



# Security-Level Disclosure

## Attribute Names & Descriptions

Freddie Mac provides loan-level information at PC issuance and on a monthly basis for all newly issued fixed-rate and adjustable-rate mortgage (ARM) PC securities issued after December 1, 2005. Issuance month and monthly loan-level disclosure supplements Freddie Mac’s current daily and monthly pool-level disclosure for new and previously issued securities.

File formats and specifications for both the Security Core and Security supplemental disclosure files (issuance/monthly) can be found in the [Freddie Mac Single-Family Disclosure Guide](#).

This document is divided into the following two sections:

- Security Level Disclosure Attributes – page 1
- Security Level Stratifications – page 8

## Security-Level Disclosure Attributes

Fixed-Rate	ARM	Modified	Attribute Name	Description	Issuance	Monthly
•	•	•	<b>Average Mortgage Loan Amount</b>	The simple average dollar amount of the loans as stated on the notes at the time the loans were originated or modified.  <i>For reperforming, modified fixed-rate and modified step-rate loans, this value represents both the interest bearing and non-interest bearing amount.</i>	•	•
		•	<b>Average Origination Mortgage Loan Amount</b>	The simple average dollar amount of the loans in the security as stated on the notes at the time the loans were originated.  <i>This value represents both the interest bearing and non-interest bearing amount.</i>	•	•
	•		<b>Convertibility Indicator</b>	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	•	•
•	•	•	<b>Current Investor Security UPB</b>	The aggregate unpaid principal balance of the loans as they contribute to the current balance of the security.		•
•	•	•	<b>CUSIP</b>	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).	•	•
•	•	•	<b>Delinquent Loans Purchased (Loan Count)</b>	The number of loans that were purchased from the security due to delinquency status during the current reporting period.		•
•	•	•	<b>Delinquent Loans Purchased (Prior Month UPB)</b>	The aggregate prior period Investor Loan UPB of the loans that were purchased from the security due to delinquency status during the current reporting period.		•
•	•	•	<b>Eligible for Resecuritization</b>	The indicator denoting whether the security is eligible for resecuritization.  Y = Yes N = No	•	•

## Security-Level Disclosure Attributes

Fixed-Rate	ARM	Modified	Attribute Name	Description	Issuance	Monthly
	•		<b>First Payment Adjustment Date</b>	The earliest First Payment Adjustment Date of the loans in the security. <i>ONLY APPLICABLE TO FANNIE MAE ISSUED SECURITIES</i>	•	•
	•		<b>First Rate Adjustment Date</b>	The earliest First Rate Adjustment Date of the loans in the security.	•	•
	•		<b>Index</b>	The code of the index on which adjustments to the interest rate are based.	•	•
	•		<b>Initial Fixed Rate Period</b>	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	•	•
	•		<b>Initial Interest Rate Cap Down %</b>	The maximum percentage points the interest rate can adjust downward at the first interest rate adjustment date.  55.555 = Mixed 77.777 = Not Applicable	•	•
	•		<b>Initial Interest Rate Cap Up %</b>	The maximum percentage points the interest rate can adjust upward at the first interest rate adjustment date.  55.555 = Mixed 77.777 = Not Applicable	•	•
		•	<b>Initial Step Fixed-Rate Period</b>	For 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	•	•
•	•	•	<b>Interest Only Security Indicator</b>	The indicator denoting whether the loans require only interest payments for a specified period beginning with the first payment date.  Y = Yes N = No	•	•

## Security-Level Disclosure Attributes

Fixed-Rate	ARM	Modified	Attribute Name	Description	Issuance	Monthly
	•		<b>Interest Rate Adjustment Frequency</b>	The number of months, excluding any fixed-rate period, between scheduled rate changes.  555 = Mixed values	•	•
	•		<b>Interest Rate Lookback</b>	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.  555 = Mixed values	•	•
•	•	•	<b>Issuance Investor Security UPB</b>	The aggregate unpaid principal balance of the loans as they contribute to the balance of the security at the time the security was issued.	•	
•	•	•	<b>Issue Date</b>	The date on which the security was issued.	•	•
•	•	•	<b>Issuer</b>	The name of the entity that issued the security.  FNM = Fannie Mae FRE = Freddie Mac	•	•
•	•	•	<b>Loan Count</b>	The total number of loans in the security.	•	•
•	•	•	<b>Maturity Date</b>	The month and year that the final scheduled payment on the loan is due.	•	•
	•		<b>Negative Amortization Factor</b>	For negative amortizing adjustable-rate loans, the decimal value that, when multiplied by the Issuance Investor Security UPB amount, equals the Negative Amortization amount.	•	•
	•		<b>Negative Amortization Indicator</b>	The indicator denoting whether the loans in the security allow negative amortization.  Y = Yes N = No 9 = Not Available	•	•
		•	<b>Next Step Rate Adjustment Date</b>	For modified step-rate loans, the month and year that the interest rate is scheduled to increase.	•	•
•	•	•	<b>Notes</b>	Additional information about the loans in the security.	•	•
•	•	•	<b>Notes Ongoing</b>	Additional information about the loans in the security.		•
		•	<b>Origination Third Party Origination UPB Percent</b>	The percentage of the aggregate Investor Loan UPB that were originated by a third party, to reflect Broker and Correspondent originations.	•	•
	•		<b>Payment Adjustment Frequency</b>	The number of months between scheduled payment changes. For a security with an initial fixed-rate period, the payment adjustment frequency is the number of months between subsequent payment changes.  555 = Mixed values	•	•
•	•	•	<b>Payment Delay Days</b>	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	•	•
	•		<b>Payment Lookback</b>	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.	•	•

## Security-Level Disclosure Attributes

Fixed-Rate	ARM	Modified	Attribute Name	Description	Issuance	Monthly
	•		<b>Periodic Interest Rate Cap Down %</b>	The maximum percentage points the interest rate can adjust downward at each interest rate adjustment date after the first interest rate adjustment date.  55.555 = Mixed 77.777 = Not Applicable	•	•
	•		<b>Periodic Interest Rate Cap Up %</b>	The maximum percentage points the interest rate can adjust upward at each interest rate adjustment date after the first interest rate adjustment date.  55.555 = Mixed 77.777 = Not Applicable	•	•
		•	<b>Periodic Step Rate Cap Up %</b>	For modified step-rate loans, the maximum percentage points the interest rate may increase at each step rate adjustment date.  555 = Mixed	•	•
•	•	•	<b>Prefix</b>	The designation assigned by the issuer denoting the type of the loans and the security.	•	•
•	•	•	<b>Prepayment Penalty Indicator</b>	The indicator denoting whether the loans backing the security are subject to a penalty for early payment of principal.  Y = Yes N = No 9 = Not Available	•	•
•	•	•	<b>Reduced Minimum Servicing Indicator</b>	The indicator denoting whether the loans in the security may have a reduced servicing fee (less than 25 bps).  Y = Yes N = No 9 = Not Available	•	•
•	•	•	<b>Security Data Correction Indicator</b>	The indicator denoting the data correction status of the security based on the current reporting period.  Y = Yes N = No	•	•
•	•	•	<b>Security Description</b>	The unique designation of the security reflecting: abbreviated FED CODE, WA Net Interest Rate, Prefix and Security Identifier.	•	•
•	•	•	<b>Security Factor</b>	The decimal value that, when multiplied by the Issuance Investor Security UPB amount, equals the Current Investor Security UPB amount.	•	•
•	•	•	<b>Security Factor Date</b>	The month and year on which the corresponding factor is effective.	•	•
•	•	•	<b>Security Identifier</b>	The unique designation assigned to the security by the issuer.	•	•
•	•	•	<b>Security Notification Indicator</b>	The indicator denoting whether the disclosure is preliminary and subject to change or final.  P = Preliminary F = Final 7 = Not Applicable	•	•
•	•	•	<b>Security Status Indicator</b>	The indicator denoting the status of the security based on the current reporting period.  A = Active P = Paid Off C = Collapsed D = Dissolved	•	•
•	•	•	<b>Seller City</b>	The city of the address of the entity that sold the loans to the issuer.  • For Multilender and Giants, this field will be blank.	•	•
•	•	•	<b>Seller Name</b>	The name of the entity that sold the loans to the issuer.  • For Multilender pools, this field will reflect MULTIPLE • For Giants, this field will reflect SCR (Single-Class Resecuritization) • Will not be updated after issuance, regardless of the mergers/acquisitions of sellers.	•	•

