



Single-Family Disclosure Guide

Guide to PC, Giant
and Tax Reporting
Disclosure Information

TABLE OF CONTENTS

INTRODUCTION	3
TIMING AND FREQUENCY OF DATA	6
LOAN LEVEL FILE	9
SECURITY LEVEL FILE	26
SECURITY SUPPLEMENTAL FILE	39
EXCHANGE FILES	95
MULTICLASS & SINGLE CLASS TAX DISCLOSURE FILES	100
APPENDIX A	103

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_1ld.pdf

The chart below classifies the prefixes found on each file.

	File 1	File 2	Pseudopool File
Prefix	<p>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</p>	<p>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</p>	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 zipped format	Day of the Month Publicly Available
Daily Files (Loan, Security and Supplemental Level)			
Daily Issuance Loan Level File 1	Initial loan-level information on newly issued pools	fiYYMMDD.txt	6:30 A.M.
Daily Issuance Loan Level File 1_Intraday #2**	Initial loan-level information on newly issued pools	fiYYMMDD_2.txt	11:30 AM
Daily Issuance Loan Level File 1_Intraday #3**	Initial loan-level information on newly issued pools	fiYYMMDD_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.
Daily Issuance Loan Level File 2*	Initial loan-level information on newly issued pools	aiYYMMDD.txt	6:30 A.M.
Daily Issuance Security File 2*	Information on newly issued pools	dbYYMMDD.txt	6:30 A.M.
Pseudopool Issuance Security Core	Factors for Pseudopools	xaYYMMDD.txt	6:30 A.M.
Pseudopool Issuance Security Supplemental	Quartiles for Pseudopools and Assorted Data	xoYYMMDD.txt	6:30 A.M.
Pseudopool Daily New Issuance Report	Information on newly issued Pseudopools	xrYYMMDD.txt	6:30 A.M.
Monthly Files (Loan, Security and Supplemental Level)			
Monthly Loan Level File 1	Updated monthly loan-level information	fuYYMMDD.txt	4 th Business Day 4:30 P.M.
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	
Monthly Security Supplemental File 1	Quartiles for pools & Assorted Data	fqYYMMDD.txt	
Monthly Security Supplemental File 2*	Quartiles for pools & Assorted Data	geYYMMDD.txt	
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	6:30 A.M.
Cumulative 45-Day to 55-Day Exchange Activity	Cumulative 45-Day to 55-Day Exchange Activity	ecYYMMDD.txt	
Aggregate Level 1 Collateral Exchange Activity	Aggregate Level 1 Collateral Exchange Activity	eaYYMMDD.txt	
Tax Files			
Multiclass Tax Type File 1		FRE_MCTAX_Q#YY YY.typ	Quarterly
Multiclass Tax Factor File 1		FRE_MCTAX_Q#YY YY.fac	Quarterly

Single Class Tax Type File 1		FRE_SCTAX_Q#YY YY.typ	Quarterly
Single Class Tax Factor File 1		FRE_SCTAX_Q#YY YY.fac	Quarterly
Multiclass Tax Type File 2		FRE2_MCTAX_Q#Y YYY.typ	Quarterly
Multiclass Tax Factor File 2		FRE2_MCTAX_Q#Y YYY.fac	Quarterly
Single Class Tax Type File 2		FRE2_SCTAX_Q#Y YYY.typ	Annual
Single Class Tax Factor File 2		FRE2_SCTAX_Q#Y YYY.fac	Annual

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	<ul style="list-style-type: none"> 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. <i>For reperforming, modified fixed-rate and modified step-rate</i>		Numeric	9.2	12	Privacy Masking: rounded to nearest thousand, if > \$500

		<i>loans, this value represents both the interest bearing and non-interest-bearing amount.</i>					
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	
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 (<i>securities issued on or after 9/1/2017</i>)
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 (<i>applicable to securities issued on or after 9/1/2017</i>)
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 (<i>securities issued on or after 9/1/2017</i>) 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 (<i>securities issued on or after 9/1/2017</i>)
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 (<i>securities issued on or after 9/1/2017</i>)
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. <i>For fixed-rate loans, this value takes into account the impact of any curtailments.</i>		Numeric		3	Value can be Negative

L-019	Loan Age	The number of scheduled payments from the time the loan was originated or modified up to and including the current reporting period.		Numeric		3	Value can be Negative
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. <i>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.</i> <i>For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.</i>	999 = Not Available	Numeric		3	If value <1 or >998, then the ratio is considered not available (<i>securities issued on or after 9/1/2017</i>)
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. <i>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.</i> <i>For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.</i>	999 = Not Available	Numeric		3	If value <1 or >998, then the ratio is considered not available (<i>securities issued on or after 9/1/2017</i>)
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 was originated or modified.	999 = Not Available	Numeric		3	If value <1 or >65, then the ratio is considered not available
L-023	Borrower Credit Score	The standardized credit score used to evaluate the borrower during the loan origination process. <i>For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.</i>	9999 = Not Available	Numeric		4	If value <300 or >850, 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 (<i>securities issued on or after 9/1/2017</i>). 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.

