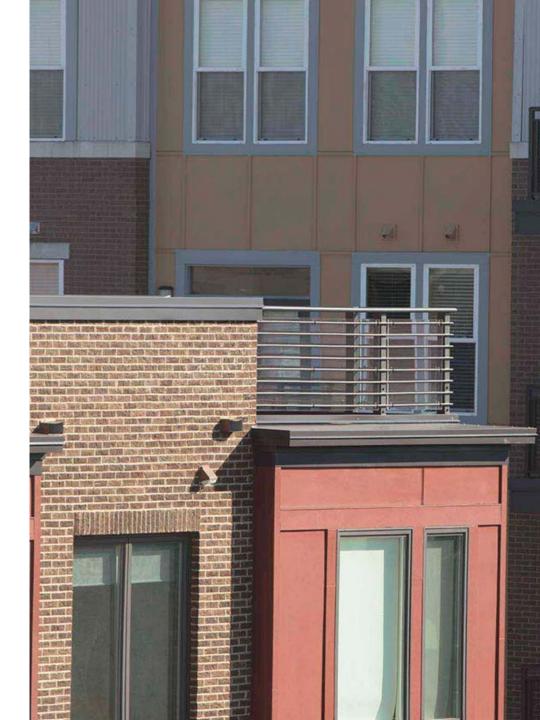![Fannie Mae]

Single-Family
Single-Class Disclosure Glossary &
Calculation Guide
November 2018

Introduction

This document provides the definitions and calculations for the data elements provided for Fannie Mae's Single-Family Single-Class Mortgage-Backed Securities in the issuance and monthly disclosure files. The data attributes are also displayed on the PoolTalk® user interface.
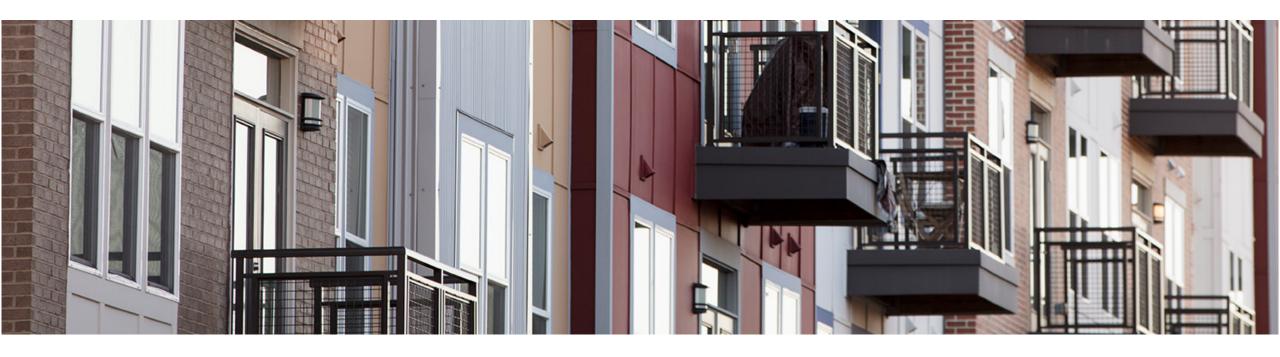
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Disclosure Files

Disclosure Files

File Business Name	File Name	Publication Timing	Process Cycle	File Published if no securities available	Products	Archive Availability
MBS Intraday Security Issuance File	FNM_IS_YYYYMMDD_1	Every Business Day - 6:30 AM Eastern time	Issuance	Yes	MBS & UMBS Mega & Supers	7 Business Days
MBS Intraday Security Supplemental Issuance File	FNM_ISS_YYYYMMDD_1	Every Business Day - 6:30 AM Eastern time	Issuance	Yes	MBS & UMBS Mega & Supers	7 Business Days
MBS Intraday Issuance Loan Level File	FNM_ILLD_YYYYMMDD_1	Every Business Day - 6:30 AM Eastern time	Issuance	Yes	MBS & UMBS	7 Business Days
MBS Intraday Security Issuance File	FNM_IS_YYYYMMDD_2	Every Business Day - 11:30 AM Eastern time	Issuance	Yes	MBS & UMBS Mega & Supers	7 Business Days
MBS Intraday Security Supplemental Issuance File	FNM_ISS_YYYYMMDD_2	Every Business Day - 11:30 AM Eastern time	Issuance	Yes	MBS & UMBS Mega & Supers	7 Business Days
MBS Intraday Issuance Loan Level File	FNM_ILLD_YYYYMMDD_2	Every Business Day - 11:30 AM Eastern time	Issuance	Yes	MBS & UMBS	7 Business Days
MBS Intraday Security Issuance File	FNM_IS_YYYYMMDD_3	Every Business Day - 3:30 PM Eastern time	Issuance	Yes	MBS & UMBS Mega & Supers	7 Business Days
MBS Intraday Security Supplemental Issuance File	FNM_ISS_YYYYMMDD_3	Every Business Day - 3:30 PM Eastern time	Issuance	Yes	MBS & UMBS Mega & Supers	7 Business Days
MBS Intraday Issuance Loan Level File	FNM_ILLD_YYYYMMDD_3	Every Business Day - 3:30 PM Eastern time	Issuance	Yes	MBS & UMBS	7 Business Days
MBS Monthly Security Factor File	FNM_MF_YYYYMM	Business Day 4 - 4:30 PM Eastern time	Monthly	Yes	MBS & UMBS Mega & Supers	Current Month + 5 Historical Months
MBS Monthly Security Supplemental File	FNM_MS_YYYYMM	Business Day 4- 4:30 PM Eastern time	Monthly	Yes	MBS & UMBS Mega & Supers	Current Month + 5 Historical Months
MBS Monthly Loan Level File	FNM_MLLD_YYYYMM	Business Day 4- 4:30 PM Eastern time	Monthly	Yes	MBS & UMBS	Current Month + 5 Historical Months

Disclosure Files

File Business Name	File Name	Publication Timing	Process Cycle	File Published if no securities available	Products	Archive Availability
MBS Month-End Issuance Security File	FNM_IS_YYYYMM	Business Day 1 of Following Month - 6:30 AM Eastern time	Month-End	Yes	MBS & UMBS Mega & Supers	Current Month + 5 Historical Months
MBS Month-End Issuance Security Supplemental File	FNM_ISS_YYYYMM	Business Day 1 of Following Month - 6:30 Eastern time	Month-End	Yes	MBS & UMBS Mega & Supers	Current Month + 5 Historical Months
MBS Month-End Issuance Loan Level	FNM_ILLD_YYYYMM	Business Day 1 of Following Month - 6:30 AM Eastern time	Month-End	Yes	MBS & UMBS	Current Month + 5 Historical Months
MBS Security Issuance Correction File	FNM_RIS_YYYYMM	Business Day 1 of Following Month - 6:30 AM Eastern time	Month-End	No	MBS & UMBS Mega & Supers	Current Month + 5 Historical Months
MBS Security Supplemental Issuance Correction File	FNM_RISS_YYYYMM	Business Day 1 of Following Month - 6:30 AM Eastern time	Month-End	No	MBS & UMBS Mega & Supers	Current Month + 5 Historical Months

Loan Level File

Loan Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
L-001	Loan Identifier	The unique designation assigned to the loan by the issuer.		String		12		
L-002	Loan Correction Indicator	The indicator denoting whether any attributes for the loan have changed from previous disclosures.	Y = Yes N = No A = Added D = Deleted	String		1		
L-003	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3		
L-004	Security Identifier	The unique designation assigned to the security by the issuer.		String		6		
L-005	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9		
L-006	Mortgage Loan Amount	The dollar amount of the loan as stated on the note at the time the loan was originated or modified. For reperforming, modified fixed-rate and modified step-rate loans, this value represents both the interest bearing and non-interest bearing amount.		Numeric	9.2	12	Privacy Masking: Amount rounded to nearest thousand if > $500.	
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, UPB rounded 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. The Current Investor loan UPB is derived from the mortgage balance as reported by the servicer. The Current Investor UPB reflects any scheduled and unscheduled principal reductions applied to the mortgage.		Numeric	9.2	12	Privacy Masking: If loan age ≤ 6 months, UPB rounded to nearest thousand if > $500. File will include the loan, when the balance equals zero for one month.	

Loan Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
L-009	Amortization Type	The classification of the loan as having either a fixed- or an adjustable-interest rate at the time the loan was originated or modified.	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		
L-011	Issuance Interest Rate	The interest rate of the loan in effect at the time the security was issued.		Numeric	2.3	6		
L-012	Current Interest Rate	The interest rate of the loan in effect during the current reporting period.		Numeric	2.3	6		
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		
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		
L-015	First Payment Date	The month and year that the first scheduled payment on the loan is due at the time the loan was originated or modified.		Date	MMCCYY	6		
L-016	Maturity Date	The month and year that the final scheduled payment on the loan is due at the time the loan was originated or modified.		Date	MMCCYY	6		
L-017	Loan Term	For fixed-rate, adjustable-rate and Interest-only mortgages, the number of months in which regularly scheduled borrower payments are due at the time the loan was originated or modified.		Numeric		3		

Loan Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
L-018	Remaining Months to Maturity	The number of remaining months that will reduce the Current Investor Loan UPB to zero. For fixed-rate loans, this value takes into account the impact of any curtailments.		Numeric		3		For fixed-Rate mortgages and interest-only mortgages that are amortizing: Calculation 1: - (FUNCTION LOG10 (1-(Issuance Investor Loan UPB*((Issuance Interest Rate/1200) / Loan Principal and Interest)))) / FUNCTION LOG10 (1 + (Issuance Interest Rate/1200)) Calculation 2: Difference between the Current Factor Date and the Loan Maturity Date. Round up to the nearest integer and use the lower value of the two calculations For adjustable-rate mortgages and interest-only mortgages in their interest-only period, use the following calculation: Difference between the Current Factor Date and the Loan Maturity Date.
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		((Security Factor Date (MM/YY) – First Payment Date (MM/YY)) + 1)

Loan Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations

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.
		
		Value of the property reflects either the lesser of the sales price or the property value for a purchase or the property value for a refinance.
		
		For modified fixed-rate, modified step-rate loans, and reinstated loans, this value will be blank.
				Numeric		3	If LTV ratios is < 1% or > 998%, it will be disclosed as "Not Available", indicated by 999.
							