## Security-Level Disclosure Attributes

Fixed-Rate	ARM	Modified	Attribute Name	Description	Issuance	Monthly
•	•	•	<b>Seller State</b>	The state or territory of the address of the entity that sold the loans to the issuer. <ul style="list-style-type: none"> <li>For Multilender and Giants, this field will be blank.</li> </ul>	•	•
•	•	•	<b>Servicer City</b>	The city of the address of the entity that services the loan. <ul style="list-style-type: none"> <li>For Multilender and Giants, this field will be blank.</li> </ul>	•	•
•	•	•	<b>Servicer Name</b>	The name of the entity that services the loan during the current reporting period. <ul style="list-style-type: none"> <li>For Multi-lender pools, this field will reflect MULTIPLE</li> <li>For Giants, this field will reflect SCR (Single-Class Resecuritization)</li> <li>Will not be updated after issuance, regardless of the mergers/acquisitions of servicers.</li> </ul>	•	•
•	•	•	<b>Servicer State</b>	The state or territory of the address of the entity that services the loan. <ul style="list-style-type: none"> <li>For Multilender and Giants, this field will be blank.</li> </ul>	•	•
		•	<b>Step Rate Adjustment Frequency</b>	For modified step-rate loans, the number of months between each interest rate adjustment. 555 = Mixed	•	•
•	•		<b>Third Party Origination UPB Percent</b>	The percentage of the aggregate Investor Loan UPB that were originated by a third party, to reflect Broker and Correspondent originations.  For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.	•	•
•	•	•	<b>Updated Longest Maturity Date</b>	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.		•
•	•		<b>WA Borrower Credit Score</b>	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.	•	•
•	•		<b>WA Combined Loan-To-Value (CLTV)</b>	The weighted average Combined Loan-To-Value ratio, expressed as a percentage, of the loans in a security.  Property value reflects either the lesser of the sales price or the appraised property value for a purchase, or the appraised property value for a refinance.  For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.	•	•
•	•	•	<b>WA Current Interest Rate</b>	The weighted average interest rate of the loans in effect during the current reporting period.		•
•	•	•	<b>WA Current Remaining Months to Maturity</b>	The weighted average number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero.  For fixed-rate loans, this value accounts for the impact of any curtailments.		•
•	•	•	<b>WA Debt-To-Income (DTI)</b>	The weighted average Debt-To-Income ratio, expressed as a percentage, of the loans in a security.	•	•
		•	<b>WA Estimated Loan-To-Value (ELTV)</b>	The weighted average Estimated Loan-To-Value ratio of the loans in a security, based on the estimated current value of the property obtained by the issuer, at the time of issuance.	•	•
•	•	•	<b>WA Issuance Interest Rate</b>	The weighted average interest rate of the loans in effect at the time the security was issued.	•	
•	•	•	<b>WA Issuance Remaining Months to Maturity</b>	The weighted average number of scheduled monthly payments that will reduce the Investor Loan UPB to zero, at the time the security was issued.  For fixed-rate loans, this value accounts for the impact of any curtailments.	•	
	•		<b>WA Life Interest Rate Ceiling</b>	The weighted average lifetime maximum interest rate. <ul style="list-style-type: none"> <li>77.777 = Not Applicable</li> <li>If all loan level values = 77.777, set to 77.777</li> <li>Loan level values of 77.777 will be excluded from the WA Life Interest Rate Ceiling calculation</li> </ul>	•	•

## Security-Level Disclosure Attributes

Fixed-Rate	ARM	Modified	Attribute Name	Description	Issuance	Monthly
	•		<b>WA Life Interest Rate Floor</b>	The weighted average lifetime minimum interest rate. <ul style="list-style-type: none"> <li>• 77.777 = Not Applicable</li> <li>• If any loan level values = 77.777, set to 77.777</li> <li>• Loan level values of 77.777 will be excluded from the WA Life Interest Rate Floor calculation</li> </ul>	•	•
•	•	•	<b>WA Loan Age</b>	The weighted average number of scheduled payments from the time the loans were originated or modified up to and including the current reporting period.  Value can be negative	•	•
•	•	•	<b>WA Loan Term</b>	The weighted average number of months in which regularly scheduled borrower payments are due.	•	•
•	•		<b>WA Loan-to-Value (LTV)</b>	The weighted average Loan-To-Value ratio, expressed as a percentage, of the loans in a security.  Property value reflects either the lesser of the sales price or the appraised property value for a purchase, or the appraised property value for a refinance.  For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.	•	•
	•		<b>WA MBS PC Margin</b>	The weighted average mortgage margin less servicing fees and guarantor fees. <ul style="list-style-type: none"> <li>• 77.777 = Not Applicable</li> <li>• If all loan level values = 77.777, set to 77.777</li> <li>• Loan level values of 77.777 will be excluded from the WA MBS PC Margin calculation</li> </ul>	•	•
•	•	•	<b>WA Months to Amortization</b>	For interest-only loans, the weighted average number of months from the current month to the first scheduled principal and interest payment date.	•	•
	•		<b>WA Months to Next Rate Adjustment Date</b>	The weighted average number of months from the current month to the next interest rate adjustment date.	•	•
		•	<b>WA Months to Next Step Rate Adjustment</b>	For 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.	•	•
•	•	•	<b>WA Mortgage Loan Amount</b>	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.	•	•
	•		<b>WA Mortgage Margin</b>	The weighted average number of percentage points to be added to the index to arrive at the new interest rate.  77.777 = Not Applicable	•	
	•		<b>WA Negative Amortization Limit</b>	For negative amortizing adjustable-rate loans, the weighted average Negative Amortization Limit of the loans in the security.	•	•
•	•	•	<b>WA Net Accrual Interest Rate</b>	For adjustable-rate loans, the weighted average Net Interest Rate less servicing fees and guarantor fees.	•	•
•	•	•	<b>WA Net Interest Rate</b>	The weighted average interest rate of the loans at the time the security was issued less servicing fees and guarantor fees.	•	•
	•		<b>WA Net Life Interest Rate Ceiling</b>	The weighted average maximum interest rate less servicing fees and guarantor fees. <ul style="list-style-type: none"> <li>• 77.777 = Not Applicable</li> <li>• If all loan level values = 77.777, set to 77.777</li> <li>• Loan level values of 77.777 will be excluded from the WA Net Life Interest Rate Ceiling calculation</li> </ul>	•	•
	•		<b>WA Life Interest Rate Floor</b>	The weighted average lifetime minimum interest rate. <ul style="list-style-type: none"> <li>• 77.777 = Not Applicable</li> <li>• If any loan level values = 77.777, set to 77.777</li> <li>• Loan level values of 77.777 will be excluded from the WA Life Interest Rate Floor calculation</li> </ul>	•	