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. <i>For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.</i>	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. <i>For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.</i>	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 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	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 Cap Down Percent	For adjustable-rate loans, the maximum number of percentage points the interest rate can adjust downward at the first interest rate change date.	77.777 - Not Applicable	Numeric	2.3	6	
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 Amount	For reprforming, modified fixed-rate and modified step-rate loans, the non-interest bearing unpaid principal balance at the time of modification. <i>The deferred amount is not included in the unpaid principal balance of the security and is not payable to the certificate holder.</i>		Numeric	9.2	12	Privacy Masking: Round to nearest thousand if > \$500
L-071	Current Deferred UPB	For reprforming, modified fixed-rate and modified step-rate loans, the current non-interest bearing unpaid principal balance. <i>The deferred amount is not included in the unpaid principal balance of the security and is not payable to the certificate holder.</i>		Numeric	9.2	12	Privacy Masking: Round to nearest thousand if > \$500
L-072	Loan Age as Of Modification	For reprforming, 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, reprforming, 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 (<i>securities issued on or after 9/1/2017</i>)
L-074	Updated Credit Score	For reinstated, reprforming, 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 reprforming, modified step-rate 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 repricing, modified step-rate loans, the number of upward interest rate adjustments per the modification agreement.		Numeric		2	
L-079	Number of Remaining Steps	For repricing, modified step-rate loans, the number of upward interest rate adjustments remaining.		Numeric		2	
L-080	Next Step Rate	For repricing, 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 repricing, modified step-rate loans, the maximum interest rate in effect following the final scheduled interest rate adjustment date. <i>Once the interest rate reaches the Terminal Step Rate, it is fixed for the remaining term of the mortgage.</i>		Numeric	2.3	6	
L-082	Terminal Step Date	For repricing, 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 repricing, modified step-rate loans, the number of months between each interest rate adjustment.		Numeric		3	
L-084	Next Step Rate Adjustment Date	For repricing, 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 repricing, 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 repricing, 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 repricing, 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 repricing, 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 (<i>securities issued on or after 9/1/2017</i>)

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. <i>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.</i>	999 = Not Available	Numeric		3	If value <1 or >998, then the ratio is considered not available (<i>securities issued on or after 9/1/2017</i>)
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. <i>Property value reflects either the lesser of the sales price or the appraised property price for a purchase, or the appraised property value for a refinance.</i>	999 = Not Available	Numeric		3	If value <1 or >998, then the ratio is considered not available (<i>securities issued on or after 9/1/2017</i>)

L-096	Origination Debt-To-Income Ratio	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.	999 = Not Available	Numeric		3	If value <1 or >65, then the ratio is considered not available
L-097	Origination Credit Score	For reperforming, modified fixed-rate and modified step-rate loans, the standardized credit score used to evaluate the borrower during the loan origination process.	9999 = Not Available	Numeric		4	If value <300 or >850, 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 = 120-149 5 = 150-179 6 = 180-209 7 = 210-239 8 = 240-269 9 = 270-299 10 = 300-329 11 = 330-359 12 = 360-389 13 = 390-419 14 = 420-449 15 = 450-479 16 = 480-509 17 = 510-539 18 = 540-569 19 = 570-599 20 = 600-629 21 = 630-659 22 = 660-689 23 = 690-719 24 = 720+	Numeric		2	Applicable for monthly disclosure only