							• If any of the following criteria is met, the LTV ratio will be disclosed as "Not Available", indicated by 999.
							  - The LTV ratio is <1% or >998%
							  - The CLTV ratio is < the LTV ratio
							  - The LTV ratio is "Not Available"
								Purchase:
								LTV = Mortgage Loan Amount / (Min (Sales Price, Property Value)) * 100
								
								Refinance:
								LTV = Mortgage Loan Amount /Property Value * 100
								
								• Truncate (shortened) to two decimal places, then rounded up to the nearest whole percent.

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.
		
		Value of the property reflects either the lesser of the sales price or the property value for a purchase or the property value for a refinance.
		
		For modified fixed-rate, modified step-rate loans, and reinstated loans, this value will be blank.
				Numeric		3	If CLTV ratios is < 1% or > 998%, it will be disclosed as "Not Available", indicated by 999.
							
							• The CLTV ratio will be disclosed as "Not Available", indicated by 999:
							  - The CLTV ratio is <1% or >998%
							  - The CLTV ratio is < the LTV ratio
							  - The CLTV ratio is "Not Available"
								Sum of All Outstanding Loan Amounts / (Min (Sales Price, Property Value)) * 100
								
								• Loan Amounts may Include:
								  - Original loan amount of the first mortgage,
								  - Drawn portion (outstanding principal balance) of a HELOC, and
								  - Unpaid principal balance of all closed-end subordinate financing

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.		Numeric		3	If value is < 1 or > 65, it will be disclosed as "Not Available", indicated by 999.	(Borrower Total Monthly Liabilities Amount / Borrower Total Monthly Income Amount) * 100 • Round to nearest integer

Loan Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
L-023	Borrower Credit Score	The standardized credit score used to evaluate the borrower during the loan origination process. • If there are two or more borrowers on a mortgage loan and more than one credit score is provided, Fannie Mae will use the lower of the two scores. • For all newly delivered loans, Fannie Mae uses the "Classic" FICO score developed by Fair Isaac Corporation with the range of 300 - 850.		Numeric		4	If credit score is < 300 or > 850, the Borrower Credit Score will be disclosed as "Not Available", which will be indicated by 9999. For modified fixed-rate, modified step-rate loans and reinstated loans, this value will be blank.	
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		
L-028	First-Time Homebuyer Indicator	The indicator denoting whether a borrower on the loan qualifies as a first-time homebuyer. An individual is to be considered a first-time homebuyer who (1) is purchasing the property; (2) will reside in the property; and (3) had no ownership interest (sole or joint) in a residential property during the three-year period preceding the date of the purchase of the property. In addition, an individual who is a displaced homemaker or single parent also will be considered a first-time homebuyer if he or she had no ownership interest in a principal residence (other than a joint ownership interest with a spouse) during the preceding three-year time period.	Y = Yes N = No 9 = Not Available	String		1		

Loan Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
L-029	Loan Purpose	The classification describing the purpose of the loan.	C = Refinance - Cash Out N = Refinance - No Cash Out & Limited Cashout R = Refinance - Not Specified P = Purchase M = Modified - Loss Mitigation 9 = Not Available	String		1		
L-030	Occupancy Status	The classification describing the property occupancy status at the time the loan was originated. For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.	P = Primary Residence S = Second Home I= Investment Property 9 = Not Available	String		1		
L-031	Number of Units	The number of dwelling units in the mortgaged property at the time the loan was originated.	1 = 1 2 = 2 3 = 3 4 = 4 99 = Not Available	Numeric		2		
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		

Loan Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
L-033	Channel	The origination channel used by the party that delivered the loan to the issuer. For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank. Broker: A mortgage loan that is originated under circumstances where a person or firm other than a mortgage loan seller or lender correspondent is acting as a "broker" and receives a commission for bringing together a borrower and a lender. The broker performs some (or most) of the loan processing functions (such as taking loan applications; ordering credit reports, appraisals, and title reports; verifying a borrower's income and employment, etc.), but it typically does not actually underwrite the loan, fund the loan at settlement, or service the loan. The mortgage loan is closed in the name of and funded by the mortgage loan seller (or, in some cases, the lender correspondent) that commissioned the broker's services. Correspondent: A mortgage loan that is originated by a party other than a mortgage loan seller and is then sold to a mortgage loan seller. A lender correspondent generally performs some (or all) of the loan processing functions (such as taking loan applications; ordering credit reports, appraisals, and title reports; verifying a borrower's income and employment; etc.) as well as underwriting and funding the mortgage loan at settlement. The mortgage loan is closed in the name of the lender correspondent, which may or may not service the loan. In certain instances, a correspondent loan may be originated under circumstances in which a broker performs some of the loan processing functions but the loan is funded by the lender correspondent at settlement. In that case, the loan would typically be classified as a correspondent loan even though there was some involvement by a broker. Retail: A mortgage loan, for which the mortgage loan seller takes the mortgage loan application and then processes, underwrites, funds, and delivers the mortgage loan to us. The loan is closed in the name of the mortgage loan seller, which may or may not service the loan. This definition may include joint ventures between the mortgage loan seller and another entity, provided that the mortgage loan seller retains control of the joint ventures (either through majority ownership or voting rights). For mortgage loans acquired prior to March 2013, the term "retail" may also, from time to time, include certain mortgage loans originated pursuant to a contractual arrangement, specifically approved by Fannie Mae, between a third party and the mortgage loan seller by which the third party may perform one or more of the functions (but not all) related to the origination of the mortgage loan, including taking the mortgage loan application, processing, underwriting, funding or delivering the mortgage loan to Fannie Mae.	R = Retail B = Broker C = Correspondent T = Third Party Origination - Not Specified 9 = Not Available	String		1		

Loan Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
L-034	Property State	The abbreviation denoting the location of the property securing the loan.		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/acquisitions. A pool with multiple sellers will display "Multiple"	
L-036	Servicer Name	The name of the entity that services the loan during the current reporting period.		String		100		
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	When the Mortgage Insurance is cancelled or expired, the Mortgage Insurance Percent is displayed as "000".	
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	Applicable only to 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 of time beginning with the first payment date.	Y = Yes N = No	String		1		

Loan Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
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	After the first P&I payment date, this value will be set to zero.	Interest Only First P&I Payment Date (MM/YY) - Security Factor Date (MM/YY)
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		
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	Index description is no longer provided. Leverage Appendix A to translate the index codes to their respective descriptions.	
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.		Numeric	2.3	6	77.777 = Not Applicable	
L-048	MBS Margin	For adjustable-rate loans, the mortgage margin less applicable fees (servicing fees and guarantor fees).		Numeric	2.3	6	77.777 = Not Applicable	Mortgage Margin minus Applicable Fees (Servicing and Guarantor Fees) • Round to third decimal place
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		

Loan Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
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		
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 00 = Other /no rounding	String		2		
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		
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 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	String		2		

Loan Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
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	If the Next Interest Rate Adjustment is in the past, the field will be null.	Next Adjustment Date (MMCCYY) – Security Factor Date (MM/YY)
L-057	Life Ceiling Interest Rate	For adjustable-rate loans, the lifetime maximum interest rate.		Numeric	2.3	6	77.777 = Not Applicable	
L-058	Life Ceiling Net Interest Rate	For adjustable-rate loans, the maximum interest rate less applicable fees (servicing fees and guarantor fees).		Numeric	2.3	6	77.777 = Not Applicable	Life Ceiling Interest Rate – Applicable Fees (Servicing and Guarantor Fees)
L-059	Life Floor Interest Rate	For adjustable-rate loans, the lifetime minimum interest rate.		Numeric	2.3	6	If the mortgage loans in the MBS pool have no floor other than the mortgage margin, Fannie Mae will populate this field as the margin. 77.777 = Not Applicable	
L-060	Life Floor Net Interest Rate	For adjustable-rate loans, the minimum interest rate less applicable fees (servicing fees and guarantor fees).		Numeric	2.3	6	If the mortgage loans in the MBS pool have no floor other than the mortgage margin, Fannie Mae will populate this field as the net margin. 77.777 = Not Applicable	Life Floor Interest Rate – Applicable Fees (Servicing and Guarantor Fees)
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 adjustment date.		Numeric	2.3	6	77.777 = Not Applicable	
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.		Numeric	2.3	6	77.777 = Not Applicable	
L-063	Periodic Interest Rate Cap Up Percent	For adjustable-rate loans, the maximum percentage points the interest rate can adjust upward at each interest rate adjustment date after the first interest rate adjustment date.		Numeric	2.3	6	77.777 = Not Applicable	

Loan Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
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 adjustment date after the first interest rate adjustment date.		Numeric	2.3	6	77.777 = Not Applicable	
L-065	Modification Program	For reperforming, modified fixed-rate and modified step-rate loans, the program under which the loan was modified. Standard Modification: Standard modifications contain features previously included in the Fannie Mae Home Affordable Modification Program (HAMP), Fannie Mae Regular Modification and Fannie Mae Streamlined Modification programs. This program started October 1, 2017 (with early adoption permitted). Legacy disclosures previously disclosed as Flex. Regular Modification: Regular modifications allowed for a variety of modification types including capitalization of interest and non-interest arrearages, extension of the mortgage term, change in interest rate, and forbearance, but no reduction of principal. Program expired October 1, 2017. Streamlined Modification: Streamlined modifications include several programs that generally allow capitalization of interest and non-interest arrearages, extension of the mortgage term, change in interest rate, and forbearance. These programs, existed from July 2013 – October 2017 (with earlier adoption permitted) and include Fannie Mae Standard Modifications and Fannie Mae Streamlined Modifications as referenced in Fannie Mae's Servicing Guide. Home Affordable Modification Program: HAMP modifications include capitalization of interest and non-interest arrearages, extension of the mortgage term, reduction of interest rates (to a floor of 2%), and in some instances forbearance, but no reduction of principal. The HAMP program applies to mortgage loans originated on or before January 1, 2009 and expired on December 31, 2016. Other: This category currently comprises of modifications outside of Fannie Mae sponsored programs. Currently, only Bankruptcy Cramdowns are identified in this category. A bankruptcy cramdown is a modification to any terms of the security deed, mortgage or note by a bankruptcy court order.	H = HAMP O = Other R = Regular S = Standard T = Streamlined 9 = Not Available	String		1		

Loan Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
L-066	Modification Type	For reperforming, modified fixed-rate and modified step-rate loans, the classification describing the type of modification.	R = Rate T = Term B = Rate & Term C = Capitalization F = Rate, Term & Forbearance O = Other	String		1		
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: Rounded to nearest thousand if > $500.	
L-070	Original Deferred Amount	For reperforming, modified fixed-rate and modified step-rate loans, the non-interest bearing unpaid principal balance at the time of modification. The deferred amount is not included in the unpaid principal balance of the security and is not payable to the certificate holder.		Numeric	9.2	12	Privacy Masking: Rounded to nearest thousand if > $500.	
L-071	Current Deferred UPB	For reperforming, modified fixed-rate and modified step-rate loans, the current non-interest bearing unpaid principal balance. The deferred amount is not included in the unpaid principal balance of the security and is not payable to the certificate holder.		Numeric	9.2	12	Privacy Masking: Rounded to nearest thousand if > $500.	

