



# Freddie Mac Mortgage-Backed Securities Disclosures: Overview of Changes between Legacy and the Single Security Initiative Aligned Files

**On August 28, 2017, Freddie Mac will begin generating PC (Level 1) and Giant PC (Level 2) disclosures in the Single Security Initiative aligned file formats. This resource highlights the various updates and changes made across the daily and monthly disclosure files for those Freddie Mac securities.**

**The REMIC (Level 3) aligned disclosure file formats will not be effective until Single Security is implemented, expected in 2Q 2019.**

# Disclosure Process Changes

## August 2017 Implementation Highlights

### Legacy Disclosure Files & Timing (current)

| File                  | Daily<br>6:30 AM | Monthly<br>4 <sup>th</sup> BD,<br>4:30PM |
|-----------------------|------------------|--|
| Fixed-Rate Loan Level | ●                | ●  |
| ARM Loan Level        | ●                | ●  |
| New Issue             | ●                |  |
| Breakout              | ●                | ●  |
| Fixed-Rate Factor     |                  | ●  |
| ARM Factor            |                  | ●  |
| Quartile              |                  | ●  |



### Aligned Disclosure Files & Timing (August 28, 2017)

| File  | Daily<br>6:30 AM | Monthly<br>4 <sup>th</sup> BD,<br>4:30PM |
|---|------------------|--|
| Loan Level (1 & 2)  | ●                | ●  |
| Security Core (1 & 2)                                       | ●                | ●  |
| Security Supplemental (1 & 2)                               | ●                | ●  |
| Pseudopool Security Core <sup>1</sup>                       |                  | ●  |
| Pseudopool Security Supplemental <sup>2</sup>               |                  | ●  |
| 45-day to 55-day Exchange Activity <sup>3</sup>             | ●                |  |
| Cumulative 45-day to 55-day Exchange Activity <sup>3</sup>  | ●                |  |
| Aggregate Level 1 Collateral Exchange Activity <sup>3</sup> | ●                |  |

<sup>1</sup> Identical in format to the Security Core file

<sup>2</sup> Identical in format to the Security Supplemental file

<sup>3</sup> Exchange files will be implemented prior to single security Go-Live in 2Q 2019

### Highlights for August 2017 Implementation

Loan Level 2, Security Core 2 and Security Supplemental 2 disclosure files are specific to ARMs, Modified, Reinstated and 75-day Fixed-Rate mortgages.

Disclosure files for all products, across both daily issuance and monthly cycles, have been standardized into a uniform, enterprise aligned file format.

Certain amount fields will be rounded for either the first six months or for the life of the loan.

Attribute labels have been updated to align with industry data standards (MISMO).

All legacy instances of “Unknown” will now map to “Not Available” (high 9’s).

File header and trailer records have been removed.

# Aligned Disclosure File Changes

## New Data Attributes



| Loan Level Files                      |
|---------------------------------------|
| Assumability Indicator                |
| Days Delinquent (NA for FRE)          |
| Government Insured Guarantee          |
| Interest Rate Rounding Method         |
| Interest Rate Rounding Method %       |
| Life Floor Interest Rate              |
| Life Floor Net Interest Rate          |
| Loan Correction Indicator             |
| Loan Performance History (NA for FRE) |
| MI Cancellation Indicator             |
| Prefix                                |
| Prepayment Penalty Total Term         |

| Security Core Files                       |
|---|
| Eligible for Resecuritization             |
| First Payment Adjustment Date             |
| First Rate Adjustment Date                |
| Interest Only Security Indicator          |
| Issuer                                    |
| Negative Amortization Indicator           |
| Payment Adjustment Frequency              |
| Payment Delay Days                        |
| Payment Lookback                          |
| Prefix                                    |
| Security Data Correction Indicator        |
| Security Description                      |
| Security Status Indicator                 |
| Servicer City                             |
| Servicer State                            |
| Subtype (NA for FRE)                      |
| WA Negative Amortization Limit            |
| WA Net Accrual Interest Rate (NA for FRE) |
| Periodic Interest Rate Cap Down %         |

| Security Supplemental Files<br>(New Stratifications)    |
|---|
| Collateral List   |
| Government Insured/Guarantee                            |
| Mortgage Insurance Cancellation Indicator               |
| Non-Standard Loan Type                                  |
| Origination Borrower Credit Score Not Available         |
| Origination Channel                                     |
| Origination Combined Loan-to-Value (CLTV) Not Available |
| Origination Debt-to-Income (DTI) Not Available          |
| Origination Loan Purpose                                |
| Origination Loan-to-Value (LTV) Not Available           |
| Origination Occupancy Status                            |
| Property Type   |

