



Loan-Level Disclosure

Variable 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. Inception month and monthly loan-level disclosure supplements Freddie Mac's current daily and monthly pool-level disclosure for new and previously issued securities.

Loan-level disclosure is available on Freddie Mac's Web site at FreddieMac.com/mbs/html/sd_pc_lookup.html by entering the CUSIP or pool number and selecting "Loan Level File."

The following variables are divided into three sections: Fixed-rate Mortgage Loan-level Variables, Adjustable-rate Mortgage Loan-level Variables and Modified Mortgage Loan-level Variables

Loan-level Disclosure Variables

Fixed-Rate	ARM	Modified	Variable Name	Description	Inception	Monthly
•	•	•	Loan Identifier	The unique designation assigned to the loan by the issuer. The first six characters represent the security identifier. The second six characters is a sequential loan count.	•	•
•	•	•	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	•	•
•	•	•	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).	•	•
•	•		Combined Loan-to-Value (CLTV)	<p>The ratio, expressed as a percentage, obtained by dividing the amount of all known outstanding loans at origination by the value of the property.</p> <p>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.</p> <p>For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.</p> <p>If the secondary financing amount disclosed by the Seller includes a home equity line of credit, then the CLTV calculation reflects the disbursed amount at closing of the first lien mortgage loan, not the maximum loan amount available under the home equity line of credit.</p> <p>In the case of a seasoned mortgage loan, if the Seller cannot warrant that the value of the mortgaged property has not declined since the note date, Freddie Mac requires that the Seller must provide a new appraisal value, which is used in the CLTV calculation.</p> <p>Percentages less than 1% or greater than 998% will be disclosed as "Not Available," which will be indicated by 999.</p> <p>This disclosure is subject to the widely varying standards originators use to calculate and / or report Borrowers' secondary mortgage loan amounts and will not be updated.</p> <p>9999 = Not Available</p>	•	•

Loan-level Disclosure Variables

Fixed-Rate	ARM	Modified	Variable Name	Description	Inception	Monthly
•	•		Borrower Credit Score	<p>The standardized credit score used to evaluate the borrower during the loan origination process.</p> <p>For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.</p> <p>All known credit scores are disclosed at issuance. Generally, the credit score known and disclosed at time of PC issuance is the score used to originate the mortgage. Mortgages reported with unknown credit scores at the time of PC issuance may have credit scores disclosed in the month following PC issuance. Credit scores reported at PC issuance and those reported in the month following, if any, are not updated and these same scores continue to appear in the monthly reporting.</p> <p>An unavailable credit score or a credit score value less than 300 or greater than 850 will be disclosed as "Not Available," which will be indicated by 9999.</p> <p>9999 = Not Available</p>	•	•
•	•	•	Current Investor Loan UPB	The unpaid principal balance of the loan as it contributes to the current balance of the security.		•
•	•	•	Debt-to-Income (DTI) Ratio	<p>The ratio obtained by dividing the total monthly debt expense by the total monthly income of the borrower at the time the loan was originated or modified.</p> <p>Disclosure of the debt to income ratio is based on (1) the sum of the Borrower's monthly debt payments, including monthly housing expenses that incorporate the mortgage payment the Borrower is making at the time of the delivery of the mortgage loan to Freddie Mac, divided by (2) the total monthly income used to underwrite the Borrower as of the date of the origination of the mortgage loan. The debt to income ratio will not be updated. This disclosure is subject to the widely varying standards originators use to calculate and / or report Borrowers' income and liabilities.</p> <p>This disclosure is subject to the widely varying standards originators use to calculate and / or report Borrowers' secondary mortgage loan amounts.</p> <p>Percentages less than 1% or greater than 65% will be disclosed as "Not Available," which will be indicated by a 999.</p> <p>999 = Not Available</p>	•	•
		•	Estimated Loan-to-Value (ELTV)	<p>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, through a proprietary Automated Valuation Model (AVM).</p> <p>In the case of modified mortgages with deferred amounts, the outstanding balance of the modified mortgage loan reflects both interest bearing and non-interest bearing UPB amounts. Although we believe that our automated valuation model yields a reasonable approximation of the property's current value, using a value obtained from: (i) a different automated valuation model, (ii) an appraisal based on a physical inspection of the property or (iii) an arm's length sale of the property could result in a different value for the property.</p> <p>Estimated LTV ratios that are not available, less than 1% or greater than 998% will be disclosed as "Not Available," which is indicated by 999.</p> <p>9999 = Not Available</p>	•	•
•	•	•	First Payment Date	<p>The month and year that the first scheduled payment on the loan is due.</p> <p>For seller-owned modified mortgages, converted mortgages, and construction to permanent mortgages, the first payment due date of the mortgage as of the note modification, conversion, or construction to permanent date of the mortgage.</p>	•	•
•	•	•	First Time Homebuyer Indicator	<p>The indicator denoting whether a borrower on the loan qualifies as a first-time homebuyer.</p> <p>Indicates whether the Borrower, or one of a group of Borrowers, is an individual who (1) is purchasing the mortgaged property, (2) will reside in the mortgaged property as a primary residence 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 mortgaged property. With certain limited exceptions, a displaced homemaker or single parent may also be considered a First-Time Homebuyer if the individual had no ownership interest in a residential property during the preceding three-year period other than an ownership interest in the marital residence with a spouse.</p> <p>"Not Available" will be indicated by 9.</p> <p>Y = Yes N = No 9 = Not Available</p>	•	•
•	•		Initial Only First Principal & Interest Payment Date	For interest-only loans, the month and year that the first monthly scheduled fully amortizing principal and interest payment is due.	•	•