## Security-Level Disclosure Attributes

Fixed-Rate	ARM	Modified	Attribute Name	Description	Issuance	Monthly
		•	<b>WA Origination Combined Loan-To-Value (CLTV)</b>	The weighted average Combined Loan-To-Value ratio, expressed as a percentage, of the loans in a security at the time of origination.  <i>Property values reflect either the lesser of the sales price or the appraised property value for a purchase, or the appraised property value for a refinance.</i>	•	•
		•	<b>WA Origination Credit Score</b>	The weighted average standardized credit score used to evaluate the borrower during the loan origination process.	•	•
		•	<b>WA Origination Debt-To-Income (DTI)</b>	The weighted average Debt-To-Income ratio of the loans in a security at the time of origination.	•	•
		•	<b>WA Origination Interest Rate</b>	The weighted average interest rate of the loans as stated on the note at the time the loans were originated.	•	•
		•	<b>WA Origination Loan Term</b>	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.	•	•
		•	<b>WA Origination Loan-To-Value (LTV)</b>	The weighted average Loan-To-Value ratio, expressed as a percentage, of the loans in a security at the time of origination.  <i>Property values reflect either the lesser of the sales price or the appraised property value for a purchase, or the appraised property value for a refinance.</i>	•	•
		•	<b>WA Origination Mortgage Loan Amount</b>	The weighted average dollar amount of the loans in the security as stated on the notes at the time the loans were originated.	•	•
		•	<b>WA Updated Credit Score</b>	The weighted average most recently available standardized credit score provided at the time of issuance.	•	•

## Security Supplemental File - Stratification Names & Descriptions

This file contains selected data about the composition of Freddie Mac's mortgage Participation Certificates (PCs) which represent interests in 1-4 family residential mortgages (single-family) or 5 or more family residential mortgages (multifamily). Information is provided as of the time of issuance of the PCs and is updated monthly. This data should be considered in conjunction with information appearing in the applicable Freddie Mac Offering Circulars, as supplemented.

Information is reported by security identifier (pool number). Where there is insufficient data to support calculations for a PC, zeroes or blanks have been placed in the record type for the PC.

The Security Supplemental file combines several different types of records within a single file. The first attribute in each row within the file will indicate the record type (stratification):

Supplemental File Stratifications			
Record Type	Description	Record Type	Description
1	Quartiles	25	Non-Standard Loan Type
2	Next Interest Rate Adjustment Date	26	Modification Program
3	LTV Not Available	27	Modification Type
4	Combined LTV Not Available	28	Modification Information
5	DTI Not Available	29	Number of Modifications
6	Borrower Credit Score Not Available	30	Deferred Unpaid Principal Balance Type
7	Days Delinquent	31	Estimated LTV Not Available
8	Number of Borrowers	32	Updated Credit Score Not Available
9	First Time Home Buyer	33	Number of Remaining Steps
10	Loan Purpose	34	Number of Steps - At Modification
11	Occupancy Status	35	Next Step Rate Adjustment Date
12	Number of Units	36	Origination LTV Not Available
13	Property Type	37	Origination Combined LTV Not Available
14	Channel	38	Origination DTI Not Available
15	Property State	39	Origination Borrower Credit Score Not Available
16	Seller Name	40	Origination Loan Purpose
17	Servicer Name	41	Origination Occupancy Status
18	MI Coverage	42	Borrower Payment History
19	MI Cancellation Indicator	43	Collateral List
20	Government Insured/Guarantee	44	Property Valuation Method
21	Interest Only First Principal and Interest Payment Date	45	Borrower Assistance Plan
22	Not Paying Principal in First Distribution	46	Alternative Delinquency Resolution
23	Origination Year	47	Number of Alternative Delinquency Resolutions
24	Origination Channel	48	Borrower Assistance Plan History

Unless stated otherwise, each stratification in the Security Supplemental file will contain the following attributes. Throughout the remainder of this document, these will be referred to as the "standard" attributes.

Standard Stratification Attributes:	
<i>The following attributes will be included for each stratification (record type) that is applicable for a given security.</i>	
Attribute	Description
Prefix	The designation assigned by the issuer denoting the type of the loans and the security.
Security Identifier	The unique designation assigned to the security by the issuer.
CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).
Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.
Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.
Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.
Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.



## Security-Level Stratifications

Fixed-Rate	ARM	Modified	Stratification Name	Description	Issuance	Monthly
•	•	•	<b>Quartiles</b> <i>(Record Type 1)</i>	<p>Quartiles are based on each 25th percentile of each PC's current principal balance. Quartiles are updated monthly, which means the information is associated with the current remaining balance of the mortgages in the PC pool.</p> <ul style="list-style-type: none"> <li>• <b>MAX</b> – Represents the highest value of the data</li> <li>• <b>75</b> – Represents data corresponding to the 75<sup>th</sup> percentile of the PC 's Current Investor Loan UPB</li> <li>• <b>MED</b> - Represents data corresponding to the 50th percentile of the PC 's Current Investor Loan UPB</li> <li>• <b>25</b> - Represents data corresponding to the 25<sup>th</sup> percentile of the PC 's Current Investor Loan UPB</li> <li>• <b>MIN</b> – Represents the lowest value of the data</li> </ul> <p>The following attributes are included in this stratification:</p> <ul style="list-style-type: none"> <li>• <b>Mortgage Loan Amount</b> - The dollar amount of the loan as stated on the note at the time the loan was originated or modified.</li> <li>• <b>Interest Rate</b> - The interest rate of the loan in effect during the current reporting period.</li> <li>• <b>Current Net Interest Rate</b> - The interest rate of the loan in effect during the current reporting period less servicing fees and guarantor fees.</li> <li>• <b>Loan Term</b> - The number of months in which regularly scheduled borrower payments are due.</li> <li>• <b>Remaining Months to Maturity</b> - The number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero.</li> <li>• <b>Loan Age</b> - The number of scheduled payments from the time the loan was originated or modified up to and including the current reporting period.</li> <li>• <b>Loan-to-Value (LTV)</b> - The ratio, expressed as a percentage, obtained by dividing the amount of the loan at origination by the value of the property.</li> <li>• <b>Combined Loan-to-Value (CLTV)</b> - The ratio, expressed as a percentage, obtained by dividing the amount of all known outstanding loans at origination by the value of the property.</li> <li>• <b>Debt-to-Income</b> - 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.</li> <li>• <b>Borrower Credit Score</b> - The standardized credit score used to evaluate the borrower during the loan origination process.</li> <li>• <b>Updated Credit Score</b> - For reinstated, reperforming, modified fixed-rate and modified step-rate loans, the most recently available standardized credit score provided at the time of issuance.</li> <li>• <b>Estimated Loan-to-Value (ELTV)</b> - 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.</li> </ul>	•	•