Loan Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
L-072	Loan Age As Of Modification	For reperforming, modified fixed-rate and modified step-rate loans, the number of scheduled payments from the time the loan was originated up to and including the current reporting period.		Numeric		3		Modification Date (MM/YY) – Origination First Payment Date (MM/YY) +1
L-073	Estimated o-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	If Estimated LTV ratios is < 1% or > 998%, it will be disclosed as "Not Available", indicated by 999.	(Mortgage Modification Amount / property Value) * 100 • Truncate (shorten) to two decimal places, then round up to the nearest whole percent
L-074	Updated Credit Score	For reinstated, reperforming, modified fixed-rate and modified step-rate loans, the most recently available standardized credit score provided at the time of issuance. This represents the most recently available credit score provided by Equifax to Fannie Mae generally in the month of the MBS issuance or within the three months prior to the MBS issuance.		Numeric		4	If credit score is < 300 or > 850, the updated credit Score will be disclosed as "Not Available", which will be indicated by 9999.	
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		

Loan Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
L-077	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 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-078	Total Number of Steps	For reperforming, modified step-rate loans, the number of upward interest rate adjustments per the modification agreement.		Numeric		2		
L-079	Number of Remaining Steps	For reperforming, modified step-rate loans, the number of upward interest rate adjustments remaining.		Numeric		2		
L-080	Next Step Rate	For reperforming, modified step-rate loans, the scheduled interest rate in effect at the next step-rate date.		Numeric	2.3	6		
L-081	Terminal Step Rate	For reperforming, modified step-rate loans, the maximum interest rate in effect following the final scheduled interest rate adjustment date. Once the interest rate reaches the Terminal Step Rate, it is fixed for the remaining term of the mortgage.		Numeric	2.3	6		
L-082	Terminal Step Date	For reperforming, modified step-rate loans, the final scheduled date on which the mortgage interest rate is scheduled to increase to its terminal step rate.		Date	MMCCYY	6		

Loan Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
L-083	Step Rate Adjustment Frequency	For reperforming, modified step-rate loans, the number of months between each interest rate adjustment.		Numeric		3		
L-084	Next Step Rate Adjustment Date	For reperforming, modified step-rate loans, the month and year that the interest rate is scheduled to increase.		Date	MMCCYY	6		
L-085	Months to Next Step Rate Adjustment Date	For reperforming, modified step-rate loans, the number of months from the current month to the next date on which the mortgage interest rate increases.		Numeric		3	• If no more steps, then the field will be "Null"	Next Step Rate Adjustment Date (MM/YY) – Security Factor Date (MM/YY)
L-086	Periodic Step Cap Up Percent	For reperforming, modified step-rate loans, the maximum percentage points the interest rate may increase at each step rate adjustment date.		Numeric	2.3	6		
L-087	Origination Mortgage Loan Amount	For reperforming, modified fixed-rate and modified step-rate loans, the dollar amount of the loan in the security as stated on the note at the time the loans were originated or modified.		Numeric	9.2	12	Privacy Masking: Rounded to nearest thousand if > $500.	• Round to the nearest thousand
L-088	Origination Interest Rate	For reperforming, modified fixed-rate and modified step-rate loans, the interest rate of the loan as stated on the note at the time the loan was originated.		Numeric	2.3	6		
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 of time beginning with the first payment date as stated on the note at the time the loan was originated.	Y = Yes N = No	String		1		

Loan Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
L-091	Origination First Payment Date	For reperforming, modified fixed-rate and modified step-rate loans, the month and year that the first scheduled payment on the loan was due as stated on the note at the time the loan was originated.		Date	MMCCYY	6		
L-092	Origination Maturity Date	For reperforming, modified fixed-rate and modified step-rate loans, the month and year in which the final payment on the loan was scheduled to be made at the time the loan was originated.		Date	MMCCYY	6		
L-093	Origination Loan Term	For reperforming, modified fixed-rate and modified step-rate loans, the number of months in which regularly scheduled borrower payments are due as stated on the note at the time the loan was originated.		Numeric		3		

L-094	Origination Loan-to-Value (LTV)	For reperforming, modified fixed-rate and modified step-rate loans, the ratio, expressed as a percentage, obtained by dividing the amount of the loan at origination by the value of the property.
		
		Property value reflects either the lesser of the sales price or the appraised property value for a purchase, or the appraised property value for a refinance.
				Numeric		3	If Origination LTV ratio is < 1% or >998%, it will be disclosed as "Not Available", indicated by 999.
							
							• If any of the following criteria is met, the LTV ratio will be disclosed as "Not Available", indicated by 999.
							  - The LTV ratio is <1% or >998%
							  - The CLTV ratio is < the LTV ratio
							  - The LTV ratio is "Not Available"
								Purchase:
								(Mortgage Loan Amount / (Min (Sales Price, Appraised Value))) * 100
								
								Refinance:
								(Mortgage Loan Amount /Appraised Value) * 100
								
								• Truncate at the 2nd decimal and round up to the higher integer.

Loan Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
L-095	Origination Combined Loan-to-Value (CLTV)	• For reperforming, modified fixed-rate and modified step-rate loans, the ratio, expressed as a percentage, obtained by dividing the amount of all known outstanding loans at origination by the value of the property. • Property value reflects either the lesser of the sales price or the appraised property value for a purchase, or the appraised property value for a refinance.		Numeric		3	If CLTV ratio is < 1% or > 998%, it will be disclosed as "Not Available", indicated by 999. • If any of the following criteria is met, the CLTV ratio will be disclosed as "Not Available", indicated by 999: - The CLTV ratio is <1% or >998% - The CLTV ratio is < the LTV ratio - The CLTV ratio is "Not Available"	Sum of All Outstanding Loan Amounts / (Min (Sales Price, Property Value)) * 100 • Loan Amounts may Include: - Original loan amount of the first mortgage, - Drawn portion (outstanding principal balance) of a HELOC, and - Unpaid principal balance of all closed-end subordinate financing
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.		Numeric		3	If value is < 1 or > 65, it will be disclosed as "Not Available", indicated by 999.	
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. • If there are two or more borrowers on a mortgage loan and more than one credit score is provided, Fannie Mae will use the lower of the two scores.		Numeric		4	If credit score is < 300 or > 850, the Origination Credit Score will be disclosed as "Not Available", which will be indicated by 9999.	
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 & Limited Cashout R = Refinance - Not Specified P = Purchase 9 = Not Available	String		1		

Loan Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
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. **Broker:** A mortgage loan that is originated under circumstances where a person or firm other than a mortgage loan seller or lender correspondent is acting as a "broker" and receives a commission for bringing together a borrower and a lender. The broker performs some (or most) of the loan processing functions (such as taking loan applications; ordering credit reports, appraisals, and title reports; verifying a borrower's income and employment, etc.), but it typically does not actually underwrite the loan, fund the loan at settlement, or service the loan. The mortgage loan is closed in the name of and funded by the mortgage loan seller (or, in some cases, the lender correspondent) that commissioned the broker's services. **Correspondent:** A mortgage loan that is originated by a party other than a mortgage loan seller and is then sold to a mortgage loan seller. A lender correspondent generally performs some (or all) of the loan processing functions (such as taking loan applications, ordering credit reports, appraisals, and title reports, verifying a borrower's income and employment, etc.) as well as underwriting and funding the mortgage loan at settlement. The mortgage loan is closed in the name of the lender correspondent, which may or may not service the loan. In certain instances, a correspondent loan may be originated under circumstances in which a broker performs some of the loan processing functions but the loan is funded by the lender correspondent at settlement. In that case, the loan would typically be classified as a correspondent loan even though there was some involvement by a broker. **Retail:** A mortgage loan, for which the mortgage loan seller takes the mortgage loan application and then processes, underwrites, funds, and delivers the mortgage loan to us. The loan is closed in the name of the mortgage loan seller, which may or may not service the loan. This definition may include joint ventures between the mortgage loan seller and another entity, provided that the mortgage loan seller retains control of the joint ventures (either through majority ownership or voting rights). For mortgage loans acquired prior to March 2013, the term "retail" may also, from time to time, include certain mortgage loans originated pursuant to a contractual arrangement, specifically approved by Fannie Mae, between a third party and the mortgage loan seller by which the third party may perform one or more of the functions (but not all) related to the origination of the mortgage loan, including taking the mortgage loan application, processing, underwriting, funding or delivering the mortgage loan to Fannie Mae.	R = Retail B = Broker C = Correspondent T = Third Party Origination - Not Specified 9 = Not Available	String		1		

Loan Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
L-104	Days Delinquent	For reperforming, modified and modified step-rate loans, the number of days for which a mortgage loan has been reported delinquent.	0 = Current 1 = 30-59 2 = 60-89 3 = 90-119 4 = 120+	Numeric		1		
L-105	Loan Performance History	For reperforming, modified and modified step-rate loans, the coded string of values that describes the previous payment performance of the loan at the time of issuance. This string will contain 36 months of history for reperforming modified and modified step rate loans and 12 months for reinstated loans.	00 = Current 01 = 1 Month 02 = 2 Months 03 = 3 Months 04 = 4 Months 05 = 5 Months 06 = 6 Months 07 = 7 Months 08 = 8 Months 09 = 9 Months 10 = 10 Months 11 = 11 Months 12 = 12 Months 13 = 13 Months 14 = 14 Months 15 = 15 Months 16 = 16 Months 17 = 17 Months 18 = 18 Months 19 = 19 Months 20 = 20 Months 21 = 21 Months 22 = 22 Months 23 = 23 Months 24 = 24 Months 25 >= 25 Months XX = Unknown (when a loan payment is not available or activity is not reported by the servicer) YY = Not Expected (represents when a payment is not due, e.g., month prior to the first payment date)	String		150	Applicable only for Issuance Disclosure. The most recently reported activity is located in the last two spaces in the string	
L-106	Loan Participation Percent	The percentage of the loan that is backing the security.		Numeric	3.2	6		

Security Level File

Security Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
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	Issuance factor would equal 1.00000000.	• (Current Investor Security UPB)/ (Issuance Investor Security UPB) • Round to eighth decimal.
S-06	Payment Delay Days	The indicator denoting whether 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 denoting the data correction status of the security based on the current reporting period.	Y = Yes N = No	String		1		
S-08	Security Status Indicator	The indicator denoting 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 denoting whether the disclosure is preliminary and subject to change or final.	P = Preliminary F = Final 7 = Not Applicable	String		1	Applicable only for Issuance Disclosure.	