L-105	Loan Performance History	<p>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.</p> <p><i>This string will contain 36 months of history for reperforming modified and modified step rate loans and 12 months for reinstated loans.</i></p>	<p>0 = Current 1 = 30-59 2 = 60-89 3 = 90-119 4 = 120-149 5 = 150-179 6 = 180-209 7 = 210-239 8 = 240-269 9 = 270-299 10 = 300-329 11 = 330-359 12 = 360-389 13 = 390-419 14 = 420-449 15 = 450-479 16 = 480-509 17 = 510-539 18 = 540-569 19 = 570-599 20 = 600-629 21 = 630-659 22 = 660-689 23 = 690-719 24 = 720+ XX = Unknown YY = Not Expected</p>	String		150	<ul style="list-style-type: none"> • Applicable only for Issuance Disclosure. • The most recently reported activity is reported in the last two positions in the string. • “Unknown” represents when a loan payment is not available, or activity is not reported by servicer. • “Not Expected” represents when a payment is not due (e.g. month prior to first payment date)
L-106	Loan Participation Percent	The percentage of the loan that is contributing to the security		Numeric	3.2	6	<p>Populated for loans backing securities issued on or after 10/1/2017</p> <p>Date Effective: 7/2/2018</p>
L-107	Property Valuation Method	Indicates the method by which the value of the subject property was obtained.	<ul style="list-style-type: none"> • 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. <i>Includes Relief Refinance and Enhanced Relief Refinance program loans. Commingled Supers may</i> 	String		1	Disclosure will be effective for loans backing pools issued as June 1, 2017. This disclosure will first appear with March 2020 issuances

			<p>contain Fannie Mae Refi Plus or High LTV Refinance loans.</p> <ul style="list-style-type: none"> • Appraisal Waiver (W) - The appraisal is waived per applicable Selling Guide or negotiated terms. <i>Appraisal waiver granted under Freddie Mac's Automated Collateral Evaluation (ACE) program. Commingled Supers may contain loans with appraisal waivers granted under Fannie Mae's Property Inspection Waiver (PIW) program.</i> • Other (O) - Any property valuation method not provided within the other enumerations. • Not Available (9) - The Property Valuation Method is not available for disclosure. <i>Default value for loans backing pools issued prior to June 1, 2017.</i> <p>Not Applicable (7) - The Property Valuation Method is not applicable to the loan product. <i>The disclosure is not applicable for modified fixed-rate and step-rate loans.</i></p>				
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.	<ul style="list-style-type: none"> • 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 	String		1	<p>Applicable for monthly disclosure only. Effective beginning with the December 2020 factor date.</p> <p>Discloses the latest ADR plan completed by the borrower.</p>

			<p>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 transfer of the property, refinance of the mortgage loan, or payoff of the interest-bearing UPB.</p> <ul style="list-style-type: none"> 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 18 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 				
--	--	--	---	--	--	--	--

			<p>interest-bearing UPB.</p> <ul style="list-style-type: none"> • 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 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 				
--	--	--	--	--	--	--	--

			<p>applicable for the related mortgage loan.</p> <ul style="list-style-type: none"> • 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	<p>The total non-interest-bearing deferral amount related to one or more Alternative Delinquency Resolutions.</p> <p><i>For modified loans, this may include additional non-interest-bearing deferral amounts related to a prior modification.</i></p>		Numeric	9.2	12	<p>Privacy Masking: Round to nearest thousand if > \$500</p> <p>Applicable for monthly disclosure only. Effective beginning with the December 2020 factor date.</p>
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.	<p>F = Forbearance Plan</p> <p>R = Repayment Plan</p> <p>T = Trial Period Plan</p> <p>O = Other Workout Plan</p> <p>N = No Workout Plan</p> <p>7 = Not Applicable</p> <p>9 = Not Available</p>	Numeric		1	<p>Applicable for monthly disclosure only.</p> <p>This attribute will be published on a one-month delay due to the timing of our servicing reporting cycle. For example, the values in this attribute published in July 2020 correspond to the delinquency status in the Days Delinquent attribute published in June 2020.</p>
L-112	Seller City	The city of the address of the entity that sold the loan to the issuer.		String		50	Unavailable data will be populated as NULL.
L-113	Seller State	The state or territory of the address of the entity that sold the loan to the issuer.		String		2	Unavailable data will be populated as NULL.
L-114	Servicer City	The city of the address of the entity that services the loan.		String		50	Unavailable data will be populated as NULL.
L-115	Servicer State	The state or territory of the address of the entity that services the loan.		String		2	Unavailable data will be populated as NULL.