Loan-level Disclosure Variables

Fixed-Rate	ARM	Modified	Variable Name	Description	Inception	Monthly
•	•		Interest Only Loan Indicator	The indicator denoting whether the loan only requires interest payments for a specified period beginning with the first payment date.	•	•
•	•	•	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.	•	•
•	•	•	Loan Age	The number of scheduled payments from the time the loan was originated or modified up to and including the current reporting period.	•	•
•	•	•	Loan Purpose	<p>The classification describing the purpose of the loan.</p> <p>Generally, a Cash-out Refinance mortgage loan is a mortgage loan in which the use of the loan amount is not limited to specific purposes. A mortgage loan placed on a property previously owned free and clear by the Borrower is always considered a Cash-out Refinance mortgage loan.</p> <p>Generally, a No Cash-out Refinance mortgage loan is a mortgage loan in which the loan amount is limited to the following uses:</p> <ul style="list-style-type: none"> • Pay off the first mortgage, regardless of its age • Pay off any junior liens secured by the mortgaged property, that were used in their entirety to acquire the subject property • Pay related closing costs, financing costs and prepaid items, and • Disburse cash out to the Borrower (or any other payee) not to exceed 2% of the new refinance mortgage loan or \$2,000, whichever is less <p>As an exception to the above, for construction conversion mortgage loans and renovation mortgage loans, the amount of the interim construction financing secured by the mortgaged property is considered an amount used to pay off the first mortgage. Paying off unsecured liens or construction costs paid by the Borrower outside of the secured interim construction financing is considered cash out to the Borrower, if greater than \$2,000 or 2% of the loan amount.</p> <p>This disclosure is subject to various special exceptions used by Sellers to determine whether a mortgage loan is a No Cash-out Refinance mortgage loan.</p> <p>If a Refinance is applicable, but the seller of the mortgage loan does not specify Cash-out Refinance or No Cash-out Refinance, "Refinance—Not Specified" is indicated. "Not Available" will be indicated by a 9.</p> <p>C = Refinance - Cash Out N = Refinance - No Cash Out R = Refinance - Not Specified P = Purchase M = Modified - Loss Mitigation 9 = Not Available</p>	•	•
•	•	•	Loan Term	The number of months in which regularly scheduled borrower payments are due.	•	•
•	•		Loan-to-Value (LTV)	<p>The ratio, expressed as a percentage, obtained by dividing the amount of the loan at origination by the value of the property.</p> <p>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.</p> <p>For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.</p> <p>In the case of a seasoned mortgage loan, if the Seller cannot warrant that the value of the mortgaged property has not declined since the note date, Freddie Mac requires that the Seller must provide a new appraisal value, which is used in the LTV calculation.</p> <p>Percentages less than 1% or greater than 998% will be disclosed as "Not Available," indicated by 999.</p> <p>999 = Not Available</p>	•	•
•	•	•	Maturity Date	The month and year that the final scheduled payment on the loan is due.	•	•
•	•		Months to Amortization	For interest-only loans, the number of months from the current month to the first scheduled principal and interest payment date.	•	•