Security Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
S-10	Security Description	The unique designation of the security including abbreviated FED code, WA Net Interest Rate, Prefix and Security Identifier.		String		22		
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		
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	Applicable only for Monthly Disclosure.	
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		
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		

Security Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
S-17	WA Net Interest Rate	The weighted average interest rate of the loans less applicable fees (servicing fees and guarantor fees).		Numeric	2.3	6		(Sum ((Net Interest Rate) * (Investor Loan UPB))) / (Sum (Investor Loan UPB)) • For Investor Loan UPB, the issuance file calculation is based upon the Issuance Investor Loan UPB and the monthly file calculation is based upon the Current Investor Loan UPB
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		(Sum ((Interest Rate) * (Issuance Investor Loan UPB))) / (Sum (Issuance Investor Loan UPB))
S-19	WA Current Interest Rate	The weighted average interest rate of the loans in effect during the current reporting period.		Numeric	2.3	6	• During the month of issuance, the WA Issuance Interest Rate value would be the same as the Current WA Interest Rate value	(Sum ((Interest Rate) * (Current Investor Loan UPB))) / (Sum (Current Investor Loan UPB))
S-20	WA Net Accrual Interest Rate	For adjustable-rate loans, the weighted average Interest Rate less applicable fees (servicing fees and guarantor fees).		Numeric	2.3	6		(Sum ((Net Accrual Interest Rate) * (Investor Loan UPB))) / (Sum (Investor Loan UPB)) • For Investor Loan UPB, the issuance file calculation is based upon the Issuance Investor Loan UPB and the monthly file calculation is based upon the Current Investor Loan UPB

Security Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
S-21	WA Loan Term	The weighted average number of months in which regularly scheduled borrower payments are due.		Numeric		3		(Sum ((Loan Term) * (Investor Loan UPB))) / (Sum (Investor Loan UPB)) • Round to the nearest integer • For Investor Loan UPB, the issuance file calculation is based upon the Issuance Investor Loan UPB and the monthly file calculation is based upon the Current Investor Loan UPB
S-22	WA Issuance Remaining Months to Maturity	The weighted average of number of remaining months that will reduce the Current Investor Loan UPB to zero, at the time the security was issued. For fixed-rate loans, this value takes into account the impact of any curtailments.		Numeric		3		(Sum ((Loan Remaining Months to Maturity) * (Issuance Investor Loan UPB))) / (Sum (Issuance Investor Loan UPB)) • Round up to the nearest integer
S-23	WA Current Remaining Months to Maturity	The weighted average of number of remaining months that will reduce the Current Investor Loan UPB to zero. For fixed-rate loans, this value takes into account the impact of any curtailments.		Numeric		3	• During the month of issuance, the WA Issuance Remaining Months to Maturity value would be the same as the WA Current Remaining Months to Maturity value	(Sum ((Loan Remaining Months to Maturity) * (Current Investor Loan UPB))) / (Sum (Current Investor Loan UPB)) • Round up to the nearest integer

Security Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
S-24	WA Loan Age	The weighted average number of months from the time the loans were originated or modified up to and including the current reporting period.		Numeric		3	Value can be negative	(Sum ((Loan Age) * (Investor Loan UPB))) / (Sum (Investor Loan UPB)) • Round to the nearest integer • For Investor Loan UPB, the issuance file calculation is based upon the Issuance Investor Loan UPB and the monthly file calculation is based upon the Current Investor Loan UPB
S-25	WA Mortgage Loan Amount	The weighted average dollar amount of the loans, as stated on the notes, at the time the loans were originated or modified. For reperforming, modified fixed-rate and modified step-rate loans, this value represents both the interest bearing and non-interest bearing amount.		Numeric	9.2	12	The input values are masked in the calculation. • Mortgage Loan Amount is rounded to the nearest thousand • If Mortgage Loan Amount < $500, set to actual value	(Sum ((Mortgage Loan Amount) * (Investor Loan UPB))) / (Sum (Investor Loan UPB)) • For Investor Loan UPB, the issuance file calculation is based upon the Issuance Investor Loan UPB and the monthly file calculation is based upon the Current Investor Loan UPB • Round to the second decimal
S-26	Average Mortgage Loan Amount	The simple average dollar amount of the loans as stated on the notes, at the time the loans were originated or modified. For reperforming, modified fixed-rate and modified step-rate loans, this value represents both the interest bearing and non-interest bearing amount.		Numeric	9.2	12	The input values are masked in the calculation. • Mortgage Loan Amount is rounded to the nearest thousand • If Mortgage Loan Amount < $500, set to actual value	(Sum (Mortgage Loan Amount)) / (Count (Loans in Pool)) • For Loan Count in Pool, the issuance file calculation is based upon the issuance date loan count and the monthly file calculation is based upon the current loan count • Round to the second decimal

Security Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
S-27	WA Loan-to-Value (LTV)	The weighted average ratio, expressed as a percentage, obtained by dividing the amount of the loans at origination by the value of the properties. Value of the property reflects either the lesser of the sales price or the property value at purchase or refinance. For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.		Numeric		3		(Sum ((LTV Ratio) * (Investor Loan UPB))) / (Sum (Investor Loan UPB)) • Round to the nearest integer • The LTV ratio will be disclosed as "Not Available", indicated by 999, if the ratio is <1% or >998% • For Investor Loan UPB, the issuance file calculation is based upon the Issuance Loan UPB and the monthly file calculation is based upon the Current Loan UPB
S-28	WA Combined Loan-to-Value (CLTV)	The weighted average ratio, expressed as a percentage, obtained by dividing the amount of all known outstanding loans at origination by the value of the properties. Value of the property reflects either the lesser of the sales price or the property value at purchase or refinance. For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.		Numeric		3		(Sum ((CLTV) * (Investor Loan UPB))) / (Sum (Investor Loan UPB)) • Round to the nearest integer •The CLTV ratio will be disclosed as "Not Available", indicated by 999, if the ratio is <1% or >998% • For Investor Loan UPB, the issuance file calculation is based upon the Issuance Investor Loan UPB and the monthly file calculation is based upon the Current Investor Loan UPB

Security Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
S-29	WA Debt-to-Income (DTI)	The weighted average ratio obtained by dividing the total monthly debt expenses by the total monthly incomes of the borrowers at the time the loans were originated or modified.	999 = Not Available	Numeric		3		(Sum ((DTI) * (Investor Loan UPB))) / (Sum (Investor Loan UPB)) • Round to the nearest integer • If loan value is < 1 or > 65, it will be excluded from the WA DTI Ratio calculation • For Investor Loan UPB, the issuance file calculation is based upon the Issuance Loan UPB and the monthly file calculation is based upon the Current Loan UPB
S-30	WA Borrower Credit Score	The weighted average standardized credit score used to evaluate the borrower during the loan origination process. For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.		Numeric		4		(Sum ((Borrower Credit Score) * (Investor Loan UPB))) / (Sum (Investor Loan UPB)) • Round to the nearest integer • If credit score is < 300 or > 850, the loan is excluded from the WA Borrower Credit Score calculation • The issuance file calculation is based upon the Issuance Investor Loan UPB. The monthly file calculation is based upon the Scheduled Investor Loan UPB
S-31	Filler							
S-32	Filler							
S-33	Loan Count	The total number of loans in the security.		Numeric		9		Sum the number of loans where Investor Loan UPB > zero

Security Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
S-34	Third Party Origination UPB Percent	The percentage of the aggregate Investor Loan UPB that were originated by a third party, to include Broker and Correspondent originations. For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.		Numeric	3.2	6		(Sum (Investor Loan UPB for Channel = Broker) + (Investor Loan UPB for Channel = Correspondent)) / (Sum (Investor Loan UPB)) For Investor Loan UPB, the issuance file calculation is based upon the Issuance Loan UPB and the monthly file calculation is based upon the Current Loan UPB
S-35	Seller Name	The name of the entity that sold the loans to the issuer.		String		100	For securities with more than one Seller, this field will reflect MULTIPLE. For Megas/Supers, this field will reflect the value of SCR (Single-Class Resecuritization). This will not be updated after issuance, regardless of mergers/acquisitions.	
S-36	Seller City	The city of the address of the entity that sold the loans to the issuer.		String		50	For securities/Megas/Supers with more than one Seller, the 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 securities/Megas/Supers with more than one Seller, the field will be blank.	

Security Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
S-38	Servicer Name	The name of the entity that services the loan during the current reporting period.		String		100	For securities with multiple servicers, this field will reflect MULTIPLE For Megas and Supers this field will reflect the value of SCR (Single-Class Resecuritization)	
S-39	Servicer City	The city of the address of the entity that services the loan.		String		50	For securities with multiple servicers, Megas and Supers, the 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 securities with multiple servicers, Megas and Supers, the field will be blank.	
S-41	Delinquent Loans Purchased (Prior Month UPB)	The aggregate prior period Investor Loan UPB of the loans that were involuntarily prepaid from the security during the current reporting period. Involuntary prepayments includes loans that were removed due to delinquencies, misrepresentations and repurchases by the lenders.		Numeric	14.2	17	Applicable only for Monthly Disclosure.	
S-42	Delinquent Loans Purchased (Loan Count)	The number of loans that were involuntarily prepaid from the security during the current reporting period. Involuntary prepayments includes loans that were removed due to delinquencies, misrepresentations and repurchases by the lenders.		Numeric		9	Applicable only for Monthly Disclosure.	
S-43	Eligible for Resecuritization	The indicator denoting whether 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	Applicable only for Monthly Disclosure.	