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 Length	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 Length	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		
	Security Description	The unique designation of the security including abbreviated FED CODE, WA Net Interest Rate, Prefix and Security Identifier.		String		23		For Pseudopools only
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 UPB 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 3 rd decimal	
	WA Net Interest Rate	The weighted average interest rate of the loans less servicing fees and guarantor fees.		Numeric	2.5	8	Rounded to the 5 th decimal	For Pseudopools only
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 3 rd decimal	
S-19	WA Current Interest Rate	The weighted average interest rate of the loans		Numeric	2.3	6	Rounded to the 3 rd decimal	Not applicable for Freddie Mac ARM

ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Precision	Implementation Notes
		in effect during the current reporting period.						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 guarantor fees.		Numeric	2.3	6	Rounded to the 3rd decimal	Not applicable for Freddie Mac ARMs
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. <i>For fixed-rate loans, this value takes into account the impact of any curtailments.</i>		Numeric		3		
S-23	WA Current Remaining Months to Maturity	The weighted average number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero. <i>For fixed-rate loans, this value takes into account the impact of any curtailments.</i>		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. <i>For reperforming, modified fixed-rate and modified step-rate loans, this value represents both the interest bearing and non-interest bearing amount.</i>		Numeric	9.2	12	Rounded to the 2nd decimal	

ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Precision	Implementation Notes
S-26	Average Mortgage Loan Amount	<p>The simple average dollar amount of the loans as stated on the notes at the time the loans were originated or modified.</p> <p><i>For reperforming, modified fixed-rate and modified step-rate loans, this value represents both the interest bearing and non-interest bearing amount.</i></p>		Numeric	9.2	12	Rounded to the 2nd decimal	
S-27	WA Loan-To-Value (LTV)	<p>The weighted average ratio, expressed as a percentage, obtained by dividing the amount of the loans at origination by the value of the properties.</p> <p><i>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.</i></p> <p><i>For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.</i></p>		Numeric		3	Rounded to the nearest integer	If value <1 or >998, then the ratio is considered not available (<i>securities issued on or after 9/1/2017</i>)
S-28	WA Combined Loan-To-Value (CLTV)	<p>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.</p> <p><i>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.</i></p> <p><i>For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.</i></p>		Numeric		3	Rounded to the nearest integer	If value <1 or >998, then the ratio is considered not available (<i>securities issued on or after 9/1/2017</i>)
S-29	WA Debt-To-Income (DTI)	<p>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.</p>		Numeric		3	Rounded to the nearest integer	If value <1 or >65, then the ratio is considered not available

ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Precision	Implementation Notes
S-30	WA Borrower Credit Score	The weighted average standardized credit score used to evaluate the borrower during the loan origination process. <i>For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.</i>	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		
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. <i>For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.</i>		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.

ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Precision	Implementation Notes
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 delinquencies, loss mitigation efforts and lender repurchases.		Numeric	14.2	17		Monthly Security file only Effective June 2019 (BD4) Attribute label will be updated after June 2019
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		2048		
S-45	Notes Ongoing	Additional information about the loans in the security.		String		2048		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		

ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Precision	Implementation Notes
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 index to arrive at the new interest rate.	77.777 - Not Applicable	Numeric	2.3	6	Rounded to the 3rd decimal place	Issuance value will be populated in the monthly files.
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		

ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Precision	Implementation Notes
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 Limit of the loans in the security.	99.999 = Not Available	Numeric	2.3	6		Not applicable to Freddie Mac ARMs
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 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 55 = Mixed	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

ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Precision	Implementation Notes
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
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		

ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Precision	Implementation Notes
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 55 = Mixed	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	
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. <i>This value represents both the interest bearing and non-interest bearing amount.</i>		Numeric	9.2	12	Rounded to the 2nd decimal	

ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Precision	Implementation Notes
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. <i>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.</i>		Numeric		3		If value <1 or >998, then the ratio is considered not available (<i>securities issued on or after 9/1/2017</i>)
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. <i>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.</i>		Numeric		3		If value <1 or >998, then the ratio is considered not available (<i>securities issued on or after 9/1/2017</i>)
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

ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Precision	Implementation Notes
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 (<i>only applicable to securities issued on or after 9/1/2017</i>)
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 provided at the time of issuance.		Numeric		4		If value <300 or >850, then the score is considered not available