Loan-level Disclosure Variables

Fixed-Rate	ARM	Modified	Variable Name	Description	Inception	Monthly
•	•	•	Mortgage Insurance Percent (MI %)	The percentage of mortgage insurance coverage obtained at origination in effect at the time the security was issued. Only primary mortgage insurance that is purchased by the Borrower, lender or Freddie Mac is disclosed. Mortgage insurance that constitutes "credit enhancement" that is not required by Freddie Mac's Charter is not disclosed. Amounts of mortgage insurance reported by Sellers that are in excess of 55% will be disclosed as "Not Available," which will be indicated by 999. 000= No MI 999= Not Available	•	•
•	•	•	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	•	•
•	•	•	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. For seller-owned modified mortgages, converted mortgages and construction to permanent mortgages, the UPB of the mortgage as of the note modification, conversion or construction to permanent date of the mortgage.	•	•
•	•	•	Issuance Net Interest Rate	The interest rate of the loan at the time the security was issued less servicing fees and guarantor fees.	•	
•	•	•	Original Interest Rate	The interest rate of the loan as stated on the note at the time the loan was originated or modified.	•	•
•	•	•	Current Net Interest Rate	The interest rate of the loan in effect during the current reporting period less servicing fees and guarantor fees.		•
•	•	•	Current Interest Rate	The interest rate of the loan in effect during the current reporting period.		•
•	•	•	Issuance Interest Rate	The interest rate of the loan in effect at the time the security was issued.	•	
•	•	•	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	•	•
•	•	•	Number of Units	The number of dwelling units in the mortgaged property at the time the loan was originated. "Not Available" will be indicated by 99. 1 = 1 2 = 2 3 = 3 4 = 4 99 = Not Available	•	•
•	•	•	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. "Not Available" will be indicated by a 9. P = Primary Residence S = Second Home I= Investment Property 9 = Not Available	•	•
•	•	•	Prepayment Penalty Indicator	The indicator denoting whether the borrower is subject to a penalty for early payment of principal. Y = Yes N = No	•	•

Loan-level Disclosure Variables

Fixed-Rate	ARM	Modified	Variable Name	Description	Inception	Monthly
•	•	•	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	•	•
•	•	•	Amortization Type	The classification of the loan as having either a fixed- or an adjustable-interest rate. FRM = Fixed-Rate ARM = Adjustable-Rate	•	•
•	•	•	Property State	The abbreviation denoting the location of the property securing the loan.	•	•
•	•	•	Property Type	The classification describing the type of property that secures the loan. "Not Available" will be indicated by 99. CP = Cooperative CO = Condominium PU = Planned Unit Development SF = Single-Family MH = Manufactured Housing 99 = Not Available	•	•
•	•	•	Remaining Months to Maturity (RMM)	The number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero. For fixed-rate loans, this value considers the impact of any curtailments.	•	•
•	•	•	Seller Name	The name of the entity that sold the loan to the issuer. This field will not be updated after issuance, regardless of mergers/acquisitions.	•	•
•	•	•	Servicer Name	The name of the entity that services the loan during the current reporting period.	•	•
•	•	•	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	•	•
•	•	•	Assumability Indicator	The indicator denoting whether the loan is assumable by another borrower. Y = Yes N = No	•	•