Security Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
S-46	Interest Only Security Indicator	The indicator denoting whether the loans only require interest payments for a specified period of time beginning with the first payment date.	Y = Yes N = No 5 = Mixed	String		1		
S-47	WA Months to Amortization	For interest-only loans, the weighted average number of months from the current month to the first scheduled principal and interest payment date.		Numeric		3		(Sum ((Months to Amortization) * (Investor Loan UPB))) / (Sum (Investor Loan UPB)) • Round to nearest integer • For Investor Loan UPB, the issuance file calculation is based upon the Issuance Investor Loan UPB and the monthly file calculation is based upon the Current Investor Loan UPB
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		
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		

Security Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
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.		Numeric	2.3	6	77.777 = Not Applicable	(Sum ((Mortgage Margin) * (Investor Loan UPB))) / (Sum (Investor Loan UPB)) • Round to the third decimal place • For Investor Loan UPB, the issuance file calculation is based upon the Issuance Investor Loan UPB and the monthly file calculation is based upon the Current Investor Loan UPB • If all loan level values = 77.777, then set to 77.777; else exclude from weighted average calculation
S-53	WA MBS Margin	For adjustable-rate loans, the weighted average mortgage margin less applicable fees (servicing fees and guarantor fees).		Numeric	2.3	6	77.777 = Not Applicable	(Sum ((MBS Margin) * (Investor Loan UPB))) / (Sum (Investor Loan UPB)) • Round to the third decimal place • For Investor Loan UPB, the issuance file calculation is based upon the Issuance Investor Loan UPB and the monthly file calculation is based upon the Current Investor Loan UPB • 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.		Numeric		3	555 = Mixed	
S-55	Interest Rate Lookback	For adjustable-rate loans, the number of calendar days prior to the interest rate adjustment date used to determine the effective index value required to calculate the next interest rate.		Numeric		3	555 = Mixed	

Security Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
S-56	Payment Adjustment Frequency	For negative amortizing 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.		Numeric		3	555 = Mixed	
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	999 = Not Available	
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 denoting whether 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		(Negative Amortization UPB) / (Issuance UPB) • Round to 8th decimal

Security Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
S-61	WA Negative Amortization Limit	For negative amortizing adjustable-rate loans, the weighted average Negative Amortization Limit of the loans in the security.		Numeric	3.3	7	777.777 = Not Applicable 999.999 = Not Available	(Sum ((Negative Amortization Limit) * (Investor Loan UPB))) / (Sum (Investor Loan UPB)) • Round to the third decimal place • For Investor Loan UPB, the issuance file calculation is based upon the Issuance Investor Loan UPB and the monthly file calculation is based upon the Current Investor Loan UPB
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 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 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	-	

Security Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
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	Applicable only for Fannie Mae issued securities	
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 adjustment date.		Numeric		3		(Sum ((Months to Next Adjustment Date) * (Investor Loan UPB))) / (Sum (Investor Loan UPB)) • Round to nearest integer • For Investor Loan UPB, the issuance file calculation is based upon the Issuance Investor Loan UPB and the monthly file calculation is based upon the Current Investor Loan UPB
S-66	WA Life Interest Rate Ceiling	For adjustable-rate loans, the weighted average lifetime maximum interest rate.		Numeric	2.3	6	77.777 = Not Applicable	(Sum ((Life Ceiling Interest Rate) * (Investor Loan UPB))) / (Sum (Investor Loan UPB)) • Round to the third decimal place • For Investor Loan UPB, the issuance file calculation is based upon the Issuance Investor Loan UPB and the monthly file calculation is based upon the Current Investor Loan UPB • If all loan level values = 77.777, set WA Life Interest Rate to 77.777; else exclude from weighted average calculation

Security Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
S-67	WA Net Life Interest Rate Ceiling	For adjustable-rate loans, the weighted average maximum interest rate less applicable fees (servicing fees and guarantor fees).		Numeric	2.3	6	77.777 = Not Applicable	(Sum ((Life Ceiling Net Interest Rate) * (Investor Loan UPB))) / (Sum (Investor Loan UPB)) • Round to the third decimal place • For Investor Loan UPB, the issuance file calculation is based upon the Issuance Loan UPB and the monthly file calculation is based upon the Current Loan UPB • If all loan level values = 77.777, set WA Net Life Interest Rate Ceiling 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.		Numeric	2.3	6	If the mortgage loans in the MBS pool have no floor other than the mortgage margin, Fannie Mae will populate this field with the margin. 77.777 = Not Applicable	(Sum ((Life Floor Interest Rate) * (Investor Loan UPB))) / (Sum (Investor Loan UPB)) • Round to the third decimal place • For Investor Loan UPB, the issuance file calculation is based upon the Issuance Investor Loan UPB and the monthly file calculation is based upon the Current Investor Loan UPB • If all loan level values = 77.777, set WA Life Interest Rate Floor to 77.777; else exclude from weighted average calculation

Security Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
S-69	WA Net Life Interest Rate Floor	For adjustable-rate loans, the weighted average minimum interest rate less applicable fees (servicing fees and guarantor fees).		Numeric	2.3	6	If the mortgage loans in the MBS pool have no floor other than the mortgage margin, Fannie Mae will populate this field with the MBS margin. 77.777 = Not Applicable	(Sum ((Life Floor Net Interest Rate) * (Investor Loan UPB))) / (Sum (Investor Loan UPB)) • Round to the third decimal place • For Investor Loan UPB, the issuance file calculation is based upon the Issuance Investor Loan UPB and the monthly file calculation is based upon the Current Investor Loan UPB • If all loan level values = 77.777, set WA Net Life Interest Rate Ceiling to 77.777
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 adjustment date.		Numeric	2.3	6	55.555 = Mixed 77.777 = Not Applicable	
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 adjustment date.		Numeric	2.3	6	55.555 = Mixed 77.777 = Not Applicable	
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 adjustment date after the first interest rate adjustment date.		Numeric	2.3	6	55.555 = Mixed 77.777 = Not Applicable	
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 adjustment date after the first interest rate adjustment date.		Numeric	2.3	6	55.555 = Mixed 77.777 = Not Applicable	

Security Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
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.		Numeric		3	555 = Mixed	
S-76	Next Step Rate Adjustment Date	For reperforming, modified step-rate loans, the month and year that the interest rate is next scheduled to increase.		Date	MMCCYY	6		

Security Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
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		(Sum ((Loan Months to Next Step Rate Adjustment Date) * (Investor Loan UPB))) / (Sum (Investor Loan UPB)) • Round to nearest integer • For Investor Loan UPB, the issuance file calculation is based upon the Issuance Investor Loan UPB and the monthly file calculation is based upon the Current Investor Loan UPB.
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.		Numeric	2.3	6	55.555 = Mixed	
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	The input values are masked in the calculation. • Origination Mortgage Loan Amount is rounded to the nearest thousand • If Origination Mortgage Loan Amount < $500, set to actual value	(Sum ((Origination Mortgage Loan Amount) * (Investor Loan UPB))) / (Sum (Investor Loan UPB)) • If the Origination Mortgage Loan Amount is invalid, the loan is excluded from the WA Mortgage Origination Loan Amount calculation • For Investor Loan UPB, the issuance file calculation is based upon the Issuance Investor Loan UPB and the monthly file calculation is based upon the Current Investor Loan UPB • Round to the second decimal

Security Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
S-80	Average Origination Mortgage Loan Amount	For reperforming, modified fixed-rate and modified step-rate loans, the simple average dollar amount of the loans in the security as stated on the notes at the time the loans were originated. This value represents both the interest bearing and non-interest bearing amount.		Numeric	9.2	12	The input values are masked in the calculation. • Origination Mortgage Loan Amount is rounded to the nearest thousand • If Origination Mortgage Loan Amount < $500, set to actual value	(Sum (Origination Mortgage Loan Amount)) / (Count (Loans in Pool)) • If the Origination Mortgage Loan Amount is invalid, the loan is excluded from the Origination Average Loan Amount calculation. • For loan count in pool, the issuance file calculation is based upon the issuance date loan count and the monthly file calculation is based upon the current loan count. • Round to the second decimal
S-81	WA Origination Interest Rate	For reperforming, modified fixed-rate and modified step-rate loans, the weighted average interest rate of the loans as stated on the note at the time the loans were originated.		Numeric	2.3	6		(Sum ((Origination Interest Rate) * (Current Investor Loan UPB))) / (Sum (Current Investor Loan UPB))
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		(Sum ((Origination Loan Term) * (Investor Loan UPB))) / (Sum (Investor Loan UPB)) • Round to the nearest integer. • The issuance file calculation is based upon the Issuance Investor Loan UPB. The monthly file calculation is based upon the Scheduled Investor Loan UPB.

Security Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
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. Value of the property reflects either the lesser of the sales price or the property value at purchase or refinance.		Numeric		3		(Sum ((Loan LTV Ratio) * (Investor Loan UPB))) / (Sum (Investor Loan UPB)) • Round to the nearest integer • If the loan Origination LTV ratio is <1% or >998%, the loan is excluded from the WA Origination LTV calculation • For Investor Loan UPB, the issuance file calculation is based upon the Issuance Loan UPB and the monthly file calculation is based upon the Current Loan UPB
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. Value of the property reflects either the lesser of the sales price or the property value at purchase or refinance.		Numeric		3		(Sum ((Origination CLTV Ratio) * (Investor Loan UPB))) / (Sum (Investor Loan UPB)) • Round to the nearest integer • The loan Origination CLTV Ratio is excluded from the WA Origination CLTV calculation if ratio is < 1% or >998% • For Investor Loan UPB, the issuance file calculation is based upon the Issuance Loan UPB and the monthly file calculation is based upon the Current Loan UPB
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		(Sum ((Origination DTI Ratio) * (Investor Loan UPB))) / (Sum (Investor Loan UPB)) • Round to the nearest integer • If value is < 1 or > 65, it will be disclosed as "Not Available", indicated by 999 and will be excluded from the WA Origination DTI ratio calculation. • For Investor Loan UPB, the issuance file calculation is based upon the Issuance Loan UPB and the monthly file calculation is based upon the Current Loan UPB