# Aligned Disclosure File Changes

## Retired Data Attributes



### Loan Level Attributes

|                                     |
|-------------------------------------|
| Documentation Type – Assets         |
| Documentation Type - Employment     |
| Documentation Type - Income         |
| Metropolitan Statistical Area (MSA) |
| Initial Interest Period             |

### Security Break Out Attributes

|                                 |
|---------------------------------|
| Documentation Type - Assets     |
| Documentation Type - Employment |
| Documentation Type - Income     |

### Security Level Attributes

|                                 |   |
|---------------------------------|---|
| First Conversion Date           | Total – State Rank 1                                    |
| Investor Tax Flag - 1984        | Total – Percentage Rank 1                               |
| Investor Tax Flag - 1985        | Total – State Rank 2                                    |
| Last Conversion Date            | Total – Percentage Rank 2                               |
| Percent UPB Pre-1984            | Total – State Rank 3                                    |
| Percent UPB Pre-1985            | Total – Percentage Rank 3                               |
| Seller Address                  | WA Mortgage Margin (retired from monthly files)         |
| Seller Zip Code                 | Mortgage Margin Range - High                            |
| Initial Interest Period         | Mortgage Margin Range - Low                             |
| Prepayment Penalty Factor       | WA Remaining Maturity Range - High                      |
| Total – Interest Bearing UPB    | WA Remaining Maturity Range - Low                       |
| Total – Deferred UPB            | Component Margin Difference                             |
| Total – Loan Count              | Conversion UPB Balance Percent                          |
| Total – WA Coupon               | Component Sequence Number                               |
| Total – WA Estimated LTV        | Assumability  |
| Total – WA Updated Credit Score | Number of Steps at Issuance (Loan Count & Investor UPB) |
| Total – WA DTI                  |   |
| Total – Average Loan Size       |   |

# Aligned Disclosure File Changes

## Effective Dates



### Business Threshold Effective Dates

“Not Available” business thresholds have been expanded with the implementation of the aligned disclosure formats. For the following attributes, initially disclosed values will be held static based on legacy thresholds. Only securities issued after August 28, 2017 will be subject to the expanded thresholds.

| Attribute                     | Legacy: Issuance prior to August 28, 2017 | Aligned: Issuance after August 28, 2017 |
|-------------------------------|---|---|
| Loan-to-Value (LTV)           | < 6% or > 105%*                           | < 1% or > 998%                          |
| Combined Loan-to-Value (CLTV) | < 6% or > 135%                            | < 1% or > 998%                          |
| Estimated LTV (ELTV)          | < 6% or > 300%                            | < 1% or > 998%                          |
| Origination LTV               | < 6% or > 105%                            | < 1% or > 998%                          |
| Origination CLTV              | < 6% or > 135%                            | < 1% or > 998%                          |
| Number of Borrowers           |   | < 1 or > 10                             |

\* High LTV prefixes capped at 135%

### Rounding of Amount Fields

For the following attributes, issuance values for securities issued prior to August 28, 2017 will be held static while securities issued after August 28, 2017 will be subject to the indicated rounding treatment.

| Attribute                             | Aligned: Issuance after August 28, 2017           |
|---------------------------------------|---|
| Current Deferred UPB                  | Rounded to nearest thousand                       |
| Current Investor Loan UPB             | Rounded to nearest thousand if Loan Age <= 6 mos. |
| Interest Bearing Mortgage Loan Amount | Rounded to nearest thousand                       |
| Issuance Investor Loan UPB            | Rounded to nearest thousand if Loan Age <= 6 mos. |
| Mortgage Loan Amount                  | Rounded to nearest thousand                       |
| Original Deferred Amount              | Rounded to nearest thousand                       |
| Origination Mortgage Loan Amount      | Rounded to nearest thousand                       |

# Aligned Disclosure File Changes

## Loan Age Calculation Update



In preparation for the Single Security implementation in 2Q 2019, Freddie Mac has aligned with Fannie Mae's Loan Age calculation.