## Security-Level Stratifications

Fixed-Rate	ARM	Modified	Stratification Name	Description	Issuance	Monthly
	•		<b>Next Interest Rate Adjustment Date</b> <i>(Record Type 2)</i>	<p>The month and year that the interest rate is next subject to change.</p> <p>Each of the attributes listed below is stratified by each Next Interest Rate Adjustment Date associated with the loans backing the security and is further grouped by the standard stratification attributes described above.</p> <ul style="list-style-type: none"> <li>• <b>Months to Next Rate Adjustment Date</b> - The number of months from the current month to the next interest rate adjustment date.</li> <li>• <b>Interest Only First Principal and Interest Payment Date</b> - The month and year that the first monthly scheduled fully amortizing principal and interest payment is due.</li> <li>• <b>WA Current Net Interest Rate</b>- The weighted average interest rate of the loans in effect during the current reporting period less servicing fees and guarantor fees.</li> <li>• <b>Current High Net Interest Rate</b> - The highest value interest rate of the loans in effect during the current reporting period less servicing fees and guarantor fees.</li> <li>• <b>Current Low Net Interest Rate</b> - The lowest value interest rate of the loans in effect during the current reporting period less servicing fees and guarantor fees.</li> <li>• <b>WA MBS PC Margin</b> - The weighted average mortgage margin less servicing fees and guarantor fees.</li> <li>• <b>High MBS PC Margin</b> - The highest value mortgage margin less servicing fees and guarantor fees.</li> <li>• <b>Low MBS PC Margin</b> - The lowest value mortgage margin less servicing fees and guarantor fees.</li> <li>• <b>WA Life Ceiling Net Interest Rate</b> - The weighted average maximum interest rate less servicing fees and guarantor fees.</li> <li>• <b>Life Ceiling High Net Interest Rate</b> - The highest value maximum interest rate less servicing fees and guarantor fees.</li> <li>• <b>Life Ceiling Low Net Interest Rate</b> - The lowest value maximum interest rate less servicing fees and guarantor fees.</li> <li>• <b>WA Life Floor Net Interest Rate</b> - The weighted average minimum interest rate less servicing fees and guarantor fees.</li> <li>• <b>Life Floor High Net Interest Rate</b> - The highest value minimum interest rate less servicing fees and guarantor fees.</li> <li>• <b>Life Floor Low Net Interest Rate</b> - The lowest value minimum interest rate less servicing fees and guarantor fees.</li> </ul>	•	•
•	•		<b>Loan-to-Value (LTV) Not Available</b> <i>(Record Type 3)</i>	Stratified by the standard attributes noted above, information for the loans in a security that have loan-to-value ratios that are not available, indicated by 999 at the loan level. Loans with LTV percentages below 1% and greater than 998% are considered not available.	•	•
•	•		<b>Combined Loan-to-Value (CLTV) Not Available</b> <i>(Record Type 4)</i>	Stratified by the standard attributes noted above, information for the loans in a security that have combined loan-to-value ratios that are not available, indicated by 999 at the loan level. Loans with CLTV percentages below 1% and greater than 998% are considered not available.	•	•
•	•		<b>Debt-to-Income (DTI) Not Available</b> <i>(Record Type 5)</i>	Stratified by the standard attributes noted above, information for the loans in a security that have debt-to-income ratios that are not available, indicated by 999 at the loan level. Loans with DTI percentages below 1% and greater than 65% are considered not available.	•	•
•	•		<b>Borrower Credit Score Not Available</b> <i>(Record Type 6)</i>	Stratified by the standard attributes noted above, information for loans in a security that have borrower credit scores that are not available, indicated by 9999 at the loan level. Loans with borrower credit scores below 300 and greater than 850 are considered not available.	•	•
•	•	•	<b>Days Delinquent</b> <i>(Record Type 7)</i>	<p>Stratified by the standard attributes noted above, information for the loans in a security that fall into each applicable delinquency range.</p> <p>1 = 30-59 (months)            2 = 60-89 (months)            3 = 90-119 (months)            4 = 120+ (months)</p>		•
•	•	•	<b>Number of Borrowers</b> <i>(Record Type 8)</i>	<p>Stratified by the standard attributes noted above, the number of borrowers obligated to repay the mortgage note secured by the mortgaged properties.</p> <p>1            2            &gt; 2            99 = Not Available</p>	•	•

## Security-Level Stratifications

Fixed-Rate	ARM	Modified	Stratification Name	Description	Issuance	Monthly
•	•	•	<b>First Time Homebuyer</b> (Record Type 9)	Stratified by the standard attributes noted above, indicates whether the borrower, or one of a group of borrowers, is a First-Time Homebuyer.  Y = Yes N = No 9 = Not Available	•	•
•	•	•	<b>Loan Purpose</b> (Record Type 10)	Stratified by the standard attributes noted above, the classification describing the purpose of the loans.  C = Refinance - Cash Out N = Refinance - No Cash Out R = Refinance - Not Specified P = Purchase M = Modified - Loss Mitigation 9 = Not Available	•	•
•	•	•	<b>Occupancy Status</b> (Record Type 11)	Stratified by the standard attributes noted above, the classification describing the property occupancy status at the time the loans were originated.  P = Primary Residence S = Second Home I = Investment Property 9 = Not Available	•	•
•	•	•	<b>Number of Units</b> (Record Type 12)	Stratified by the standard attributes noted above, the number of dwelling units in the mortgaged property at the time the loans were originated.  1 = 1 2 = 2 3 = 3 4 = 4 99 = Not Available	•	•
•	•	•	<b>Property Type</b> (Record Type 13)	Stratified by the standard attributes noted above, the classification describing the type of property that secures the loans.  CP = Cooperative CO = Condominium PU = Planned Unit Development SF = Single-Family MH = Manufactured Housing 99 = Not Available	•	•
•	•	•	<b>Channel</b> (Record Type 14)	Stratified by the standard attributes noted above, the origination channel used by the party that delivered the loans to the issuer.  R = Retail B = Broker C = Correspondent T = Third Party Origination - Not Specified 9 = Not Available	•	•
•	•	•	<b>Property State</b> (Record Type 15)	Stratified by the standard attributes noted above, the distribution of the states in which properties securing the loans in a security are located.	•	•