Security Level File

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes	Fannie Mae Calculations
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		(Sum ((Origination Credit Score) * (Investor Loan UPB))) / (Sum (Investor Loan UPB)) • Round to the nearest integer • If credit score is < 300 or > 850, the loan is excluded from the WA Origination Credit Score calculation • For Investor Loan UPB, the issuance file calculation is based upon the Issuance Investor Loan UPB and the monthly file calculation is based upon the Current Investor Loan UPB
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		Sum (Investor Loan UPB for Origination Channel = Broker) + (Investor Loan UPB for Origination Channel = Correspondent)) / (Sum (Investor Loan UPB)
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		(Sum ((Estimated LTV Ratio) * (Investor Loan UPB))) / (Sum (Investor Loan UPB)) • Round to the nearest integer • If Estimated LTV ratio is < 1% or > 998%, the loan is excluded from the WA Estimated LTV calculation • For Investor Loan UPB, the issuance file calculation is based upon the Issuance Loan UPB and the monthly file calculation is based upon the Current Loan UPB
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		(Sum ((Updated Credit Score) * (Investor Loan UPB))) / (Sum (Investor Loan UPB)) • Round to the nearest integer • If credit score is < 300 or > 850, the loan is excluded from the WA Updated Credit Score calculation • For Investor Loan UPB, the issuance file calculation is based upon the Issuance Investor Loan UPB and the monthly file calculation is based upon the Current Investor Loan UPB

Security Supplemental File

Security Supplemental File Record Type

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

Security Supplemental Record Type Calculations

Applicable Stratified Variable	
Quartile	For each mortgage loan characteristic where quartile levels appear, each loan in the pool is ranked from the highest to the lowest value. For example, in the case of Loan-to-Value (LTV) ratios, each loan in the pool is ranked from that with the highest LTV ratio to that with the lowest LTV ratio. The lowest LTV ratio would appear in the pool statistics under "MIN." The next figure in the quartile table for such mortgage loan characteristic is determined by counting the loans starting with the lowest value and continuing upward until the Investor Loan Unpaid Principal Balance (UPB) of the loans counted equals twenty-five percent of the Investor Loan UPB of all the loans in the pool. The value associated with the last loan counted appears in the quartile-level distribution table under "25%." Likewise, the next figures in the quartile-level distribution table are determined by again counting all of the loans starting with the lowest value and continuing upward until the Investor Loan UPB of the loans counted equal fifty percent of the Investor Loan UPB of all the loans in the pool. This process is repeated to determine the value in the quartile-level distribution table associated with seventy-five percent. The values of the last loan counted in each case appear in the quartile-level distribution table under "MED" and "75%," respectively. The highest such value for any mortgage loan in a pool appears in the quartile-level distribution table under "MAX."
Aggregate Loan Count	Count (Loans in Stratification)
Percentage Loan Count	(Count (Loans in Stratification)) / (Count (Loans in Pool)) * 100 • Round to the second decimal place • The sum of the percent of loans for the mortgages within a MBS may not add up to 100% due to rounding
Aggregate Investor Loan UPB	Sum (Loans in Stratification) • For Investor Loan UPB , the issuance file calculation is based upon the Issuance Investor Loan UPB and the monthly file calculation is based upon the Current Investor Loan UPB • The aggregate Investor Loan UPB may not equal the security balance due to loan corrections
Percentage Investor Loan UPB	(Sum (Stratification of Loan Investor Loan UPB)) / (Sum (Investor Loan UPB)) * 100 • Round to the second decimal place • The sum of the percent of UPB for the mortgages within a MBS may not add up to 100% due to rounding • For Investor Loan UPB, the issuance file calculation is based upon the Issuance Loan UPB and the monthly file calculation is based upon the Current Loan UPB
Percentage Missing	(Sum ((Investor UPB for which Attribute's Values are Unavailable)) / (Sum (Investor Loan UPB)) * 100 • Round to the second decimal place • The sum of the percent of UPB for the mortgages within a MBS may not add up to 100% due to rounding • For Investor Loan UPB, the issuance file calculation is based upon the Issuance Loan UPB and the monthly file calculation is based upon the Current Loan UPB

Record Type 1 – Quartiles

ID	Attribute Name	Attribute Definition	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 of the active loans in a security, distributed across the following quartile data points: MIN, 25%, MED, 75%, MAX.	MAX 75% MED 25% MIN	String		3	
SS-006	Mortgage Loan Amount	The dollar amount of the loan as stated on the note at the time the loan was originated or modified. For reperforming, modified fixed-rate and modified step-rate loans, this value represents both the interest bearing and non-interest bearing amount.		Numeric	9.2	12	Privacy Masking: Rounded to nearest thousand if > $500
SS-007	Interest Rate	The interest rate of the loan in effect during the current reporting period.		Numeric	2.3	6	
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	For fixed-rate, adjustable-rate and interest-only mortgages, the number of scheduled monthly payments of the mortgage, between the first payment date and the maturity date of the mortgage.		Numeric		3	

Record Type 1 – Quartiles

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-010	Remaining Months to Maturity	The number of remaining months that will reduce the Current Investor Loan UPB to zero. For fixed-rate loans, this value takes into account the impact of any curtailments.		Numeric		3	
SS-011	Loan Age	The number of months from the time the loan was originated or modified up to and including the current reporting period.		Numeric		4	
SS-012	Loan-to-Value (LTV)	The ratio, expressed as a percentage, obtained by dividing the amount of the loan at origination by the value of the property. Value of the property reflects either the lesser of the sales price or the property value at purchase or refinance. For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.		Numeric		3	
SS-013	Combined Loan-to-Value (CLTV)	The ratio, expressed as a percentage, obtained by dividing the amount of all known outstanding loans at origination by the value of the property. Value of the property reflects either the lesser of the sales price or the property value at purchase or refinance. For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.		Numeric		3	
SS-014	Debt-to-Income (DTI)	The ratio obtained by dividing the total monthly debt expense by the total monthly income of the borrower at the time the loan was originated or modified.		Numeric		3	

Record Type 1 – Quartiles

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-015	Borrower Credit Score	The standardized credit score used to evaluate the borrower during the loan origination process. For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.		Numeric		4	
SS-016	Filler						
SS-017	Filler						
SS-018	Updated Credit Score	For reinstated, reperforming, modified fixed-rate and modified step-rate loans, the most recently available standardized credit score provided at the time of issuance.		Numeric		4	
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	

Record Type 2 – Next Interest Rate Adjustment Date

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-020	Record Type = 2	Next Interest Rate Adjustment Date		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 adjustment date.		Numeric		3	
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	
SS-030	Percentage Loan Count	For the stratified attribute of adjustable-rate loans, the percentage of loans in the security.		Numeric	3.2	6	

Record Type 2 – Next Interest Rate Adjustment Date

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

Record Type 2 – Next Interest Rate Adjustment Date

ID	Attribute Name	Attribute Definition	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	
SS-040	WA MBS 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	High MBS Margin	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	Low MBS Margin	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	
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	
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	
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	

Record Type 2 – Next Interest Rate Adjustment Date

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
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	
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	
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	
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	
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	
SS-054	Life Floor Low Net Interest Rate	For the stratified attribute of adjustable-rate loans, the lowest value minimum interest rate less servicing fees and guarantor fees.		Numeric	2.3	6	

Record Type 3 – Loan-to-Value (LTV) Not Available Stratification

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-055	Record Type = 3	Loan-to-Value (LTV) Not Available Stratification For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.		String		2	Applicable only 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	

Record Type 4 – Combined Loan-to-Value (CLTV) Not Available Stratification

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-063	Record Type = 4	Combined Loan-to-Value (CLTV) Not Available Stratification For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.		String		2	Applicable only 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	

Record Type 5 – Debt-to-Income (DTI) Not Available Stratification

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-071	Record Type = 5	Debt-to-Income (DTI) Not Available Stratification		String		2	Applicable only 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	

Record Type 6 – Borrower Credit Score Not Available Stratification

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-079	Record Type = 6	Borrower Credit Score Not Available Stratification For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.		String		2	Applicable only if security characteristics apply.
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	14.2	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	3.2	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	3.2	6	

Record Type 7 – Days Delinquent Stratification

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

Record Type 8 - Number of Borrowers Stratification

ID	Attribute Name	Attribute Definition	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	

Record Type 9 - First Time Homebuyer Stratification

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-105	Record Type = 9	First Time Homebuyer 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 Homebuyer	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	

Record Type 10 – Loan Purpose Stratification

ID	Attribute Name	Attribute Definition	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	

Record Type 11 – Occupancy Status Stratification

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

Record Type 12 – Number of Units Stratification

ID	Attribute Name	Attribute Definition	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	

Record Type 13 - Property Type Stratification

ID	Attribute Name	Attribute Definition	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	

Record Type 14 - Channel Stratification

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

Record Type 15 - Property State Stratification

ID	Attribute Name	Attribute Definition	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.		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	

Record Type 16 - Seller Name Stratification

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

Record Type 16 - Seller Name Stratification

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-179	Minimum Interest Rate	For the stratified attribute, the minimum interest rate of the loan in effect during the current reporting period.		Numeric	2.3	6	
SS-180	Maximum Interest Rate	For the stratified attribute, the maximum interest rate of the loan in effect during the current reporting period.		Numeric	2.3	6	
SS-181	Minimum Remaining Months to Maturity	For the stratified attribute, the minimum number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero.		Numeric		3	
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	

Record Type 17 - Servicer Name Stratification

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

Record Type 17 - Servicer Name Stratification

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-196	Maximum Loan Age	For the stratified attribute, the maximum number of scheduled payments from the time the loan was originated or modified up to and including the current reporting period.		Numeric		3	
SS-197	Minimum Interest Rate	For the stratified attribute, the minimum interest rate of the loan in effect during the current reporting period.		Numeric	2.3	6	
SS-198	Maximum Interest Rate	For the stratified attribute, the maximum interest rate of the loan in effect during the current reporting period.		Numeric	2.3	6	
SS-199	Minimum Remaining Months to Maturity	For the stratified attribute, the minimum number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero.		Numeric		3	
SS-200	Maximum Remaining Months to Maturity	For the stratified attribute, the maximum number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero.		Numeric		3	
SS-201	WA Loan Age	For the stratified attribute, the weighted average number of scheduled payments from the time the loan was originated or modified to and including the current reporting period.		Numeric		3	
SS-202	WA Interest Rate	For the stratified attribute, the weighted average interest rate of the loan in effect during the current reporting period.		Numeric	2.3	6	
SS-203	WA Remaining Months to Maturity	For the stratified attribute, the weighted average number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero.		Numeric		3	

Record Type 18 - Mortgage Insurance Coverage Stratification

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-204	Record Type = 18	Mortgage Insurance Coverage Stratification		String		2	
SS-205	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-206	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-207	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-208	Mortgage Insurance Coverage	The mortgage insurance coverage in effect at the time the security was issued.	WITHMI = Loans With Mortgage Insurance NOMI = Loans Without Mortgage Insurance 999 = Not Available	String		6	
SS-209	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-210	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-211	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-212	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