### Current Calculation Method:

**Loan Age = ((As of Date (MM/YY) – Loan Origination Date (MM/YY)) – 1)**

• *Note: To ensure the age measurement commences with the first full month after the note origination month, we subtract 1.*

- **Cap = (Product Term \* 12) – Remaining Months to Maturity + 2**
- **If Loan Origination Date is not valid or is null, set the loan age to Cap value.**
- **If loan age > Cap, set the loan age to Cap value.**
- **If loan age < 0, set loan age to 0.**

### Future Calculation Method:

**Loan Age = ((As of Date (MM/YY) – First Payment Date (MM/YY)) + 1)**

- **If Loan Age > Loan Term, set to prior month Loan Age + 1**

The Loan Age calculation was changed to use the First Payment Date as opposed to the Note Origination Date. There should be no difference between the outputs of the two methods for a vast majority of Freddie Mac's loans and securities.

# Aligned Disclosure File Changes

## ARM Index Conversion



The aligned disclosure file formats leverage an enumerated code for the Index rather than a description. This mapping converts the current description to the new aligned Index code. *Although there are additional index codes reflected in the aligned technical specification, only these indices apply to Freddie Mac ARM securities.*

| Current Index Description                | New Aligned Index Code |
|--|------------------------|
| 6 MO CD SECONDARY MARKET RATE            | 02                     |
| 10 YR WEEKLY CMT                         | 05                     |
| 12 MO MOVING AV OF 1 YR MONTHLY CMT      | 08                     |
| 1 YR MONTHLY CMT                         | 09                     |
| 1 YR WEEKLY CMT                          | 10                     |
| 2 YR WEEKLY CMT                          | 11                     |
| 3 YR MONTHLY CMT                         | 12                     |
| 3 YR WEEKLY CMT                          | 13                     |
| 5 YR WEEKLY CMT                          | 14                     |
| 5 YR MONTHLY CMT                         | 16                     |
| 7 YR MONTHLY CMT                         | 18                     |
| 11TH DISTRICT COFI MONTHLY               | 21                     |
| 7TH DISTRICT COFI MONTHLY                | 22                     |
| NTL MONTHLY MEDIAN COFI                  | 23                     |
| VARIABLE INT RATE SEMIANNUAL COFI FOR CA | 25                     |
| FEDERAL COFI                             | 27                     |
| 1 MO LIBOR WSJ 25TH DAY OF MO            | 36                     |

| Current Index Description                         | New Aligned Index Code |
|---|------------------------|
| 1 YR LIBOR - WSJ                                  | 38                     |
| 6 MO LIBOR WSJ                                    | 42                     |
| 6 MO LIBOR WSJ                                    | 43                     |
| 6 MO LIBOR WSJ 15TH DAY OF MO                     | 44                     |
| NTL AV CONTRACT MORTGAGE RATE                     | 46                     |
| BANK PRIME LOAN RATE                              | 48                     |
| FH 60 DAY REQUIRED NET YIELD (IMPROVING RATE MTG) | 49                     |
| 6 MO TSY BILL AUCTION DISCOUNT RATE MONTHLY AV    | 54                     |
| 6 MO TSY BILL AUCTION DISCOUNT RATE               | 55                     |
| 6 MO TSY BILL AUCTION INVESTMENT RATE             | 57                     |
| 6 MO TSY BILL WEEKLY SECONDARY MARKET RATE        | 58                     |
| 5 YR INTEREST RATE SWAP                           | 59                     |
| 4TH DISTRICT COFI MONTHLY                         | 60                     |

| MULTIFAMILY Current Index Description  | MULTIFAMILY New Index Code |
|--|----------------------------|
| 11 <sup>TH</sup> DISTRICT COFI MONTHLY | 05                         |
| 12 MO MOVING AV OF 1 YR MONTHLY CMT    | 28                         |
| 5 YR TREASURY – LKBK SEE OCS           | 950                        |
| CPC-GNMA EQUIVALENT – LKBK SEE OCS     | 954                        |

Multifamily indices were out of scope for GSE alignment. Current descriptions have been retained.