## Security-Level Stratifications

Fixed-Rate	ARM	Modified	Stratification Name	Description	Issuance	Monthly
•	•	•	<b>Seller Name</b> <i>(Record Type 16)</i>	<p>The number of loans in a security for each entity that sold to Freddie Mac at least 1% of the mortgages in a PC pool. Entities that sold to Freddie Mac less than 1% of the mortgages in a PC pool are reflected under the heading "Sellers&lt;1%."</p> <p>Each of the attributes listed below is stratified by each Seller associated with the loans backing the security and is further grouped by the standard stratification attributes described above.</p> <ul style="list-style-type: none"> <li>• <b>Minimum Loan Age</b> - The minimum number of scheduled payments from the time the loan was originated or modified up to and including the current reporting period.</li> <li>• <b>Maximum Loan Age</b> - The maximum number of scheduled payments from the time the loan was originated or modified to and including the current reporting period.</li> <li>• <b>Minimum Interest Rate</b> - The minimum interest rate of the loan in effect during the current reporting period.</li> <li>• <b>Maximum Interest Rate</b> - The maximum interest rate of the loan in effect during the current reporting period.</li> <li>• <b>Minimum Remaining Months to Maturity</b> - The minimum number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero.</li> <li>• <b>Maximum Remaining Months to Maturity</b> - The maximum number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero.</li> <li>• <b>WA Loan Age</b> - The weighted average number of scheduled payments from the time the loan was originated or modified up to and including the current reporting period.</li> <li>• <b>WA Interest Rate</b> - The weighted average interest rate of the loan in effect during the current reporting period.</li> <li>• <b>WA Remaining Months to Maturity</b> - The weighted average number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero.</li> </ul>	•	•
•	•	•	<b>Servicer Name</b> <i>(Record Type 17)</i>	<p>The number of mortgages for each entity that services at least 1% of the mortgages in a PC pool (updated to reflect transfer of servicing). Entities that service less than 1% of the mortgages in a PC pool are reflected under the heading "Servicers&lt;1%."</p> <p>Each of the attributes listed below is stratified by each Servicer associated with the loans backing the security and is further grouped by the standard stratification attributes described above.</p> <ul style="list-style-type: none"> <li>• <b>Minimum Loan Age</b> - The minimum number of scheduled payments from the time the loan was originated or modified up to and including the current reporting period.</li> <li>• <b>Maximum Loan Age</b> - The maximum number of scheduled payments from the time the loan was originated or modified to and including the current reporting period.</li> <li>• <b>Minimum Interest Rate</b> - The minimum interest rate of the loan in effect during the current reporting period.</li> <li>• <b>Maximum Interest Rate</b> - The maximum interest rate of the loan in effect during the current reporting period.</li> <li>• <b>Minimum Remaining Months to Maturity</b> - The minimum number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero.</li> <li>• <b>Maximum Remaining Months to Maturity</b> - The maximum number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero.</li> <li>• <b>WA Loan Age</b> - The weighted average number of scheduled payments from the time the loan was originated or modified up to and including the current reporting period.</li> <li>• <b>WA Interest Rate</b> - The weighted average interest rate of the loan in effect during the current reporting period.</li> <li>• <b>WA Remaining Months to Maturity</b> - The weighted average number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero.</li> </ul>	•	•
•	•	•	<b>Mortgage Insurance Coverage</b> <i>(Record Type 18)</i>	<p>Stratified by the standard attributes noted above, the mortgage insurance coverage in effect at the time the security was issued.</p> <p>Loans for which the amount of mortgage insurance reported by Sellers is more than 55% will be reflected under the heading "Not Available," indicated by 99.</p> <p>WITHMI = Loans with Mortgage Insurance            NOMI = Loans without Mortgage Insurance            99 = Not Available</p>	•	•

## Security-Level Stratifications

Fixed-Rate	ARM	Modified	Stratification Name	Description	Issuance	Monthly
•	•	•	<b>Mortgage Insurance Cancellation Indicator</b> (Record Type 19)	Stratified by the standard attributes noted above, indicates whether mortgage insurance coverage has been cancelled on the loans since the security was issued.  Y = Yes N = No 7 = Not Applicable	•	•
•	•	•	<b>Government Insured/Guarantee</b> (Record Type 20)	Stratified by the standard attributes noted above, the classification describing the government insured/guarantee program, if any, covering the loans in a security.  FH = FHA VA = Veterans Affair RH = Rural Housing IH = Section 184 Indian Home 99 = Not Available	•	•
•	•	•	<b>Interest Only First Principal and Interest Payment Date</b> (Record Type 21)	For the interest-only loans in a security, the month and year that the first monthly scheduled fully amortizing principal and interest payment is due.  Each of the attributes listed below is stratified by each Interest Only First Principal and Interest Payment Date associated with the loans backing the security and is further grouped by the standard stratification attributes described above. <ul style="list-style-type: none"> <li>• <b>Minimum Loan Age</b> - The minimum number of scheduled payments from the time the loan was originated or modified up to and including the current reporting period.</li> <li>• <b>Maximum Loan Age</b> - The maximum number of scheduled payments from the time the loan was originated or modified up to and including the current reporting period.</li> <li>• <b>Minimum Interest Rate</b> - The minimum interest rate of the loan in effect during the current reporting period.</li> <li>• <b>Maximum Interest Rate</b> - The maximum interest rate of the loan in effect during the current reporting period.</li> <li>• <b>Minimum Remaining Months to Maturity</b> - The minimum number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero.</li> <li>• <b>Maximum Remaining Months to Maturity</b> - The maximum number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero.</li> <li>• <b>WA Loan Age</b> - The weighted average number of scheduled payments from the time the loan was originated or modified up to and including the current reporting period.</li> <li>• <b>WA Interest Rate</b> - The weighted average interest rate of the loan in effect during the current reporting period.</li> <li>• <b>WA Remaining Months to Maturity</b> - The weighted average number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero.</li> <li>• <b>WA Months to Amortization</b> - The weighted average number of months from the current month to the first scheduled principal and interest payment date.</li> </ul>	•	•
•	•	•	<b>Not Paying Principal in First Distribution</b> (Record Type 22)	Stratified by the standard attributes noted above, information for loans in a security that will not receive a principal distribution in the first investor payment.	•	
•	•	•	<b>Origination Year</b> (Record Type 23)	Stratified by the standard attributes noted above, the distribution of loans in a security by the origination year of the loans.	•	•
		•	<b>Origination Channel</b> (Record Type 24)	Stratified by the standard attributes noted above, the origination channel used by the party that delivered the loans to the issuer.  R = Retail B = Broker C = Correspondent T = Third Party Origination - Not Specified 9 = Not Available	•	•

# Security-Level Stratifications

Fixed-Rate	ARM	Modified	Stratification Name	Description	Issuance	Monthly
•	•	•	<b>Non-Standard Loan Type</b> <i>(Record Type 25)</i>	<p><b>Effective 10/13/2017, this record type will no longer be populated in the daily issuance or monthly files.</b></p> <p>Stratified by the standard attributes noted above, the non-standard characteristics for the loans in a security.</p> <p>COOP = Cooperative  HIGH = FHFA High Cost Area  BYDN = Interest-rate buydown  RELO = Relocation</p>		

• **Modification Program**  
(Record Type 26)

Stratified by the standard attributes noted above, the modification programs under which the loans in a security were modified.