Record Type 19 - Mortgage Insurance Cancellation Indicator Stratification

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

Record Type 20 - Government Insured/Guarantee Stratification

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

Record Type 21 - Interest Only First Principal and Interest Payment Date Stratification

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

Record Type 21 - Interest Only First Principal and Interest Payment Date Stratification

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-242	Minimum Interest Rate	For the stratified attribute, the minimum interest rate of the loan in effect during the current reporting period.		Numeric	2.3	6	
SS-243	Maximum Interest Rate	For the stratified attribute, the maximum interest rate of the loan in effect during the current reporting period.		Numeric	2.3	6	
SS-244	Minimum Remaining Months to Maturity	For the stratified attribute, the minimum number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero.		Numeric		3	
SS-245	Maximum Remaining Months to Maturity	For the stratified attribute, the maximum number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero.		Numeric		3	
SS-246	WA Loan Age	For the stratified attribute, the weighted average number of scheduled payments from the time the loan was originated or modified up to and including the current reporting period.		Numeric		3	
SS-247	WA Interest Rate	For the stratified attribute, the weighted average interest rate of the loan in effect during the current reporting period.		Numeric	2.3	6	
SS-248	WA Remaining Months to Maturity	For the stratified attribute, the weighted average number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero.		Numeric		3	
SS-249	WA Months to Amortization	For the stratified attribute, the weighted average number of months from the current month to the first scheduled principal and interest payment date.		Numeric		3	

Record Type 22 - Not Paying Principal in First Distribution Stratification

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-250	Record Type = 22	Not Paying Principal in First Distribution Stratification Loans that will not receive a principal distribution in the first investor payment.		String		2	Applicable only for at issuance for Single−Class Securities (no resecuritizations)
SS-251	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-252	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-253	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-254	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-255	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-256	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-257	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

Record Type 23 - Origination Year Stratification

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-258	Record Type = 23	Origination Year Stratification		String		2	
SS-259	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-260	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-261	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-262	Origination Year	The year of origination of the loans in the security.		Date	CCYY	4	
SS-263	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-264	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-265	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-266	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

Record Type 24 - Origination Channel Stratification

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

Record Type 25 - Non-Standard Loan Type Stratification

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-276	Record Type = 25	Non-Standard Loan Type Stratification		String		2	Applicable only for issuance for Single-Class (no resecuritizations).
SS-277	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-278	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-279	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	

Record Type 25 - Non-Standard Loan Type Stratification

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-280	Non-Standard Loan Type	The non-standard loan characteristics included in the security.	COOP = Cooperative HIGH = FHFA High Cost Area BYDN = Interest-rate buydown RELO = Relocation	String		4	Applicable only for at issuance for Single-Class securities (no resecuritizations) One or more of the following non-standard mortgage loan types will be displayed if any constitutes greater than 10% of the scheduled unpaid principal balance of the MBS pool, or if a combination of two or more of these mortgage loan types constitute greater than 15% of the scheduled unpaid principal balance of the MBS pool: • Co-operative share loans (COOP) • Interest-rate loans (significant temporary interest rate buy down loans) • Relocation loans • FHFA High Cost Area The categories are not mutually exclusive. For example, one mortgage loan may be a co-op mortgage loan and an interest-rate mortgage loan, and if so, it will appear in this table in both categories. Totals may exceed 100%.
SS-281	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-282	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-283	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-284	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

Record Type 26 - Modification Program Stratification

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-285	Record Type = 26	Modification Program Stratification		String		2	Applicable only if security characteristics apply.
SS-286	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-287	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-288	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-289	Modification Program	For reperforming, modified fixed-rate and modified step-rate loans, the program under which the loan was modified.	H = HAMP O = Other R = Regular S = Standard T = Streamlined 9 = Not Available	String		1	
SS-290	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-291	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-292	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-293	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

Record Type 27 - Modification Type Stratification

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-294	Record Type = 27	Modification Type Stratification		String		2	Applicable only if security characteristics apply.
SS-295	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-296	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-297	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-298	Modification Type	For reperforming, modified fixed-rate and modified step-rate loans, the classification describing the type of modification.	R = Rate T = Term B = Rate & Term C = Capitalization F = Rate, Term & Forbearance O = Other	String		1	
SS-299	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-300	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-301	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-302	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

Record Type 28 - Modification Information Stratification

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-303	Record Type = 28	Modification Information Stratification		String		2	Not applicable for Fannie Mae.
SS-304	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-305	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-306	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-307	Modification Information	For reperforming, modified fixed-rate and modified step-rate loans, the Total Capitalized Amounts and Deferred Unpaid Principal Balances of the loans in the security.	TOTAL CAPITALIZED AMOUNT DEFERRED UPB	String		25	
SS-308	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-309	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-310	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-311	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

Record Type 29 - Number of Modifications Stratification

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

Record Type 30 - Deferred Unpaid Principal Balance Stratification

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-321	Record Type = 30	Deferred Unpaid Principal Balance Stratification Applicable only for modified pools		String		2	Not applicable for Fannie Mae
SS-322	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-323	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-324	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-325	Deferred UPB Type	For reperforming, modified fixed-rate and modified step-rate loans, denotes if the reported unpaid principal balance includes any deferred amount.	WITHDEFUPB = With Deferred UPB NODEFUPB = Without Deferred UPB 99 = Not Available	String		10	
SS-326	Interest-Bearing UPB	For reperforming, modified fixed-rate and modified step-rate loans, the aggregate interest bearing unpaid principal balance at the time of modification.		Numeric	14.2	17	
SS-327	Deferred UPB	For reperforming, modified fixed-rate and modified step-rate loans, the aggregate non-interest bearing amount at the time of modification. This amount does not contribute to MBS. The deferred amount is not included in the unpaid principal balance of the security and is not payable to the certificate holder.		Numeric	14.2	17	
SS-328	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-329	WA Interest Rate	For the stratified attribute, the weighted average interest rate of the loans in effect during the current reporting period.		Numeric	2.3	6	

Record Type 30 - Deferred Unpaid Principal Balance Stratification

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-330	WA 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	
SS-331	WA Updated Credit Score	For the stratified attribute in reinstated, reperforming, modified fixed-rate and modified step-rate loans, the weighted average most recently available standardized credit score provided at the time of issuance.		Numeric		4	
SS-332	WA Debt-to-Income (DTI) Ratio	For the stratified attribute in reinstated, reperforming, modified fixed-rate and modified step-rate loans, the weighted average ratio obtained by dividing the total monthly debt expense by the total monthly income of the borrower at the time the loan was originated or modified.		Numeric		3	
SS-333	Average Mortgage Loan Amount	For the stratified attribute in reinstated, reperforming, modified fixed-rate and modified step-rate loans, the simple average dollar amount of the loan as stated on the note at the time the loan was originated or modified. For reperforming, modified fixed-rate and modified step-rate loans, this value represents both the interest bearing and non-interest bearing amount.		Numeric	9.2	12	
SS-334	Property State 1	The abbreviation denoting the location of the property securing the loan for the stratified attribute. ~Ranked #1 by Investor Loan UPB		String		2	
SS-335	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security that are associated with Property State #1 (ranked by Investor Loan UPB).		Numeric	14.2	17	
SS-336	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security that are associated with Property State #1 (ranked by Investor Loan UPB).		Numeric	3.2	6	
SS-337	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security that are associated with Property State #1 (ranked by Investor Loan UPB).		Numeric		9	

Record Type 30 - Deferred Unpaid Principal Balance Stratification

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-338	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security with Property State #1 (ranked by Investor Loan UPB).		Numeric	3.2	6	
SS-339	Property State 2	The abbreviation denoting the location of the property securing the loan for the stratified attribute. ~Ranked #2 by Investor Loan UPB		String		2	
SS-340	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security that are associated with Property State #2 (ranked by Investor Loan UPB).		Numeric	14.2	17	
SS-341	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security that are associated with Property State #2 (ranked by Investor Loan UPB).		Numeric	3.2	6	
SS-342	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security that are associated with Property State #2 (ranked by Investor Loan UPB).		Numeric		9	
SS-343	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security with Property State #2 (ranked by Investor Loan UPB).		Numeric	3.2	6	
SS-344	Property State 3	The abbreviation denoting the location of the property securing the loan for the stratified attribute. ~Ranked #3 by Investor Loan UPB		String		2	
SS-345	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security that are associated with Property State #3 (ranked by Investor Loan UPB).		Numeric	14.2	17	
SS-346	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security that are associated with Property State #3 (ranked by Investor Loan UPB).		Numeric	3.2	6	
SS-347	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security that are associated with Property State #3 (ranked by Investor Loan UPB).		Numeric		9	
SS-348	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security with Property State #3 (ranked by Investor Loan UPB).		Numeric	3.2	6	

Record Type 31 - Estimated Loan-to-Value (ELTV) Not Available Stratification

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-349	Record Type = 31	Estimated Loan-to-Value (ELTV) Not Available Stratification For non-reperforming, modified fixed-rate and modified step-rate loans, this value will be populated, if applicable.		String		2	Applicable only if security characteristics apply.
SS-350	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-351	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-352	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-353	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		String	14.2	17	
SS-354	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-355	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-356	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

Record Type 32 - Updated Credit Score Not Available Stratification

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

Record Type 33 - Number of Remaining Steps Stratification

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-365	Record Type = 33	Number of Remaining Steps Stratification		String		2	Not applicable to Fannie Mae.
SS-366	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-367	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-368	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-369	Number of Remaining Steps	For reperforming, modified step-rate loans, the number of upward interest rate adjustments remaining.		Numeric		2	
SS-370	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-371	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-372	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-373	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

Record Type 34 - Number of Steps - at Modification Stratification

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-374	Record Type = 34	Number of Steps - At Modification Stratification		String		2	Not applicable to Fannie Mae.
SS-375	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-376	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-377	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-378	Number of Steps - at Modification	For reperforming, modified step-rate loans, the number of upward interest rate adjustments at the time of modification.		Numeric		2	
SS-379	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-380	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-381	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-382	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

Record Type 35 - Next Step Rate Adjustment Date Stratification

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

Record Type 36 - Origination Loan-to-Value (LTV) Not Available Stratification

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

Record Type 37 - Origination Combined Loan-to-Value (CLTV) Not Available Stratification