# Aligned Disclosure File Changes

## Attribute Precision Logic



An update is being made to the precision logic that is applied to the following attributes and may result in a slight difference in the output values.

| Attribute                                   | Current Precision Logic                  | Future Precision Logic            |
|---|--|-----------------------------------|
| WA Mortgage Loan Amount                     | Round to the nearest whole dollar        | Round to the second decimal place |
| Average Mortgage Loan Amount                | Round to the nearest whole dollar        | Round to the second decimal place |
| WA Months to Amortization                   | Truncate to one-hundredth decimal place  | Round to nearest whole number     |
| WA Life Interest Rate Ceiling               | Truncate to one-thousandth decimal place | Round to the third decimal place  |
| WA Months to Next Rate Adjustment Date      | Truncate to one-hundredth decimal place  | Round to nearest whole number     |
| WA MBS / PC Margin                          | Truncate to one-thousandth decimal place | Round to the third decimal place  |
| WA Interest Rate                            | Truncate to one-thousandth decimal place | Round to the third decimal place  |
| WA Origination Mortgage Loan Amount         | Round to the nearest whole dollar        | Round to the second decimal place |
| Average Origination Mortgage Loan Amount    | Round to the nearest whole dollar        | Round to the second decimal place |
| WA Months to Next Step Rate Adjustment Date | Truncate to one-hundredth decimal place  | Round to nearest whole number     |

# Loan Level Disclosure File Changes

## Attribute Enumerations



The following attributes have been updated with new valid value enumerations at both the loan level as well as for stratifications on the security supplemental file.

| Property Type             |                                |
|---------------------------|--------------------------------|
| Legacy                    | Aligned                        |
| CO = Condo                | CO = Condominium               |
| LH = Leasehold            | SF = Single-Family             |
| PU = PUD                  | PU = Planned Urban Development |
| MH = Manufactured Housing | MH = Manufactured Housing      |
| SF = 1-4 Fee Simple       | CP = Cooperative               |
| CP = Co-op                | 99 = Not Available             |
| Space(2) = Unknown        |                                |

| Occupancy Status & Origination Occupancy Status |                         |
|---|-------------------------|
| Legacy  | Aligned                 |
| O = Owner Occupied                              | P = Primary Residence   |
| I = Investment Property                         | I = Investment Property |
| S = Second Home                                 | S = Second Home         |
| Space = Unknown                                 | 9 = Not Available       |

| Modification Program |                   |
|----------------------|-------------------|
| Legacy               | Aligned           |
| A = Alternative      | A = Alternative   |
| B = HAMP Backup      | B = HAMP Backup   |
| C = Classic          | C = Classic       |
| H = HAMP             | H = HAMP          |
| O = Other            | O = Other         |
| S = Standard         | S = Standard      |
| T = Streamlined      | T = Streamlined   |
| U = Underwater       | U = Underwater    |
|                      | R = Regular       |
|                      | 9 = Not Available |

| Number of Borrowers |                    |
|---------------------|--------------------|
| Legacy              | Aligned            |
| 01 = 1 borrower     | 1 = 1              |
| 02 = >1 borrowers   | 2 = 2              |
|                     | 3 = 3              |
|                     | 4 = 4              |
|                     | 5 = 5              |
|                     | 6 = 6              |
|                     | 7 = 7              |
|                     | 8 = 8              |
|                     | 9 = 9              |
|                     | 10 = 10            |
|                     | 99 = Not Available |

# Loan Level Disclosure File Changes

## Attribute Enumerations (cont.)



| Initial Fixed-Rate Period |                     |
|---------------------------|---------------------|
| Legacy                    | Aligned             |
| 00 = Not Applicable       | 00 = <= 6 months    |
| 02 = 18-30 months         | 01 = 7-18 months    |
| 03 = 30-42 months         | 02 = 19-30 months   |
| 04 = 42-54 months         | 03 = 31-42 months   |
| 05 = 54-66 months         | 04 = 43-54 months   |
| 06 = 66-78 months         | 05 = 55-66 months   |
| 07 = 78-90 months         | 06 = 67-78 months   |
| 08 = 90-102 months        | 07 = 79-90 months   |
| 09 = 102-114 months       | 08 = 91-102 months  |
| 10 = 114-126 months       | 09 = 103-114 months |
| 15 = 174-186 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    |