Code	Program	Description
A	Alternative	Alternative modifications included capitalization of interest and certain non-interest arrearages, setting of interest rates to a fixed rate (increasing or decreasing rates), extending the Mortgage term to 480 months, a borrower trial period for the modification before they are finalized and may have included forbearance (but not reductions) of principal. The terms of the modifications under our alternative modification initiative generally were similar to those under our streamlined modification initiative; however, we generally offered the alternative modification to borrowers who were five to twenty-four months delinquent on their Mortgages. The alternative modification initiative was a one-time initiative and the final modification agreement must have been entered into no later than January 1, 2014.
B	HAMP Backup	Certain borrowers who initially qualified for a HAMP modification and who made timely payments during a HAMP trial period, but who, because of income verification or other reasons, subsequently failed to qualify under the HAMP program, could have had their Mortgages modified under our HAMP backup initiative (which was a non-HAMP initiative). HAMP backup modifications generally had terms similar to modifications under the HAMP program. HAMP backup modifications had to have first modified payment due dates on or before December 1, 2010.
C	Classic	Classic modifications included capitalization of interest and non-interest arrearages and may have included extensions of the term of the mortgage and reductions in interest rate, but not forbearance or reduction of principal. Classic modifications were discontinued as a standard Guide offering in February 2012.
D	Payment Deferral	Payment Deferrals include forbearance (but not reductions) of principal. Payment Deferrals are generally offered to borrowers who are between 30 days and 12 months delinquent (depending on the program). A trial period plan is not required. This code applies to both (i) the payment deferral modification initiative, implemented by select servicers beginning in May 2016, and (ii) the Payment Deferral initiative, which became available beginning July 1, 2020 and will be mandatory on January 1, 2021
E	Extend	Extend modifications include extending the Mortgage term by a number of months equal to the number of missed monthly payments, setting of interest rates to a fixed rate (increasing or decreasing rates), a borrower trial period for the modifications before they are finalized and may include forbearance (but not reductions) of principal. We ceased offering the Extend modification on October 1, 2020.
F	Flex	Flex modifications include capitalization of interest and non-interest arrearages, setting of interest rates to a fixed rate (increasing or decreasing rates), extending the Mortgage term to 480 months, a borrower trial period for the modifications before they are finalized and may include forbearance (but not reductions) of principal. Our Servicers must implement this initiative for loss mitigation evaluations occurring on or after October 1, 2017 (with earlier adoption permitted).
H	HAMP	HAMP modifications include capitalization of interest and non-interest arrearages, and, to the extent necessary to achieve a targeted modified payment, lowering of interest rates (to a floor of 2%), extending the Mortgage term and may include forbearance (but not reductions) of principal. HAMP modifications include a borrower trial period for the modifications before they are finalized. If the initial modified interest rate is less than the terminal step rate, the interest rate will increase after five years in 1% (or less) increments annually until the terminal step rate is reached. HAMP applies to Mortgages originated on or before January 1, 2009. Borrowers must have applied for HAMP no later than December 31, 2016 and, if eligible, must enter into a HAMP modification agreement no later than December 1, 2017.
O	Other	The borrower has executed a modification program other than the provided enumerations
P	Cap & Extend	Cap and Extend modifications include capitalization of interest and certain non-interest arrearages, extending the Mortgage term up to 480 months, setting of interest rates to a fixed rate (increasing or decreasing rates), a borrower trial period for the modifications before they are finalized and may include forbearance (but not reductions) of principal. We ceased offering the Cap and Extend modification on October 1, 2020.
R	Regular	Fannie Mae Only
U	Underwater	Underwater modifications included capitalization of interest and non-interest arrearages, setting of interest rates to a fixed-rate (increasing or decreasing rates), extending the Mortgage term, and may have included forbearance (but not reductions) of principal. The terms of the modifications under our underwater modification initiative were generally offered to borrowers with loan origination dates before May 31, 2009 whose Mortgages had estimated loan-to-value ratios at the time of modification of greater than 150%. The underwater modification initiative was a one-time initiative and the final modification agreement must have been entered into no later than August 1, 2013.
S	Standard	Non-HAMP Standard modifications include capitalization of interest and certain non-interest arrearages, setting of interest rates to a fixed rate (increasing or decreasing rates), extending the Mortgage term to 480 months, a borrower trial period for the modifications before they are finalized and may include forbearance (but not reductions) of principal. This initiative began in October 2011 and expired on September 30, 2017.
T	Streamlined	Streamlined modifications include capitalization of interest and certain non-interest arrearages, setting of interest rates to a fixed rate (increasing or decreasing rates), extending the Mortgage term to 480 months, a borrower trial period for the modifications before they are finalized and may have included

## Security-Level Stratifications

Fixed-Rate	ARM	Modified	Stratification Name	Description	Issuance	Monthly						
				<table border="1"> <tr> <td></td> <td></td> <td>forbearance (but not reductions) of principal. We generally offer the streamlined modification to borrowers who are at least three-months delinquent on their Mortgages or borrowers with step-rate modified mortgages who become two-months delinquent following a step-rate adjustment. The Streamlined Modification initiative was implemented in July 2013 (with earlier adoption permitted) and the last day a trial period may be entered is September 1, 2017.</td> </tr> <tr> <td>9</td> <td>Not Available</td> <td>The modification program is not available for disclosure.</td> </tr> </table>			forbearance (but not reductions) of principal. We generally offer the streamlined modification to borrowers who are at least three-months delinquent on their Mortgages or borrowers with step-rate modified mortgages who become two-months delinquent following a step-rate adjustment. The Streamlined Modification initiative was implemented in July 2013 (with earlier adoption permitted) and the last day a trial period may be entered is September 1, 2017.	9	Not Available	The modification program is not available for disclosure.		
		forbearance (but not reductions) of principal. We generally offer the streamlined modification to borrowers who are at least three-months delinquent on their Mortgages or borrowers with step-rate modified mortgages who become two-months delinquent following a step-rate adjustment. The Streamlined Modification initiative was implemented in July 2013 (with earlier adoption permitted) and the last day a trial period may be entered is September 1, 2017.										
9	Not Available	The modification program is not available for disclosure.										
		•	<b>Modification Type</b> <i>(Record Type 27)</i>	<p>Stratified by the standard attributes noted above, the classifications describing the types of modifications for the loans in a security.</p> <p>R = Rate T = Term B = Rate &amp; Term C = Capitalization D = Deferred Amount F = Rate, Term &amp; Deferred Amount S = Rate &amp; Deferred Amount U = Term &amp; Deferred Amount O = Other</p>	•	•						
		•	<b>Modification Information</b> <i>(Record Type 28)</i>	<p>Stratified by the standard attributes noted above, the Total Capitalized Amounts and Deferred Unpaid Principal Balances of the loans in the security.</p> <p>TOTAL CAPITALIZED AMOUNT DEFERRED UPB</p>	•	•						
		•	<b>Number of Modifications</b> <i>(Record Type 29)</i>	<p>Stratified by the standard attributes noted above, the number of times the loans in a security have been modified.</p> <p>1 2 &gt;2</p>	•	•						
		•	<b>Deferred Unpaid Principal Balance Type</b> <i>(Record Type 30)</i>	<p>Denotes if the reported unpaid principal balances of the loans in a security included any deferred amount.</p> <p>WITHDEFUPB = With Deferred UPB NODEFUPB = Without Deferred UPB 99 = Not Available</p> <p>Each of the attributes listed below is stratified by each Deferred UPB Type associated with the loans backing the security and is further grouped by the standard stratification attributes described above.</p> <ul style="list-style-type: none"> <li>• <b>Interest-Bearing UPB</b> - The aggregate interest bearing unpaid principal balance at the time of modification.</li> <li>• <b>Deferred UPB</b> - The aggregate non-interest bearing amount at the time of modification. This amount does not contribute to MBS.</li> <li>• <b>WA Interest Rate</b> - The weighted average interest rate of the loans in effect during the current reporting period.</li> <li>• <b>WA Estimated LTV (ELTV)</b> - 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.</li> <li>• <b>WA Updated Credit Score</b> - The weighted average most recently available standardized credit score provided at the time of issuance.</li> <li>• <b>WA Debt-to-Income (DTI) Ratio</b> - 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.</li> <li>• <b>Average Mortgage Loan Amount</b> - The simple average dollar amounts of the loans as stated on the note at the time the loan was originated or modified.</li> <li>• <b>Property State 1</b> - The abbreviation denoting the location of the property securing the loans for the stratified attribute. Ranked #1 by Investor Loan UPB.</li> <li>• <b>Property State 2</b> - The abbreviation denoting the location of the property securing the loans for the stratified attribute. Ranked #2 by Investor Loan UPB.</li> <li>• <b>Property State 3</b> - The abbreviation denoting the location of the property securing the loans for the stratified attribute. Ranked #3 by Investor Loan UPB.</li> </ul>	•	•						