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
1	Quartiles
2	Next Rate Change Date (NRCD)
3	Loan-To-Value (LTV) Not Available Stratification
4	Combined Loan-To-Value (CLTV) Not Available Stratification
5	Debt-To-Income (DTI) Not Available Stratification
6	Borrower Credit Score Not Available Stratification
7	Days Delinquent Stratification
8	Number of Borrowers Stratification
9	First Time Home Buyer Stratification
10	Loan Purpose Stratification
11	Occupancy Status Stratification
12	Number of Units Stratification
13	Property Type Stratification
14	Channel Stratification
15	Property State Stratification
16	Seller Name Stratification
17	Servicer Name Stratification
18	Mortgage Insurance Coverage Stratification
19	Mortgage Insurance Cancellation Indicator Stratification
20	Government Insured/Guarantee Stratification
21	Interest Only First Principal and Interest Payment Date Stratification
22	Not Paying Principal in First Distribution Stratification
23	Origination Year Stratification
24	Origination Channel Stratification
25	Non-Standard Loan Type Stratification
26	Modification Program Stratification
27	Modification Type Stratification
28	Modification Information Stratification
29	Number of Modifications Stratification
30	Deferred Unpaid Principal Balance Stratification
31	Estimated Loan-to-Value (ELTV) Not Available Stratification
32	Updated Credit Score Not Available Stratification
33	Number of Remaining Steps Stratification
34	Number of Steps - At Modification Stratification
35	Next Step Rate Adjustment Date Stratification
36	Origination Loan-To-Value (LTV) Not Available Stratification
37	Origination Combined Loan-To-Value (CLTV) Not Available Stratification
38	Origination Debt-To-Income (DTI) Not Available Stratification
39	Origination Borrower Credit Score Not Available Stratification
40	Origination Loan Purpose Stratification
41	Origination Occupancy Status Stratification
42	Borrower Payment History Stratification
43	Collateral List
44	Property Valuation Method
45	Borrower Assistance Plan
46	Alternative Delinquency Resolution

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

Quartiles							
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. <i>For reperforming, modified fixed-rate and modified step-rate loans, this value represents both the interest bearing and non-interest bearing amount.</i>		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 guarantor 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. <i>For fixed-rate loans, this value takes into account the impact of any curtailments.</i>		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	

Quartiles							
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-012	Loan-To-Value (LTV)	<p>The ratio, expressed as a percentage, obtained by dividing the amount of the loan at origination by the value of the property.</p> <p><i>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.</i></p> <p><i>For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.</i></p>		Numeric		3	
SS-013	Combined Loan-To-Value (CLTV)	<p>The ratio, expressed as a percentage, obtained by dividing the amount of all known outstanding loans at origination by the value of the property.</p> <p><i>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.</i></p> <p><i>For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.</i></p>		Numeric		3	
SS-014	Debt-To-Income (DTI)	<p>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.</p>		Numeric		3	
SS-015	Borrower Credit Score	<p>The standardized credit score used to evaluate the borrower during the loan origination process.</p> <p><i>For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.</i></p>		Numeric		4	
SS-016	FILLER						
SS-017	FILLER						
SS-018	Updated Credit Score	<p>For reinstated, reperforming, modified fixed-rate and modified step-rate loans, the most recently available standardized credit score provided at the time of issuance.</p>		Numeric		4	
Quartiles							

ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
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 the mortgage loan by the estimated current value of the property obtained by the issuer, at the time of issuance.		Numeric		3	
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
SS-030	Percentage Loan Count	For the stratified attribute of adjustable-rate loans, the percentage of loans in the security.		Numeric	3.2	6	
SS-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
SS-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
SS-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
SS-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 guarantor fees.		Numeric	2.3	6	
SS-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	
SS-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
SS-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

Next Rate Change Date (NRCD)

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
Next Rate Change Date (NRCD)							

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 guarantor 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 guarantor 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 <i>For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.</i>		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	

Combined Loan-To-Value (CLTV) Not Available Stratification							
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 <i>For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.</i>		String		2	If security characteristics apply
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	

Borrower Credit Score Not Available Stratification							
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 Stratification							
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.	0 = Current 1 = 30-59 2 = 60-89 3 = 90-119 4 = 120-149 5 = 150-179 6 = 180-209 7 = 210-239 8 = 240-269 9 = 270-299 10 = 300-329 11 = 330-359 12 = 360-389 13 = 390-419 14 = 420-449 15 = 450-479 16 = 480-509 17 = 510-539 18 = 540-569 19 = 570-599 20 = 600-629 21 = 630-659 22 = 660-689 23 = 690-719 24 = 720+	Numeric		2	Will represent 100% of the pool.
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 Buyer 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 Stratification							
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.		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 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. <i>For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.</i>	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	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	
SS-137	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-138	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-139	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-140	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	
Property Type Stratification							
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 Stratification							
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. <i>For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.</i>	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 Stratification							
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 Stratification							
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. <i>Will reflect servicer names contributing > 1% of the Current Investor Security UPB.</i>		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	

Seller Name Stratification							
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
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	
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	
SS-186	Seller City	The city of the address of the entity that sold the loan to the issuer.		String		50	
SS-187	Seller State	The state or territory of the address of the entity that sold the loan to the issuer.		String		2	