Loan-level Disclosure Variables

Fixed-Rate	ARM	Modified	Variable Name	Description	Inception	Monthly
•	•		Channel	<p>The origination channel used by the party that delivered the loan to the issuer.</p> <p>For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.</p> <p>Disclosure indicates whether a broker or correspondent, as those terms are defined below, originated or was involved in the origination or the mortgage.</p> <p>If a Third-Party Origination is applicable, but the Seller does not specify Broker or Correspondent, the disclosure will indicate "TPO Not Specified." If a Broker, Correspondent or Third Party Origination disclosure is not applicable, the mortgage loan will be designated as Retail, as defined below.</p> <ul style="list-style-type: none"> • Broker is a person or entity that specializes in loan originations, receiving a commission (from a Correspondent or other lender) to match Borrowers and lenders. The Broker performs some or most of the loan processing functions, such as taking loan applications, or ordering credit reports, appraisals and title reports. Typically, the Broker does not underwrite or service the mortgage loan and generally does not use its own funds for closing; however, if the Broker funded a mortgage loan on a lender's behalf, such a mortgage loan is considered a "Broker" third party origination mortgage loan. The mortgage loan is generally closed in the name of the lender who commissioned the Broker's services. • Correspondent is an entity that typically sells the Mortgages it originates to other lenders, which are not Affiliates of that entity, under a specific commitment or as part of an ongoing relationship. The Correspondent performs some or all the loan processing functions, such as taking the loan application, ordering credit reports, appraisals, and title reports, and verifying the Borrower's income and employment. The Correspondent may or may not have delegated underwriting and typically funds the mortgage loans at settlement. The mortgage loan is closed in the Correspondent's name and the Correspondent may or may not service the mortgage loan. The Correspondent may use a Broker to perform some of the processing functions or even to fund the loan on its behalf; under such circumstances, the mortgage loan is considered a "Broker" third party origination mortgage loan, rather than a "Correspondent" third party origination mortgage loan. • Retail Mortgage is a mortgage loan that is originated, underwritten and funded by a lender or its Affiliates. The mortgage loan is closed in the name of the lender or its Affiliate and if it is sold to Freddie Mac, it is sold by the lender or its Affiliate that originated it. A mortgage loan that a Broker or Correspondent completely or partially originated, processed, underwrote, packaged, funded or closed is not considered a Retail mortgage loan. • For purposes of the definitions of Correspondent and Retail, "Affiliate" means any entity that is related to another party as a consequence of the entity, directly or indirectly, controlling the other party, being controlled by the other party, or being under common control with the other party. <p>R = Retail B = Broker C = Correspondent T = Third Party Origination - Not Specified 9 = Not Available</p>	•	•
		•	Updated Credit Score	<p>For reinstated, reperforming, modified fixed-rate and modified step-rate loans, the most recently available standardized credit score provided at the time of issuance.</p> <p>If an updated credit score is unavailable or outside the range of 300 to 850, then we disclose "Not Available," which is indicated by 9999.</p> <p>9999 = Not Available</p>	•	•
	•		Convertibility Indicator	<p>The indicator denoting whether the loan has a feature that allows the borrower to convert from an adjustable rate to a fixed rate.</p> <p>Y = Yes N = No</p>	•	•
	•		Mortgage Margin	<p>For adjustable-rate loans, the number of percentage points to be added to the index to arrive at the new interest rate.</p> <p>77.777 - Not Applicable</p>	•	•
	•		Interest Rate Adjustment Frequency	<p>For adjustable-rate loans, the number of months, excluding any fixed-rate period, between scheduled rate changes.</p>	•	•
	•		Next Interest Rate Adjustment Date	<p>For adjustable-rate loans, the month and year that the interest rate is next subject to change.</p>	•	•

