	152		
Real Estate Percentage	Number(6,2)	7	159		1234.12

^{*} Fields are padded with spaces to complete the fixed length file.
* Factors are expressed as monthly amounts accrued per \$1000

^{*} The decimal data type is expressed as (field maximum number of digits, places to the right of the decimal)



APPENDIX A



Property State Code Enumerations					
Enumeration	Enumeration Name				
AK	Alaska				
AL	Alabama				
AR	Arkansas				
AZ	Arizona				
CA	California				
CO	Colorado				
СТ	Connecticut				
DC	District of Columbia				
DE	Delaware				
FL	Florida				
GA	Georgia				
GU	Guam				
HI	Hawaii				
IA	lowa				
ID	Idaho				
IL	Illinois				
IN	Indiana				
KS	Kansas				
KY	Kentucky				
LA	Louisiana				
MA	Massachusetts				
MD	Maryland				
ME	Maine				
MI	Michigan				
MN	Minnesota				
MO	Missouri				
MS	Mississippi				
MT	Montana				
NC	North Carolina				
ND	North Dakota				
NE	Nebraska				
NH	New Hampshire				
NJ	New Jersey				
NM	New Mexico				
NV	Nevada				
NY	New York				
OH	Ohio				
OK	Oklahoma				
OR	Oregon				
PA	Pennsylvania				
PR	Puerto Rico				
RI	Rhode Island				
SC	South Carolina				
SD	South Dakota				
TN	Tennessee				
TX	Texas				
UT	Utah				
VA	Virginia				
VI	Virgin Islands				
VT	Vermont				
WA	Washington				
WI	Wisconsin				
WV	West Virginia				
WY	Wyoming				
L ** *	1				



Single Family ARM Index Codes				
Enumeration	Enumeration Name			
02	CD_6MO_SEC_MRKT_MNTH_AVG			
05	CMT_10YR_WKLY_AVG			
08	CMT_1YR_CUML_AVG_PREV12_MNTH_AVG			
09	CMT_1YR_MNTH_AVG			
10	CMT_1YR_WKLY_AVG			
11	CMT_2YR_WKLY_AVG			
12	CMT_3YR_MNTH_AVG			
13	CMT_3YR_WKLY_AVG			
14	CMT_5YR _WKLY_AVG			
16	CMT_5YR_MNTH_AVG			
18	CMT_7YR_MNTH			
21	COFI_1MO_11THDIST			
22	COFI_1MO_7THDIST			
23	COFI_1MO_NTL_MNTH_AVG			
25	COFI_6MO_CA			
27	COFI_FRE			
36	LIBOR_1MO_WSJ			
38	LIBOR_1YR_WSJ_DLY			
42	LIBOR_6MO_WSJ			
43	LIBOR_6MO_WSJ_DLY			
44	LIBOR_6MO_WSJ_MNTH_AVG			
46	PRIM_MORT_MRKT_SRVY_PLUS			
48	PRIME_WSJ_DLY			
49	RNY_FRE_30YR_60DAY_DLY			
54	TBILL_6MO_DISC_MNTH_AVG			
55	TBILL_6MO_DISC_WKLY			
57	TBILL_6MO_INV_WKLY			
58	TBILL_6MO_SEC_WKLY_AVG			
59	ICE_5YR_INT_RATE_SWAP			
60	COFI_1MO_4THDIST			
61	30-Day Average SOFR			
555	MIXED INDICES			

Enumeration Name Abbreviations				
Abbreviation	Meaning			
AA	Actual/Actual			
AVG	Average			
BBA	British Bankers Association			
CONT	Contract			
CONV	Conventional			
COS	Cost of Savings			
CMT	Constant Maturity Treasury			
CUML	Cumulative			
DISC	Discount			
DIST	District			
DLY	Daily			
FED	Federal			
FRE	Freddie Mac			
FRM	Fixed Rate Mortgage			
INV	Investment			
MM	Money Market			
MNTH	Monthly			
MO	Month			
NTL	National			
PREV26	Previous 26			
PREV4	Previous 4			
QRTY	Quarterly			
RNY	Required Net Yield			
SA	Scheduled/Actual			
SEC	Secondary			
WKLY	Weekly			





WSJ	Wall Street Journal
YLD	Yield
YR	Year
ICE	Intercontinental Exchange
SOFR	Secured Overnight Financing Rate