| Initial Step Fixed-Rate Period |                     |
|--------------------------------|---------------------|
| Legacy                         | Aligned             |
| 05 = 48-72 months              | 00 = <= 6 months    |
| Space(2) = Not Applicable      | 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    |

| Days Delinquent (NEW) |
|-----------------------|
| 0 = Current           |
| 1 = 30-59             |
| 2 = 60-89             |
| 3 = 90-119            |
| 4 = 120+              |

| Prepayment Penalty Total Term (NEW) |
|-------------------------------------|
| 06 = 6 Months                       |
| 12 = 1 Year                         |
| 24 = 2 Years                        |
| 36 = 3 Years                        |
| 99 = Not Available                  |

| Government Insured Guarantee (NEW) |
|------------------------------------|
| FH = FHA                           |
| VA = Veterans Affairs              |
| RH = Rural Housing                 |
| IH = Indian Housing                |
| 99 = Not Available                 |

| Interest Rate Rounding Method (NEW) |
|-------------------------------------|
| DN = Down                           |
| NE = Nearest                        |
| UP = Up                             |
| NO = No Rounding                    |

# Loan Level Disclosure File Changes

## Attribute Labels



| Legacy   | Aligned   |
|--|---|
| Product Type   | Amortization Type                                       |
| New Attribute  | Assumability Indicator *                                |
| Credit Score   | Borrower Credit Score                                   |
| Third Party Origination (TPO) Flag                               | Channel   |
| Combined Loan-To-Value (CLTV)                                    | Combined Loan-To-Value (CLTV)                           |
| Convertible  | Convertibility Indicator                                |
| Deferred UPB   | Current Deferred UPB                                    |
| Current Interest Rate  | Current Interest Rate                                   |
| Current Unpaid Principal Balance                                 | Current Investor Loan UPB                               |
| Current Net Note Rate  | Current Net Interest Rate                               |
| CUSIP Number   | CUSIP   |
| New Attribute (NA for FRE)                                       | Days Delinquent   |
| Debt-To-Income (DTI)   | Debt-To-Income (DTI)                                    |
| Estimated Loan-To-Value (LTV)                                    | Estimated Loan-To-Value (ELTV)                          |
| First Payment Date   | First Payment Date                                      |
| First Time Home Buyer Flag                                       | First Time Home Buyer Indicator                         |
| New Attribute  | Government Insured Guarantee                            |
| Index  | Index   |
| Initial Fixed Rate Period for Hybrid ARMS                        | Initial Fixed Rate Period                               |
| Initial Cap Down %   | Initial Interest Rate Cap Down Percent                  |
| Initial Cap Up %   | Initial Interest Rate Cap Up Percent                    |
| Initial Fixed Rate Period  | Initial Step Fixed-Rate Period                          |
| Interest Bearing Mortgage Loan Amount                            | Interest Bearing Mortgage Loan Amount                   |
| Initial Interest First Principal and Interest (P&I) Payment Date | Interest Only First Principal and Interest Payment Date |
| Initial Interest Flag  | Interest Only Loan Indicator *                          |

| Legacy                           | Aligned                                      |
|----------------------------------|--|
| Rate Adjustment Frequency        | Interest Rate Adjustment Frequency           |
| Lookback                         | Interest Rate Lookback                       |
| New Attribute                    | Interest Rate Rounding Method                |
| New Attribute                    | Interest Rate Rounding Method Percent        |
| Interest Rate Step Indicator     | Interest Rate Step Indicator *               |
| Note Rate As Of PC Issuance      | Issuance Interest Rate                       |
| Investor UPB                     | Issuance Investor Loan UPB                   |
| Net Note Rate                    | Issuance Net Interest Rate                   |
| Maximum Lifetime Rate            | Life Ceiling Interest Rate                   |
| Net Maximum Lifetime Rate        | Life Ceiling Net Interest Rate               |
| New Attribute                    | Life Floor Interest Rate                     |
| New Attribute                    | Life Floor Net Interest Rate                 |
| Loan Age                         | Loan Age                                     |
| Loan Age As Of Modification Date | Loan Age As Of Modification                  |
| Correction Flag                  | Loan Correction Indicator                    |
| Loan Sequence Number             | Loan Identifier                              |
| New Attribute (NA for FRE)       | Loan Performance History                     |
| Loan Purpose                     | Loan Purpose                                 |
| Loan Term                        | Loan Term                                    |
| Loan-To-Value (LTV)              | Loan-To-Value (LTV)                          |
| Maturity Date                    | Maturity Date                                |
| Net Mortgage Margin              | MBS PC Margin                                |
| Modification Program             | Modification Program                         |
| Modification Type                | Modification Type                            |
| Months to Amortize               | Months to Amortization                       |
| Months to Adjust                 | Months to Next Interest Rate Adjustment Date |