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Fixed-Rate	ARM	Modified	Variable Name	Description	Inception	Monthly																																																																								
	•		Index	<p>For adjustable-rate loans, the description of the index on which adjustments to the interest rate are based.</p> <table border="1"> <thead> <tr> <th>Code</th> <th>Index Description</th> <th>Code</th> <th>Index Description</th> </tr> </thead> <tbody> <tr> <td>02</td> <td>6 MO CD SECONDARY MARKET RATE</td> <td>38</td> <td>1 YR LIBOR - WSJ</td> </tr> <tr> <td>05</td> <td>10 YR WEEKLY CMT</td> <td>42</td> <td>6 MO LIBOR WSJ</td> </tr> <tr> <td>08</td> <td>12 MO MOVING AV OF 1 YR MONTHLY CMT</td> <td>43</td> <td>6 MO LIBOR WSJ</td> </tr> <tr> <td>09</td> <td>1 YR MONTHLY CMT</td> <td>44</td> <td>6 MO LIBOR WSJ 15TH DAY OF MO</td> </tr> <tr> <td>10</td> <td>1 YR WEEKLY CMT</td> <td>46</td> <td>NTL AV CONTRACT MORTGAGE RATE</td> </tr> <tr> <td>11</td> <td>2 YR WEEKLY CMT</td> <td>48</td> <td>BANK PRIME LOAN RATE</td> </tr> <tr> <td>12</td> <td>3 YR MONTHLY CMT</td> <td>49</td> <td>FH 60 DAY REQUIRED NET YIELD (IMPROVING RATE MTG)</td> </tr> <tr> <td>13</td> <td>3 YR WEEKLY CMT</td> <td>54</td> <td>6 MO TSY BILL AUCTION DISCOUNT RATE MONTHLY AV</td> </tr> <tr> <td>14</td> <td>5 YR WEEKLY CMT</td> <td>55</td> <td>6 MO TSY BILL AUCTION DISCOUNT RATE</td> </tr> <tr> <td>16</td> <td>5 YR MONTHLY CMT</td> <td>57</td> <td>6 MO TSY BILL AUCTION INVESTMENT RATE</td> </tr> <tr> <td>18</td> <td>7 YR MONTHLY CMT</td> <td>58</td> <td>6 MO TSY BILL WEEKLY SECONDARY MARKET RATE</td> </tr> <tr> <td>21</td> <td>11TH DISTRICT COFI MONTHLY</td> <td>59</td> <td>5 YR INTEREST RATE SWAP</td> </tr> <tr> <td>22</td> <td>7TH DISTRICT COFI MONTHLY</td> <td>60</td> <td>4TH DISTRICT COFI MONTHLY</td> </tr> <tr> <td>23</td> <td>NTL MONTHLY MEDIAN COFI</td> <td>05</td> <td>11TH DISTRICT COFI MONTHLY</td> </tr> <tr> <td>25</td> <td>VARIABLE INT RATE SEMIANNUAL COFI FOR CA</td> <td>28</td> <td>12 MO MOVING AV OF 1 YR MONTHLY CMT</td> </tr> <tr> <td>27</td> <td>FEDERAL COFI</td> <td>950</td> <td>5 YR TREASURY – LKBK SEE OCS</td> </tr> <tr> <td>36</td> <td>1 MO LIBOR WSJ 25TH DAY OF MO</td> <td>954</td> <td>CPC-GNMA EQUIVALENT – LKBK SEE OCS</td> </tr> </tbody> </table> <p>• Bolded codes are multifamily indices</p>	Code	Index Description	Code	Index Description	02	6 MO CD SECONDARY MARKET RATE	38	1 YR LIBOR - WSJ	05	10 YR WEEKLY CMT	42	6 MO LIBOR WSJ	08	12 MO MOVING AV OF 1 YR MONTHLY CMT	43	6 MO LIBOR WSJ	09	1 YR MONTHLY CMT	44	6 MO LIBOR WSJ 15TH DAY OF MO	10	1 YR WEEKLY CMT	46	NTL AV CONTRACT MORTGAGE RATE	11	2 YR WEEKLY CMT	48	BANK PRIME LOAN RATE	12	3 YR MONTHLY CMT	49	FH 60 DAY REQUIRED NET YIELD (IMPROVING RATE MTG)	13	3 YR WEEKLY CMT	54	6 MO TSY BILL AUCTION DISCOUNT RATE MONTHLY AV	14	5 YR WEEKLY CMT	55	6 MO TSY BILL AUCTION DISCOUNT RATE	16	5 YR MONTHLY CMT	57	6 MO TSY BILL AUCTION INVESTMENT RATE	18	7 YR MONTHLY CMT	58	6 MO TSY BILL WEEKLY SECONDARY MARKET RATE	21	11TH DISTRICT COFI MONTHLY	59	5 YR INTEREST RATE SWAP	22	7TH DISTRICT COFI MONTHLY	60	4TH DISTRICT COFI MONTHLY	23	NTL MONTHLY MEDIAN COFI	05	11 TH DISTRICT COFI MONTHLY	25	VARIABLE INT RATE SEMIANNUAL COFI FOR CA	28	12 MO MOVING AV OF 1 YR MONTHLY CMT	27	FEDERAL COFI	950	5 YR TREASURY – LKBK SEE OCS	36	1 MO LIBOR WSJ 25TH DAY OF MO	954	CPC-GNMA EQUIVALENT – LKBK SEE OCS	•	•
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	•		Initial Interest Rate Cap Down Percent	<p>For adjustable-rate loans, the maximum number of percentage points the interest rate can adjust downward at the first interest rate change date.</p> <p>77.777 - Not Applicable</p>	•	•																																																																								
	•		Initial Interest Rate Cap Up Percent	<p>For adjustable-rate loans, the maximum percentage points the interest rate can adjust upward at the first interest rate adjustment date.</p> <p>77.777 - Not Applicable</p>	•	•																																																																								
	•		Initial Fixed Rate Period	<p>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.</p> <p>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</p>	•	•																																																																								
	•		Interest Rate Lookback	<p>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.</p>	•	•																																																																								
	•		Interest Rate Rounding Method	<p>For adjustable-rate loans, the designation of how the interest rate is rounded when a new interest rate is calculated.</p> <p>DN = Down NE = Nearest UP = Up NO = No Rounding</p>	•	•																																																																								