## Security-Level Stratifications

Fixed-Rate	ARM	Modified	Stratification Name	Description	Issuance	Monthly
		•	<b>Estimated Loan-to-Value (LTV) Not Available</b> <i>(Record Type 31)</i>	Stratified by the standard attributes noted above, information for loans in a security that have estimated loan-to-value ratios that are not available, indicated by 999 at the loan level. Loans with ELTV percentages below 1% and greater than 998% are considered not available.	•	•
		•	<b>Updated Credit Score Not Available</b> <i>(Record Type 32)</i>	Stratified by the standard attributes noted above, information for loans in a security that have updated credit scores that are not available, indicated by 9999 at the loan level. Loans with updated credit scores below 300 and greater than 850 are considered not available.	•	•
		•	<b>Number of Remaining Steps</b> <i>(Record Type 33)</i>	Stratified by the standard attributes noted above, for modified step-rate loans in a security, the number of upward interest rate adjustments remaining.	•	•
		•	<b>Number of Steps – At Modification</b> <i>(Record Type 34)</i>	Stratified by the standard attributes noted above, for modified step-rate loans in a security, the number of upward interest rate adjustments at the time of modification.	•	•
		•	<b>Next Step Rate Adjustment Date</b> <i>(Record Type 35)</i>	For modified step-rate loans in a security, the month and year that the interest rate is scheduled to increase.  Each of the attributes listed below is stratified by Next Step Rate Adjustment Date associated with the loans backing the security and is further grouped by the standard stratification attributes described above. <ul style="list-style-type: none"> <li>• <b>Projected WA Interest Rate</b> - The projected weighted average of the expected interest rates in effect on the associated adjustment date, not accounting for prepayments.</li> <li>• <b>Projected WA Net Interest Rate</b> - 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.</li> </ul>	•	•
		•	<b>Origination LTV Not Available</b> <i>(Record Type 36)</i>	Stratified by the standard attributes noted above, information for loans in a security that have Origination Loan-to-Value ratios that are not available, indicated by 999 at the loan level. Loans with Origination LTV percentages below 1% and greater than 998% are considered not available.	•	•
		•	<b>Origination CLTV Not Available</b> <i>(Record Type 37)</i>	Stratified by the standard attributes noted above, information for loans in a security that have Origination Combined Loan-to-Value ratios that are not available, indicated by 999 at the loan level. Loans with Origination CLTV percentages below 1% and greater than 998% are considered not available.	•	•
		•	<b>Origination DTI Not Available</b> <i>(Record Type 38)</i>	Stratified by the standard attributes noted above, information for loans in a security that have Origination Debt-to-Income ratios that are not available, indicated by 99 at the loan level. Loans with Origination DTI percentages below 1% and greater than 65% are considered not available.	•	•
		•	<b>Origination Borrower Credit Score Not Available</b> <i>(Record Type 39)</i>	Stratified by the standard attributes noted above, information for loans in a security that have Origination Borrower Credit Scores that are not available, indicated by 9999 at the loan level. Loans with Origination Borrower Credit Score percentages below 300 and greater than 850 are considered not available.	•	•
		•	<b>Origination Loan Purpose</b> <i>(Record Type 40)</i>	Stratified by the standard attributes noted above, the classification of the loans as either a purchase money mortgage or a refinance mortgage at the time the loan was originated.  C = Refinance - Cash Out N = Refinance - No Cash Out R = Refinance - Not Specified P = Purchase 9 = Not Available	•	•
		•	<b>Origination Occupancy Status</b> <i>(Record Type 41)</i>	Stratified by the standard attributes noted above, the classification describing the property occupancy status at the time the loans were originated.  P = Primary Residence S = Second Home I = Investment Property 9 = Not Available	•	•

## Security-Level Stratifications

Fixed-Rate	ARM	Modified	Stratification Name	Description	Issuance	Monthly
		•	<b>Borrower Payment History</b> <i>(Record Type 42)</i>	<p>For the loans in the security, the number of days for which a mortgage loan was reported delinquent.</p> <p>Each of the attributes listed below is stratified by Borrower Payment History associated with the loans backing the security and is further grouped by the Days Delinquent category and standard stratification attributes described above.</p> <ul style="list-style-type: none"> <li>• <b>Days Delinquent</b> - The number of days for which a mortgage loan was reported delinquent. <ul style="list-style-type: none"> <li>○ 0 = Current</li> <li>○ 1 = 30-59</li> <li>○ 2 = 60-89</li> <li>○ 3 = 90-119</li> <li>○ 4 = 120+</li> </ul> </li> <li>• <b>Borrower Payment Date</b> - The month and year that the borrower was scheduled to remit payment. Up to 36-months of payment history.</li> </ul>	•	•
•	•		<b>Collateral List</b> <i>(Record Type 43)</i>	<p>A listing of each security that directly underlies the resecuritization.</p> <p>Each of the attributes listed below is stratified by each security directly backing the resecuritization and is further grouped by the standard stratification attributes described above.</p> <ul style="list-style-type: none"> <li>• <b>Collateral Prefix</b> - The designation assigned by the issuer denoting the type of the loans and the security.</li> <li>• <b>Collateral Security Identifier</b> -The unique designation assigned to the security by the issuer.</li> <li>• <b>Collateral CUSIP</b> - The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).</li> <li>• <b>Collateral Current WA Net Interest Rate</b> - The weighted average interest rate of the loans in effect during the current reporting period less servicing fees and guarantor fees.</li> <li>• <b>Collateral Issue Date</b> - The date on which the security was issued.</li> <li>• <b>Collateral Issuer</b> - The issuer for each security that directly underlies the resecuritization.</li> <li>• <b>Collateral Maturity Date</b> - The month and year that the final scheduled payment on the loan is due at the time of resecuritization.</li> <li>• <b>Collateral Issuance Investor Security UPB</b> - The unpaid principal balance of the loans as they contribute to the balance of the security.</li> <li>• <b>Collateral Issuance Contributing Investor Security UPB</b> -The pro-rata share of the Issuance Investor Security UPB amount.</li> <li>• <b>Collateral Current Contributing Investor Security UPB</b> - The pro-rata share of the Current Investor Security UPB amount.</li> <li>• <b>Collateral WA Interest Rate at Settlement</b> - The weighted average interest rate at the time of resecuritization.</li> <li>• <b>Collateral WA Remaining Months to Maturity at Settlement</b> -T he 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 considers the impact of any curtailments.</li> <li>• <b>Collateral WA Loan Age at Settlement</b> - 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.</li> <li>• <b>Collateral Trust Identifier</b> - An identifier assigned to the trust when established into a multiclass resecuritization.</li> <li>• <b>Collateral Class Identifier</b> - An identifier assigned to the class when established into a multiclass resecuritization.</li> <li>• <b>Group Identifier</b> - An identifier assigned to the group when established into a multiclass resecuritization.</li> </ul>	•	