\* These attributes will be retroactively populated for all securities in the new aligned file formats (includes new enumerations to existing attributes).

# Loan Level Disclosure File Changes

## Attribute Labels (cont.)



| Legacy                                    | Aligned                                   |
|---|---|
| Months to Adjust                          | Months to Next Step Rate Adjustment Date  |
| New Attribute                             | Mortgage Insurance Cancellation Indicator |
| Mortgage Insurance Percentage (MI %)      | Mortgage Insurance Percent                |
| Mortgage Loan Amount                      | Mortgage Loan Amount                      |
| Gross Mortgage Margin                     | Mortgage Margin                           |
| Next Adjustment Date                      | Next Interest Rate Adjustment Date        |
| Next Step Rate                            | Next Step Rate                            |
| Next Adjustment Date                      | Next Step Rate Adjustment Date            |
| Number of Borrowers                       | Number of Borrowers                       |
| Number of Modifications                   | Number of Modifications                   |
| Number of Remaining Steps                 | Number of Remaining Steps                 |
| Number of Units                           | Number of Units                           |
| Occupancy Status                          | Occupancy Status *                        |
| Deferred Amount                           | Original Deferred Amount                  |
| Note Rate                                 | Original Interest Rate                    |
| Origination Product Type                  | Origination Amortization Type             |
| Origination Third Party Originator (TPO)  | Origination Channel                       |
| Origination Combined Loan-To-Value (CLTV) | Origination Combined Loan-To-Value (CLTV) |
| Origination Credit Score                  | Origination Credit Score                  |
| Origination Debt-To-Income Ratio (DTI)    | Origination Debt-To-Income Ratio          |
| Origination First Payment Date            | Origination First Payment Date            |
| Origination Initial Interest Flag         | Origination Interest Only Loan Indicator  |
| Origination Note Rate                     | Origination Interest Rate                 |
| Origination Loan Purpose                  | Origination Loan Purpose                  |
| Origination Loan Term                     | Origination Loan Term                     |

| Legacy                                 | Aligned                                 |
|--|---|
| Origination Loan-To-Value (LTV)        | Origination Loan-To-Value (LTV)         |
| Origination Maturity Date              | Origination Maturity Date               |
| Origination Loan Amount                | Origination Mortgage Loan Amount        |
| Origination Occupancy Status           | Origination Occupancy Status *          |
| Periodic Cap %                         | Periodic Interest Rate Cap Down Percent |
| Periodic Cap %                         | Periodic Interest Rate Cap Up Percent   |
| Periodic Cap Up %                      | Periodic Step Cap Up Percent            |
| New Attribute                          | Prefix *                                |
| Prepayment Penalty Mortgage (PPM) Flag | Prepayment Penalty Indicator            |
| New Attribute                          | Prepayment Penalty Total Term           |
| Property State                         | Property State                          |
| Property Type                          | Property Type *                         |
| Remaining Months to Maturity (RMM)     | Remaining Months to Maturity            |
| Pool Number                            | Security Identifier                     |
| Seller Name                            | Seller Name                             |
| Servicer Name                          | Servicer Name                           |
| Rate Adjustment Frequency              | Step Rate Adjustment Frequency          |
| Date of Terminal Step                  | Terminal Step Date                      |
| Terminal Step Rate                     | Terminal Step Rate                      |
| Total Capitalized Amount               | Total Capitalized Amount                |
| Total Number of Steps                  | Total Number of Steps                   |
| Updated Credit Score                   | Updated Credit Score                    |

\* These attributes will be retroactively populated for all securities in the new aligned file formats (includes new enumerations to existing attributes).