Loan-level Disclosure Variables

Fixed-Rate	ARM	Modified	Variable Name	Description	Inception	Monthly
	•		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	•	•
	•		Life Ceiling Interest Rate	For ARMs, the maximum note rate of an ARM over the life of the loan. 77.777 - Not Applicable	•	•
	•		Months to Next Rate Adjustment Date	For adjustable-rate loans, the number of months from the current month to the next interest rate change date.	•	•
	•		Life Ceiling Net Interest Rate	For adjustable-rate loans, the maximum interest rate less servicing fees and guarantor fees. 77.777 - Not Applicable	•	•
	•		Life Floor Interest Rate	For adjustable-rate loans, the lifetime minimum interest rate. 77.777 - Not Applicable	•	•
	•		Life Floor Net Interest Rate	For adjustable-rate loans, the minimum interest rate less servicing fees and guarantor fees. 77.777 - Not Applicable	•	•
	•		MBS PC Margin	For adjustable-rate loans, the mortgage margin less servicing fees and guarantor fees. 77.777 - Not Applicable	•	•
	•		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. 77.777 - Not Applicable	•	•
	•		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. 77.777 - Not Applicable	•	•

• **Modification Program**

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 non-interest arrearages, setting of interest rates to a fixed rate (increasing or decreasing rates), extending the Mortgage term, 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 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	Deferred Payment	Deferred Payment modifications include forbearance (but not reductions) of principal. The terms of the modifications under our deferred payment modification initiative are generally offered to borrowers who are at least 30 days delinquent but less than 90 days delinquent and have remitted at least two consecutive monthly mortgage payments with respect to the two most recent monthly due dates. A trial period plan is not required for this type of modification. Select Servicers were permitted, but not required, to implement the deferred payment modification beginning in May 2016.
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 any loss mitigation evaluation 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, a borrower trial period for the modifications before they are finalized and may include forbearance (but not reductions) of principal. 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	
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 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.
T	Streamlined	Streamlined 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, a borrower trial period for the modifications before they are finalized and may have included 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 into is September 1, 2017.
9	Not Available	