## Security-Level Stratifications

Fixed-Rate	ARM	Modified	Stratification Name	Description	Issuance	Monthly
•	•	•	<b>Property Valuation Method</b> <i>(Record Type 44)</i>	<p>Stratified by the standard attributes noted above, indicates the method by which the value of the subject property was obtained.</p> <ul style="list-style-type: none"> <li>• <b>Appraisal (A)</b> - The property value was obtained through an appraisal that was completed by a licensed or certified appraiser.</li> <li>• <b>Onsite Property Data Collection (P)</b> - The property data collected onsite by a licensed or certified appraiser or other third-party and validated through a proprietary automated valuation model.</li> <li>• <b>GSE Targeted Refinance Programs (R)</b> - The programs implemented by the GSEs for targeted refinance products. <i>Includes Relief Refinance and Enhanced Relief Refinance program loans. Commingled Supers may contain Fannie Mae Refi Plus or High LTV Refinance loans.</i></li> <li>• <b>Appraisal Waiver (W)</b> - The appraisal is waived per applicable Selling Guide or negotiated terms. <i>Appraisal waiver granted under Freddie Mac's <a href="#">Automated Collateral Evaluation (ACE)</a> program. Commingled Supers may contain loans with appraisal waivers granted under Fannie Mae's <a href="#">Property Inspection Waiver (PIW)</a> program.</i></li> <li>• <b>Other (O)</b> - Any property valuation method not provided within the other enumerations.</li> <li>• <b>Not Available (9)</b> - The Property Valuation Method is not available for disclosure. <i>Default value for loans backing pools issued prior to June 1, 2017.</i></li> <li>• <b>Not Applicable (7)</b> - The Property Valuation Method is not applicable to the loan product. <i>The disclosure is not applicable for modified fixed-rate and step-rate loans.</i></li> </ul>	•	•
•	•	•	<b>Borrower Assistance Plan</b> <i>(Record Type 45)</i>	<p>Stratified by the standard attributes noted above, the type of assistance plan that the borrower is enrolled in that provides temporary mortgage payment relief or an opportunity to cure a mortgage delinquency over a defined period. The data in this stratification will be published on a one-month delay due to the timing of our servicing reporting cycle. For example, the values in this stratification published in July 2020 correspond to the delinquency status in the Days Delinquent Stratification published in June 2020.</p> <ul style="list-style-type: none"> <li>• <b>Forbearance Plan (F)</b> - An agreement between the servicer and the borrower that reflects the terms of the forbearance, including whether the borrower may make either reduced or no monthly payments for a specific period.</li> <li>• <b>Repayment Plan (R)</b> - An agreement between the servicer and a borrower that gives the borrower a defined period to reinstate the mortgage by paying the normal regular payments plus an additional agreed upon amount in repayment of the delinquency.</li> <li>• <b>Trial Period Plan (T)</b> - An agreement, generally lasting 3 months, that allows the servicer to test the borrower's ability to make a modified loan payment before finalizing the modification.</li> <li>• <b>Other Workout Plan (O)</b> - The borrower is enrolled in a plan other than a forbearance plan, a repayment plan or a trial period plan.</li> <li>• <b>No Workout Plan (N)</b> - The borrower is not enrolled in an alternate plan.</li> <li>• <b>Not Applicable (7)</b> - A borrower assistance plan is not applicable for the related mortgage loan.</li> <li>• <b>Not Available (9)</b> - A borrower assistance plan is not available for disclosure.</li> </ul>		•

## Security-Level Stratifications

Fixed-Rate	ARM	Modified	Stratification Name	Description	Issuance	Monthly
•	•	•	<b>Alternative Delinquency Resolution</b> <i>(Record Type 46)</i>	<p>Loss mitigation solution that resolves delinquencies and help homeowners remain in their homes in accordance with the servicer's contractual obligation, while allowing the loan to remain in the security.</p> <ul style="list-style-type: none"> <li>• <b>Payment Deferral (P)</b> - For borrowers who have resolved a temporary hardship and can resume making their monthly mortgage payment but cannot afford either a full reinstatement or repayment plan to bring the loan current. The borrower can defer up to two months of missed principal and interest (P&amp;I) payments. The amount is deferred into a non-interest-bearing balance due at mortgage loan maturity, or earlier upon the sale or transfer of the property, refinance of the mortgage loan, or payoff of the interest-bearing UPB.</li> <li>• <b>COVID-19 Payment Deferral (C)</b> - For borrowers who experienced a COVID-19 related hardship and can resume making their monthly mortgage payment. The borrower can defer up to 12 months of missed P&amp;I payments, out-of-pocket escrow advances paid to third parties; servicing advances paid to third parties in the ordinary course of business and not retained by the servicer, if allowed by state law. The amount is deferred into a non-interest-bearing balance due at mortgage loan maturity or earlier upon the sale or transfer of the property, refinance of the mortgage loan, or payoff of the interest-bearing UPB.</li> <li>• <b>Disaster Payment Deferral (D)</b> - For borrowers who experienced a disaster related hardship and can resume making their monthly mortgage payment. The borrower can defer up to 12 months of missed P&amp;I payments, out-of-pocket escrow advances paid to third parties; servicing advances paid to third parties in the ordinary course of business and not retained by the servicer, if allowed by state law. The amount is deferred into a non-interest-bearing balance due at mortgage loan maturity or earlier upon the sale or transfer of the property, refinance of the mortgage loan, or payoff of the interest-bearing UPB.</li> <li>• <b>Multiple (M)</b> – Represents loans that have completed more than one Alternative Delinquency Resolution.</li> <li>• <b>Other (O)</b> - The borrower has executed an Alternative Delinquency Resolution program other than the other provided enumerations.</li> <li>• <b>Not Applicable (7)</b> – An Alternative Delinquency Resolution is not applicable for the related mortgage loan.</li> <li>• <b>Not Available (9)</b> – The Alternative Delinquency Resolution is not available for disclosure.</li> </ul> <p>In addition to the standard stratification attributes noted above, the record type will also provide the following attribute for each category represented.</p> <ul style="list-style-type: none"> <li>• <b>Total Deferral Amount</b> - The total non-interest-bearing deferral amount related to one or more Alternative Delinquency Resolutions.</li> </ul>		•
•	•	•	<b>Number of Alternative Delinquency Resolutions</b> <i>(Record Type 47)</i>	<p>The total number of Alternative Delinquency Resolutions as reported by the servicer for a specific loan. <i>May not account for 100% of the pool (zero not represented).</i></p> <ul style="list-style-type: none"> <li>• 1</li> <li>• 2</li> <li>• 3</li> <li>• 4</li> <li>• 5</li> <li>• &gt;5</li> </ul> <p>In addition to the standard stratification attributes noted above, the record type will also provide the following attribute for each category represented.</p> <ul style="list-style-type: none"> <li>• <b>Total Deferral Amount</b> - The total non-interest-bearing deferral amount related to one or more Alternative Delinquency Resolutions.</li> </ul>		•

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Fixed-Rate	ARM	Modified	Stratification Name	Description	Issuance	Monthly
		•	<b>Borrower Assistance Plan History</b> <i>(Record Type 48)</i>	<p>For a reperforming or modified loan in a newly issued security, the type of borrower assistance plan that the borrower was enrolled in at any time during the 36 months prior to issuance of such security.</p> <ul style="list-style-type: none"> <li>• <b>Forbearance Plan (F)</b> - An agreement between the servicer and the borrower that reflects the terms of the forbearance, including whether the borrower may make either reduced or no monthly payments for a specific period.</li> <li>• <b>Repayment Plan (R)</b> - An agreement between the servicer and a borrower that gives the borrower a defined period to reinstate the mortgage by paying the normal regular payments plus an additional agreed upon amount in repayment of the delinquency.</li> <li>• <b>Trial Period Plan (T)</b> - An agreement, generally lasting 3 months, that allows the servicer to test the borrower's ability to make a modified loan payment before finalizing the modification.</li> <li>• <b>Other Workout Plan (O)</b> - The borrower is enrolled in a plan other than a forbearance plan, a repayment plan or a trial period plan.</li> <li>• <b>No Workout Plan (N)</b> - The borrower is not enrolled in an alternate plan.</li> <li>• <b>Not Applicable (7)</b> - A borrower assistance plan is not applicable for the related mortgage loan.</li> <li>• <b>Not Available (9)</b> - A borrower assistance plan is not available for disclosure.</li> </ul> <p>In addition to the standard stratification attributes noted above, the record type will also provide the following attribute for each category represented.</p> <ul style="list-style-type: none"> <li>• <b>Borrower Payment Date</b> - The month and year that the borrower was scheduled to remit payment.</li> </ul>	•	