# Security Level Disclosure File Changes

## Attribute Enumerations



The following attributes have been updated with new valid value enumerations at the security core file level.

| Security Notification Indicator |                    |
|---------------------------------|--------------------|
| Legacy                          | Aligned            |
| P = Preliminary                 | P = Preliminary    |
| Null = Final                    | F = Final          |
| C = Corrected Info              | 7 = Not Applicable |

| Negative Amortization Indicator (NEW) |
|---------------------------------------|
| Y = Yes                               |
| N = No                                |
| 9 = Not Available                     |

| Convertibility Indicator (NEW) |
|--------------------------------|
| Y = Yes                        |
| N = No                         |
| 9 = Not Available              |

| Security Data Correction Indicator (NEW) |
|--|
| Y = Yes                                  |
| N = No                                   |

| Interest Only Indicator (NEW) |
|-------------------------------|
| Y = Yes                       |
| N = No                        |

| WA Negative Amortization Limit (NEW) |
|--------------------------------------|
| 777.777 = Not Applicable             |

| Payment Adjustment Frequency (NEW) |
|------------------------------------|
| 555 = Mixed value                  |

| Security Status Indicator (NEW) |
|---------------------------------|
| A = Active                      |
| P = Paid Off                    |
| C = Collapsed                   |
| D = Dissolved                   |

| Payment Delay Days (NEW) |
|--------------------------|
| 45 = 45 Days             |
| 55 = 55 Days             |
| 75 = 75 Days             |

| Interest Rate Lookback |
|------------------------|
| 555 = Mixed value      |

| Step Rate Adjustment Frequency |
|--------------------------------|
| 555 = Mixed value              |

| Interest Rate Adjustment Frequency |
|------------------------------------|
| 555 = Mixed value                  |

| Periodic Interest Rate Cap Up % |
|---------------------------------|
| 55.555 = Mixed value            |

| Issuer (NEW)      |
|-------------------|
| FNM = Fannie Mae  |
| FRE = Freddie Mac |

| Eligible for Resecuritization (NEW) |
|-------------------------------------|
| Y = Yes                             |
| N = No                              |

| Periodic Interest Rate Cap Down % |
|-----------------------------------|
| 55.555 = Mixed value              |

| Periodic Step Rate Cap Up % |
|-----------------------------|
| 55.555 = Mixed value        |

# Security Level Disclosure File Changes

## Attribute Enumerations (cont.)



| Initial Fixed-Rate Period |                     |
|---------------------------|---------------------|
| Legacy                    | Aligned             |
| 2 = 18-30 months          | 00 = <= 6 months    |
| 3 = 30-42 months          | 01 = 7-18 months    |
| 4 = 42-54 months          | 02 = 19-30 months   |
| 5 = 54-66 months          | 03 = 31-42 months   |
| 6 = 66-78 months          | 04 = 43-54 months   |
| 7 = 78-90 months          | 05 = 55-66 months   |
| 8 = 90-102 months         | 06 = 67-78 months   |
| 9 = 102-114 months        | 07 = 79-90 months   |
| 10 = 114-126 months       | 08 = 91-102 months  |
| 15 = 174-186 months       | 09 = 103-114 months |
| 666 = Mixed value         | 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 value    |

| Initial Step Fixed-Rate Period |                     |
|--------------------------------|---------------------|
| Legacy                         | Aligned             |
| 05 = 48-72 months              | 00 = <= 6 months    |
| Space(2) = Not applicable      | 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 value    |

| Initial Interest Rate Cap Up % |                      |
|--------------------------------|----------------------|
| Legacy                         | Aligned              |
| 66.666 = Mixed initial cap     | 55.555 = Mixed value |
| 77.777 = Null                  |                      |

| Initial Interest Rate Cap Down % |                      |
|----------------------------------|----------------------|
| Legacy                           | Aligned              |
| 66.666 = Mixed initial cap       | 55.555 = Mixed value |
| 77.777 = Null                    |                      |