Servicer Name Stratification							
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-188	Record Type = 17	Servicer Name Stratification		String		2	
SS-189	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-190	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-191	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-192	Servicer Name	The name of the entity that services the loan during the current reporting period. <i>Will reflect servicer names contributing > 1% of the Current Investor Security UPB.</i>		String		100	
SS-193	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-194	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-195	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-196	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	
SS-197	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-198	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-199	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-200	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 Stratification							
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-201	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-202	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-203	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-204	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-205	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-206	Servicer City	The city of the address of the entity that services the loan.		String		50	
SS-207	Servicer State	The state or territory of the address of the entity that services the loan.		String		2	

Mortgage Insurance Coverage Stratification							
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-208	Record Type = 18	Mortgage Insurance Coverage Stratification		String		2	
SS-209	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-210	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-211	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-212	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-213	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-214	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-215	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-216	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

Mortgage Insurance Cancellation Indicator Stratification							
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-217	Record Type = 19	Mortgage Insurance Cancellation Indicator Stratification		String		2	
SS-218	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-219	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-220	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-221	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-222	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-223	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-224	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-225	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

Government Insured/Guarantee Stratification							
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-226	Record Type = 20	Government Insured/Guarantee Stratification		String		2	Government Insured/Guarantee loans
SS-227	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-228	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-229	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-230	Government Insured /Guarantee	The classification describing the Government Insured/Guarantee Program, if any, covering the loan.	FH = FHA VA = Veterans Affairs RH = Rural Housing IH = Section 184 Indian Home 99 = Not Available	String		2	
SS-231	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-232	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-233	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-234	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

Interest Only First Principal and Interest Payment Date Stratification							
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-235	Record Type = 21	Interest Only First Principal and Interest Payment Date Stratification		String		2	
SS-236	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-237	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-238	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-239	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-240	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-241	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-242	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-243	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	
SS-244	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-245	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-246	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-247	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 First Principal and Interest Payment Date Stratification							
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-248	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-249	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-250	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-251	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-252	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-253	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 Principal in First Distribution Stratification							
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-254	Record Type = 22	Not Paying Principal in First Distribution Stratification. <i>Loans that will not receive a principal distribution in the first investor payment.</i>		String		2	Applicable only at issuance for Single - Class (no resecuritizations)
SS-255	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-256	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-257	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-258	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-259	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-260	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-261	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	
Origination Year Stratification							
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-262	Record Type = 23	Origination Year Stratification		String		2	
SS-263	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-264	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-265	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-266	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-267	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-268	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-269	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-270	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	
Origination Channel Stratification							
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-271	Record Type = 24	Origination Channel Stratification		String		2	If security characteristics apply
SS-272	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-273	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-274	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-275	Origination Channel	For repurchasing, 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-276	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-277	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-278	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-279	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

Non-Standard Loan Type Stratification							
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-280	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-281	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-282	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-283	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-284	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-285	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-286	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-287	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-288	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-289	Record Type = 26	Modification Program Stratification		String		2	If security characteristics apply
SS-290	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-291	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-292	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-293	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-294	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	If security characteristics apply
SS-295	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-296	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-297	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-298	Record Type = 27	Modification Type Stratification		String		2	
SS-299	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-300	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-301	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	

SS-302	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 S = Rate & Deferred Amount T = Term U = Term & Deferred Amount	String		1	Effective beginning 9/21/2020
SS-303	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-304	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-305	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-306	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	
Modification Information Stratification							
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-307	Record Type = 28	Modification Information Stratification		String		2	If security characteristics apply
SS-308	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-309	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-310	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-311	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-312	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-313	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-314	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-315	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

Number of Modifications Stratification							
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-316	Record Type = 29	Number of Modifications Stratification		String		2	
SS-317	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-318	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-319	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-320	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-321	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-322	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-323	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-324	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

Deferred Unpaid Principal Balance Stratification							
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-325	Record Type = 30	Deferred Unpaid Principal Balance Stratification		String		2	If security characteristics apply
SS-326	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-327	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-328	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-329	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-330	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-331	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-332	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-333	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-334	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	

Deferred Unpaid Principal Balance Stratification							
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-335	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-336	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-337	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. <i>For reperforming, modified fixed-rate and modified step-rate loans, this value represents both the interest bearing and non-interest bearing amount.</i>		Numeric	9.2	12	
SS-338	Property State 1	The abbreviation denoting the location of the property securing the loan for the stratified attribute. <i>Ranked #1 by Investor Loan UPB</i>	See Appendix A	String		2	
SS-339	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-340	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	