• **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

Loan-level Disclosure Variables

Fixed-Rate	ARM	Modified	Variable Name	Description	Inception	Monthly
				F = Rate, Term & Forbearance O = Other		
		•	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.	•	•
		•	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.	•	•
		•	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.	•	•
		•	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.	•	•
		•	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.	•	•
		•	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.	•	•
		•	Interest Rate Step Indicator	The indicator denoting whether the modification includes a step rate. If a loan has been modified more than once, this field represents the most recent modification. Y = Yes N = No	•	•
		•	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	•	•
		•	Total Number of Steps	For reperforming, modified step-rate loans, the number of upward interest rate adjustments per the modification agreement.	•	•
		•	Number of Remaining Steps	For reperforming, modified step-rate loans, the number of upward interest rate adjustments remaining.	•	•
		•	Next Step Rate	For reperforming, modified step-rate loans, the scheduled interest rate in effect at the next step-rate date.	•	•
		•	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.	•	•
		•	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.	•	•
		•	Step Rate Adjustment Frequency	For reperforming, modified step-rate loans, the number of months between each interest rate adjustment.	•	•

Loan-level Disclosure Variables

Fixed-Rate	ARM	Modified	Variable Name	Description	Inception	Monthly
		•	Next Step Rate Adjustment Date	For reperforming, modified step-rate loans, the month and year that the interest rate is scheduled to increase.	•	•
		•	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.	•	•
		•	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.	•	•
		•	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.	•	•
		•	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.	•	•
		•	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	•	•
		•	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	•	•
		•	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.	•	•
		•	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.	•	•
		•	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.	•	•
		•	Origination Loan-To-Value (LTV)	For reperforming, modified fixed-rate and modified step-rate loans, the ratio, expressed as a percentage, obtained by dividing the amount of the loan at origination by the value of the property. Property value reflects either the lesser of the sales price or the appraised property value for a purchase, or the appraised property value for a refinance. 999 = Not Available	•	•
		•	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. 9999 = Not Available	•	•
		•	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. In the case of purchase mortgages, the ratio was obtained by dividing the mortgage loan amount on the note date by the lesser of the mortgaged property's appraised value on the note date or its purchase price. In the case of a refinance mortgage loan, the ratio was obtained by dividing the mortgage loan amount on the note date by the mortgaged property's appraised value on the note date. In the case of a seasoned mortgage loan, if the Seller could not warrant that the value of the mortgaged property has not declined since the note date, Freddie Mac required that the Seller provide a new appraisal value, which was used in the LTV calculation. Percentages below 1% or greater than 998% will be disclosed as "Not Available," indicated by a 999 999 = Not Available	•	•
		•	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. An unavailable credit score or a credit score value less than 300 or greater than 850 will be disclosed as "Not Available", which will be indicated by a 9999. 9999 = Not Available	•	•