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

Record Type 38 - Origination Debt-to-Income (DTI) Not Available Stratification

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

Record Type 39 - Origination Borrower Credit Score Not Available Stratification

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

Record Type 40 - Origination Loan Purpose Stratification

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

Record Type 41 - Origination Occupancy Status Stratification

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-435	Record Type = 41	Origination Occupancy Status Stratification		String		2	Applicable only if security characteristics apply.
SS-436	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-437	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-438	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-439	Origination Occupancy Status	For reperforming, modified fixed-rate and modified step rate loans, the classification describing the property occupancy status at the time the loan was originated.	P = Primary Residence S = Second Home I = Investment Property 9 = Not Available	String		1	
SS-440	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-441	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-442	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-443	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

Record Type 42 - Borrower Payment History Stratification

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-444	Record Type = 42	Borrower Payment History Stratification		String		2	Not applicable to Fannie Mae.
SS-445	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
SS-446	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
SS-447	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SS-448	Days Delinquent	For reperforming, modified and modified step-rate loans, the number of days for which a mortgage loan was reported delinquent.	0 = Current 1 = 30-59 2 = 60-89 3 = 90-119 4 = 120+	String		1	
SS-449	Borrower Payment Date	The month and year that the borrower was scheduled to remit payment. Up to 36-months of payment history		Date	MMCCYY	6	
SS-450	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
SS-451	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
SS-452	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
SS-453	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

Record Type 43- Collateral List

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

Record Type 43- Collateral List

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
SS-465	Collateral Issuance Investor Security UPB	For each security that directly underlies the resecuritization, the unpaid principal balance of the loans as they contribute to the balance of the security.		Numeric	12.2	15	
SS-466	Collateral Issuance Contributing Investor Security UPB	For each security that directly underlies the resecuritization, the pro-rata share of the Investor Security UPB - Issuance amount .		Numeric	12.2	15	
SS-467	Collateral Current Contributing Investor Security UPB	For each security that directly underlies the resecuritization, the pro-rata share of the Investor Security UPB - Current amount.		Numeric	12.2	15	
SS-468	Collateral WA Interest Rate at Settlement	For each security that directly underlies the resecuritization, the weighted average interest rate at the time of resecuritization.		Numeric	2.3	6	
SS-469	Collateral WA Remaining Months to Maturity at Settlement	For each security that directly underlies the resecuritization, the weighted average number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero at the time of resecuritization. For fixed-rate loans, this value takes into account the impact of any curtailments.		Numeric		3	
SS-470	Collateral WA Loan Age at Settlement	For each security that directly underlies the resecuritization, the weighted average number of scheduled payments from the time the loan was originated or modified up to and including the current reporting period at the time of resecuritization.		Numeric		3	
SS-471	Collateral Trust Identifier	For each security that directly underlies the resecuritization, an identifier assigned to the trust when established into a multiclass resecuritization.		String		50	Applicable only when underlying collateral is a REMIC.
SS-472	Collateral Class Identifier	For each security that directly underlies the resecuritization, an identifier assigned to the class when established into a multiclass resecuritization.		String		4	Applicable only when underlying collateral is a REMIC.
SS-473	Group Identifier	An identifier assigned to the group when established into a multiclass resecuritization.		String		5	Applicable only when underlying collateral is a REMIC or SMBS.

Appendix A

Data Mapping Appendix A – Index

Current Index Code	Current Index Description	Future Index Code	Future Index Description
1	6 Month Auction High Disct Rate Mnth Avg	54	Tbill_6Mo_Disc_Mnth_Avg
2	1 Year Treasury Constant Maturity - Monthly	9	CMT_1Yr_Mnth_Avg
3	3 Year Treasury Constant Maturity - Monthly	12	CMT_3Yr_Mnth_Avg
4	5 Year Treasury Constant Maturity - Monthly	16	CMT_5Yr_Mnth_Avg
5	FHFB Contract Mortgage Rate Prev. Occupied	46	Ntl_Avg_Cont_Prev_Occ
6	6 Month Auction High Disct Rate Wkly Avg	55	Tbill_6Mo_Disc_Wkly
7	1 Year Treasury Constant Maturity - Weekly	10	CMT_1Yr_Wkly_Avg
8	3 Year Treasury Constant Maturity - Weekly	13	CMT_3Yr_Wkly_Avg
9	5 Year Treasury Constant Maturity - Weekly	14	CMT_5Yr _Wkly_Avg
11	6-Mo Money Market-Com. Banks (Weekly)	45	Mm_6Mo_Combank_Wkly
12	FHLB 11th District Cost Of Funds - Monthly	21	COFI_1Mo_11Thdist
13	10 Year Treasury Constant Maturity - Weekly	5	CMT_10Yr_Wkly_Avg
15	6 Month Auction High Investment Rate	57	Tbill_6Mo_Inv_Wkly
16	11th Dist Dly Guar Rate-30 Day Com (5Yr)	1	11Thdist_Dly_Guar_Rate
18	6 Month Treasury Bill Secondary Market	58	Tbill_6Mo_Sec_Wkly_Avg
19	2 Year Treasury Constant Maturity - Weekly	11	CMT_2Yr_Wkly_Avg
20	Cum Avg Prev 4 Wks 6 Month Treasury	56	Tbill_6Mo_Inv_Cuml_Avg_Prev4_Wkly_Avg
21	Cum Avg Prev 26 Wks 6 Month Treasury	52	Tbill_6Mo_Cuml_Avg_Prev26_Wkly_Avg
22	Cum Avg Prev 4 Wks Of 6 Month Treasury	53	Tbill_6Mo_Disc_Cuml_Avg_Prev4_Wkly_Avg
23	1 Month Wall Street Journal LIBOR Rate	36	LIBOR_1Mo_WSJ

Data Mapping Appendix A – Index

Current Index Code	Current Index Description	Future Index Code	Future Index Description
24	Cum Avg Prev 12 Mos FHLB 11th Dist COF	20	COFI_12Mo_11Thdist_Cuml_Avg
26	Wall Street Journal Prime Rate - Daily	48	Prime_WSJ_Dly
27	1 year Treasury Bill (Weekly Auction Avg)	51	Tbill_1Yr_Disc_Wkly_Avg
37	Semi-Annual COF For CA FHLB Members	25	COFI_6Mo_CA
40	Blend 50% FRM/50% Weekly 1 Year Treasury	19	CMT_Blend_1Yr_Wkly_Avg
43	1 Year Treasury Cum. Avg. Last 12 Month	8	CMT_1Yr_Cuml_Avg_Prev12_Mnth_Avg
45	6 Month Wall Street Journal LIBOR Rate	42	LIBOR_6Mo_WSJ
46	Semi-Annual COF For 11th District FHLB	24	COFI_6Mo_11Thdist
47	Quarterly Average Of The Federal COFI	26	COFI_Fed_Qrty_Avg
49	1 Year Treasury Constant Maturity Monthly Avg Of Wkly	7	CMT_1Yr_Cuml_Avg_4Wks_Wkly_Avg
50	FHFB National Avg Effective Rate	47	Ntl_Avg_Effective_Rate
51	6 Month Wall Street Journal LIBOR	44	LIBOR_6Mo_WSJ_Mnth_Avg
58	6 Month Wall Street Journal LIBOR	43	LIBOR_6Mo_WSJ_Dly
62	1 Month Wall Street Journal LIBOR	35	LIBOR_1Mo_WSJ_Dly
65	6 Month British Bankers LIBOR - Monthly	40	LIBOR_6Mo_BBA
67	6 Month Auction High Discount Rate	55	Tbill_6Mo_Disc_Wkly
69	1 Year Treasury Bill Auction Average (Monthly)	50	Tbill_1Yr_Disc_Mnth_Avg
73	1 Year Treasury Cumm. Avg. Last 12 Month	6	CMT_1Yr_Cuml_Avg_Prior12_Mnth_Avg
74	30 Year 60 Day A/A Conventional FRM	31	FRM_Conv_60Day_30Yr_Aa_Dly
75	1 Year Wall Street Journal LIBOR - Daily	38	LIBOR_1Yr_WSJ_Dly

Data Mapping Appendix A – Index

Current Index Code	Current Index Description	Future Index Code	Future Index Description
76	Freddie Mac Federal Cost Of Funds	27	COFI_Fre
78	6 Month Treasury Security -Weekly Avg.	17	CMT_6Mo_Wkly_Avg
80	30-Day FRM Conv Posted Yield A/A	29	FRM_Conv_30Day_Posted_Yld_Aa
81	30-Day FRM Conv Posted Yield S/A	30	FRM_Conv_30Day_Posted_Yld_Sa
82	60-Day FRM Conv Posted Yield A/A	32	FRM_Conv_60Day_Posted_Yld_Aa
83	60-Day FRM Conv Posted Yield S/A	33	FRM_Conv_60Day_Posted_Yld_Sa
87	1 Month British Bankers LIBOR - Daily	34	LIBOR_1Mo_BBA_Dly
88	3 Month British Bankers LIBOR - Daily	39	LIBOR_3Mo_BBA_Dly
89	1 Yr WSJ LIBOR-Monthly On 1st Bus. Day	37	LIBOR_1Yr_WSJ
90	10 Year Treasury Constant Maturity -Monthly	4	CMT_10Yr_Mnth
91	1 Yr CMT Monthly - Last4 Weeks Of Weekly	7	CMT_1Yr_Cuml_Avg_4Wks_Wkly_Avg
92	5 Yr CMT Monthly - Last 4 Weeks Of Weekl	15	CMT_5Yr_Cuml_Avg_4Wks_Wkly_Avg
94	6 Month British Bankers LIBOR - Daily	41	LIBOR_6Mo_BBA_Dly
95	Wells Fargo Cost Of Savings - Monthly	28	Cos_1Mo_Wellsfargo
Not Applicable	Not Applicable	2	Cd_6Mo_Sec_Mrkt_Mnth_Avg
Not Applicable	Not Applicable	3	Cd_6Mo_Wkly
Not Applicable	Not Applicable	16	CMT_5Yr_Mnth_Avg
Not Applicable	Not Applicable	18	CMT_7Yr_Mnth
Not Applicable	Not Applicable	22	COFI_1Mo_7Thdist
Not Applicable	Not Applicable	23	COFI_1Mo_Ntl_Mnth_Avg
Not Applicable	Not Applicable	49	Rny_Fre_30Yr_60Day_Dly

![Fannie Mae]

Contact Information

Please contact Fixed-Income Marketing with any questions:

- Email: FixedIncome_Marketing@fanniemae.com
- Phone: 1-800-232-6643 option #3