Deferred Unpaid Principal Balance Stratification							
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-341	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-342	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-343	Property State 2	The abbreviation denoting the location of the property securing the loan for the stratified attribute. <i>Ranked #2 by Investor Loan UPB</i>	See Appendix A	String		2	
SS-344	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-345	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-346	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-347	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-348	Property State 3	The abbreviation denoting the location of the property securing the loan for the stratified attribute. <i>Ranked #3 by Investor Loan UPB</i>	See Appendix A	String		2	
SS-349	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-350	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	

Deferred Unpaid Principal Balance Stratification							
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-351	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-352	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 Loan-to-Value (ELTV) Not Available Stratification							
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-353	Record Type = 31	Estimated Loan-to-Value (ELTV) Not Available Stratification		String		2	If security characteristics apply
SS-354	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-355	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-356	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-357	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-358	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-359	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric	3.2	6	
SS-360	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric		9	

Updated Credit Score Not Available Stratification							
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-361	Record Type = 32	Updated Credit Score Not Available Stratification <i>For non-reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.</i>		String		2	If security characteristics apply
SS-362	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-363	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-364	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-365	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-366	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-367	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-368	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

Number of Remaining Steps Stratification							
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-369	Record Type = 33	Number of Remaining Steps Stratification		String		2	If security characteristics apply
SS-370	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-371	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-372	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-373	Number of Remaining Steps	For reperforming, modified step-rate loans, the number of upward interest rate adjustments remaining.		Numeric		2	
SS-374	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-375	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-376	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-377	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

Number of Steps - At Modification Stratification							
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-378	Record Type = 34	Number of Steps - At Modification Stratification		String		2	Freddie Mac Modified Step securities
SS-379	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-380	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-381	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-382	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-383	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-384	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-385	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-386	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

Next Step Rate Adjustment Date Stratification							
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-387	Record Type = 35	Next Step Rate Adjustment Date Stratification		String		2	Freddie Mac Modified Step securities
SS-388	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-389	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-390	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-391	Next Step Rate Adjustment Date	For repricing, modified step-rate loans, the month and year that the interest rate is scheduled to increase.		Date	MMCCYY	6	
SS-392	Projected WA Interest Rate	For repricing, 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-393	Projected WA Net Interest Rate	For repricing, 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-394	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-395	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-396	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-397	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-398	Record Type = 36	Origination Loan-To-Value (LTV) Not Available Stratification <i>For non-reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.</i>		String		2	If security characteristics apply
SS-399	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-400	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-401	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-402	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-403	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-404	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-405	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

Origination Combined Loan-To-Value (CLTV) Not Available Stratification

ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-406	Record Type = 37	Origination Combined Loan-To-Value (CLTV) Not Available Stratification <i>For non-reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.</i>		String		2	If security characteristics apply
SS-407	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-408	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-409	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-410	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-411	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-412	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-413	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-414	Record Type = 38	Origination Debt-To-Income (DTI) Not Available Stratification <i>For non-reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.</i>		String		2	If security characteristics apply
SS-415	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-416	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-417	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-418	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-419	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-420	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-421	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-422	Record Type = 39	Origination Borrower Credit Score Not Available Stratification		String		2	If security characteristics apply
SS-423	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-424	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-425	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-426	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-427	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-428	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-429	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

Origination Loan Purpose Stratification

ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-430	Record Type = 40	Origination Loan Purpose Stratification		String		2	If security characteristics apply
SS-431	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-432	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-433	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-434	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-435	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-436	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-437	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-438	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

Origination Occupancy Status Stratification

ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-439	Record Type = 41	Origination Occupancy Status Stratification		String		2	If security characteristics apply
SS-440	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-441	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-442	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	

SS-443	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-444	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-445	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-446	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-447	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

Borrower Payment History Stratification

ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-448	Record Type = 42	Borrower Payment History Stratification		String		2	Applicable at issuance for Modified Fixed and Step and Reinstated
SS-449	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-450	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-451	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-452	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-453	Borrower Payment Date	The month and year that the borrower was scheduled to remit payment.		Date	MMCCYY	6	
SS-454	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-455	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-456	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-457	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