Loan-level Disclosure Variables

Fixed-Rate	ARM	Modified	Variable Name	Description	Inception	Monthly
		•	Origination Loan Purpose	<p>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.</p> <p>The classification describing the purpose of the loan.</p> <p>Indicates whether the mortgage loan is a Cash-out Refinance mortgage, No Cash-out Refinance mortgage, a Purchase mortgage or a Modified Mortgage. If a Refinance is applicable, but the seller of the mortgage loan does not specify Cash-out Refinance or No Cash-out Refinance, "Refinance—Not Specified" is indicated. "Not Available" will be indicated by a 9.</p> <p>A Modified Mortgage is a mortgage which has been modified for loss mitigation purposes.</p> <p>Generally, a Cash-out Refinance mortgage loan is a mortgage loan in which the use of the loan amount is not limited to specific purposes. A mortgage loan placed on a property previously owned free and clear by the Borrower is always considered a Cash-out Refinance mortgage loan.</p> <p>Generally, a No Cash-out Refinance mortgage loan is a mortgage loan in which the loan amount is limited to the following uses:</p> <ul style="list-style-type: none"> • Pay off the first mortgage, regardless of its age • Pay off any junior liens secured by the mortgaged property, that were used in their entirety to acquire the subject property • Pay related closing costs, financing costs and prepaid items, and • Disburse cash out to the Borrower (or any other payee) not to exceed 2% of the new refinance mortgage loan or \$2,000, whichever is less <p>As an exception to the above, for construction conversion mortgage loans and renovation mortgage loans, the amount of the interim construction financing secured by the mortgaged property is considered an amount used to pay off the first mortgage. Paying off unsecured liens or construction costs paid by the Borrower outside of the secured interim construction financing is considered cash out to the Borrower, if greater than \$2,000 or 2% of the loan amount.</p> <p>This disclosure is subject to various special exceptions used by Sellers to determine whether a mortgage loan is a No Cash-out Refinance mortgage loan.</p> <p>C = Refinance - Cash Out N = Refinance - No Cash Out R = Refinance - Not Specified P = Purchase 9 = Not Available</p>	•	•
		•	Origination Occupancy Status	<p>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> <p>P= Primary Residence S= Second Home I= Investment Property 9= Not Available</p>	•	•

Loan-level Disclosure Variables

Fixed-Rate	ARM	Modified	Variable Name	Description	Inception	Monthly
		•	Origination Channel	<p>For reperforming, modified fixed-rate and modified step-rate loans, the origination channel used by the party that delivered the loan to the issuer.</p> <ul style="list-style-type: none"> • Broker is a person or entity that specializes in loan originations, receiving a commission (from a Correspondent or other lender) to match Borrowers and lenders. The Broker performs some or most of the loan processing functions, such as taking loan applications, or ordering credit reports, appraisals and title reports. Typically, the Broker does not underwrite or service the mortgage loan and generally does not use its own funds for closing; however, if the Broker funded a mortgage loan on a lender's behalf, such a mortgage loan is considered a "Broker" third party origination mortgage loan. The mortgage loan is generally closed in the name of the lender who commissioned the Broker's services. • Correspondent is an entity that typically sells the Mortgages it originates to other lenders, which are not Affiliates of that entity, under a specific commitment or as part of an ongoing relationship. The Correspondent performs some or all of the loan processing functions, such as taking the loan application, ordering credit reports, appraisals, and title reports, and verifying the Borrower's income and employment. The Correspondent may or may not have delegated underwriting and typically funds the mortgage loans at settlement. The mortgage loan is closed in the Correspondent's name and the Correspondent may or may not service the mortgage loan. The Correspondent may use a Broker to perform some of the processing functions or even to fund the loan on its behalf; under such circumstances, the mortgage loan is considered a "Broker" third party origination mortgage loan, rather than a "Correspondent" third party origination mortgage loan. • Retail Mortgage is a mortgage loan that is originated, underwritten and funded by a lender or its Affiliates. The mortgage loan is closed in the name of the lender or its Affiliate and if it is sold to Freddie Mac, it is sold by the lender or its Affiliate that originated it. A mortgage loan that a Broker or Correspondent completely or partially originated, processed, underwrote, packaged, funded or closed is not considered a Retail mortgage loan. • For purposes of the definitions of Correspondent and Retail, "Affiliate" means any entity that is related to another party as a consequence of the entity, directly or indirectly, controlling the other party, being controlled by the other party, or being under common control with the other party. <p>R = Retail B = Broker C = Correspondent T = Third Party Origination - Not Specified 9 = Not Available</p>	•	•
		•	Days Delinquent	<p>For reperforming, modified and modified step-rate loans, the number of days for which a mortgage loan has been reported delinquent.</p> <p>0 = Current 1 = 30-59 2 = 60-89 3 = 90-119 4 = 120+</p>	•	•
		•	Loan Performance History	<p>For reperforming, modified and modified step-rate loans, the coded string of values that describes the previous payment performance of the loan at the time of issuance.</p> <p>This string will contain 36 months of history for reperforming modified and modified step rate loans and 12 months for reinstated loans.</p>	•	•