Collateral List							
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-458	Record Type = 43	Collateral List		String		2	Applicable at Issuance for Single Class Resecuritizations
SS-459	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-460	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-461	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-462	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-463	Collateral Security Identifier	For each security that directly underlies the resecuritization, the unique designation assigned to the security by the issuer.		String		6	
SS-464	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-465	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-466	Collateral Issue Date	For each security that directly underlies the resecuritization, the date on which the security was issued.		Date	MMDDCCYY	8	
SS-467	Collateral Issuer	The issuer for each security that directly underlies the resecuritization.		String		3	
SS-468	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-469	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 List							
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-470	Collateral Issuance Contributing Investor Security UPB	For each security that directly underlies the securitization, the pro-rata share of the Investor Security UPB - Issuance amount		Numeric	12.2	15	
SS-471	Collateral Current Contributing Investor Security UPB	For each security that directly underlies the securitization, the pro-rata share of the Investor Security UPB - Current amount.		Numeric	12.2	15	
SS-472	Collateral WA Interest Rate at Settlement	For each security that directly underlies the securitization, the weighted average interest rate at the time of securitization.		Numeric	2.3	6	
SS-473	Collateral WA Remaining Months to Maturity at Settlement	For each security that directly underlies the securitization, the weighted average number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero at the time of securitization.		Numeric		3	
SS-474	Collateral WA Loan Age at Settlement	For each security that directly underlies the securitization, 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 securitization.		Numeric		3	
SS-475	Collateral Trust Identifier	An identifier assigned to the trust when established into a multiclass securitization.		String		50	
SS-476	Collateral Class Identifier	An identifier assigned to the class when established into a multiclass securitization.		String		4	
SS-477	Group Identifier	An identifier assigned to the group when established into a multiclass securitization.		String		5	

Property Valuation Method							
ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-478	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-479	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-480	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-481	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-482	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-483	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-484	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-485	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-486	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 / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-487	Record Type = 45	Borrower Assistance Plan Stratification		String		2	
SS-488	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-489	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-490	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	

SS-491	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-492	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-493	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-494	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-495	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-496	Record Type = 46			String		2	Applicable for monthly disclosure only. Effective beginning with the December 2020 factor date.
SS-497	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-498	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-499	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-500	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.	P = Payment Deferral C = COVID-19 Payment Deferral D = Disaster Payment Deferral M = Multiple O = Other 7 = Not Applicable 9 = Not Available	String		1	Please reference the loan-level file specification for enumeration definitions (L-108). Loans that have completed multiple ADR plans will be disclosed as "Multiple" at the pool level.
SS-501	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-502	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-503	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	

SS-504	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	
SS-505	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-506	Record Type = 47			String		2	Applicable for monthly disclosure only. Effective beginning with the December 2020 factor date.
SS-507	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-508	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-509	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-510	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-511	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-512	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-513	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-514	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	
SS-515	Total Deferral Amount	The total non-interest-bearing deferral amount related to one or more Alternative Delinquency Resolutions. <i>For modified loans, this may include additional non-interest-bearing deferral amounts related to a prior modification.</i>		Numeric	9.2	12	

Borrower Assistance Plan History

ID	Attribute Name	Attribute Definition	Codes / Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-516	Record Type = 48	Borrower Assistance Plan History Stratification		String		2	Applicable for issuance disclosure only Effective as of 2/22/2021
SS-517	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	

SS-518	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-519	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-520	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-521	Borrower Payment Date	The month and year that the borrower was scheduled to remit payment.		Date	MMCC YY	6	
SS-522	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-523	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-524	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-525	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. <i>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.</i>	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). <i>The 55-day MBS CUSIP was created as a "mirror" of the 45-day PC.</i>	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	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. <i>Reflects the amount of the security that was exchanged directly to its' corresponding 55-day security.</i>	Numeric	14.2	17	Truncated to whole number
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 exchange activity is included in this disclosure.	Date	MMDDCCYY	8	

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. <i>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.</i>	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). <i>The 55-day MBS CUSIP was created as a "mirror" of the 45-day PC.</i>	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).	Alpha-Numeric		9	
03	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
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	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 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	

MULTICLASS & SINGLE CLASS TAX DISCLOSURE FILES

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-xxxxxxx
filler	space	1	94		
Issuer name1	character	50	144	Issue Name	Federal National Mortgage Association, FHLMC Trust
filler	space	1	145		
Issuer name2	character	50	195	Attention line	Blank
filler	space	1	196		
Issuer address1	character	50	246	Street Address	1100 15TH STREET NW WASHINGTON DC 20005 1551 PARK RUN DRIVE MCLEAN 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 Factor	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		
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
CT	Connecticut
DC	District of Columbia
DE	Delaware
FL	Florida
GA	Georgia
GU	Guam
HI	Hawaii
IA	Iowa
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

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