# Security Level Disclosure File Changes

## Attribute Labels



| Legacy   | Aligned                                      |
|--|--|
| Average Loan Size                              | Average Mortgage Loan Amount                 |
| Average Origination Loan Size                  | Average Origination Mortgage Loan Amount     |
| Convertible                                    | Convertibility Indicator                     |
| Current UPB                                    | Current Investor Security UPB                |
| CUSIP Number                                   | CUSIP  |
| Delinquent Loans Purchased Number of Loans     | Delinquent Loans Purchased (Loan Count)      |
| Delinquent Loans Purchased Prior Amount of UPB | Delinquent Loans Purchased (Prior Month UPB) |
| New Attribute                                  | Eligible for Resecuritization *              |
| New Attribute                                  | First Payment Adjustment Date                |
| New Attribute                                  | First Rate Adjustment Date                   |
| Index  | Index *                                      |
| Initial Fixed Rate Period                      | Initial Fixed Rate Period *                  |
| Initial Cap Down Percent                       | Initial Interest Rate Cap Down %             |
| Initial Cap Up Percent                         | Initial Interest Rate Cap Up %               |
| Initial Fixed Rate Period                      | Initial Step Fixed-Rate Period               |
| New Attribute                                  | Interest Only Security Indicator             |
| Adjustment Period                              | Interest Rate Adjustment Frequency           |
| Lookback                                       | Interest Rate Lookback                       |
| Issuance UPB                                   | Issuance Investor Security UPB               |
| As Of Date                                     | Issue Date                                   |
| New Attribute                                  | Issuer                                       |
| Loan Detail Record Count                       | Loan Count                                   |

| Legacy                           | Aligned   |
|----------------------------------|---|
| Maturity Date                    | Maturity Date                                   |
| Negative Amortization Factor     | Negative Amortization Factor                    |
| New Attribute                    | Negative Amortization Indicator                 |
| Next Adjustment Date             | Next Step Rate Adjustment Date                  |
| Legend                           | Notes   |
| Legend 2                         | Notes Ongoing                                   |
| Origination TPO %                | Origination Third Party Origination UPB Percent |
| New Attribute                    | Payment Adjustment Frequency                    |
| New Attribute                    | Payment Delay Days *                            |
| New Attribute                    | Payment Lookback                                |
| Periodic Rate Cap                | Periodic Interest Rate Cap Down %               |
| Periodic Rate Cap                | Periodic Interest Rate Cap Up %                 |
| Periodic Cap Up %                | Periodic Step Rate Cap Up %                     |
| New Attribute                    | Prefix *  |
| Prepayment Penalty Mortgage Flag | Prepayment Penalty Indicator                    |
| Reduced Minimum Servicing Flag   | Reduced Minimum Servicing Indicator             |
| New Attribute                    | Security Data Correction Indicator              |
| New Attribute                    | Security Description                            |
| Pool Factor                      | Security Factor                                 |
| As of Date                       | Security Factor Date                            |
| Pool Number                      | Security Identifier                             |
| Pool Notification Flag           | Security Notification Indicator                 |

\* These attributes will be retroactively populated for all securities in the new aligned file formats (includes new enumerations to existing attributes).



# Security Level Disclosure File Changes

## Attribute Labels (cont.)



| Legacy                                   | Aligned                                  |
|--|--|
| New Attribute                            | Security Status Indicator                |
| Seller City                              | Seller City                              |
| Seller Name                              | Seller Name                              |
| Seller State                             | Seller State                             |
| New Attribute                            | Servicer City                            |
| Servicer Name                            | Servicer Name                            |
| New Attribute                            | Servicer State                           |
| Adjustment Period                        | Step Rate Adjustment Frequency           |
| New Attribute (NA for FRE)               | Subtype                                  |
| Percentage Third Party Origination (TPO) | Third Party Origination UPB Percent      |
| Updated Longest Maturity Date            | Updated Longest Maturity Date            |
| WA Origination Credit Score              | WA Origination Credit Score              |
| WA Credit Score                          | WA Borrower Credit Score                 |
| WA Combined Loan-To-Value                | WA Combined Loan-To-Value (CLTV)         |
| WA Coupon                                | WA Current Interest Rate                 |
| WA Remaining Maturity                    | WA Current Remaining Months to Maturity  |
| WA Debt-To-Income                        | WA Debt-To-Income (DTI)                  |
| WA Estimated Loan-To-Value (LTV)         | WA Estimated Loan-To-Value (ELTV)        |
| WA Coupon (Issuance)                     | WA Issuance Interest Rate                |
| WA Remaining Maturity                    | WA Issuance Remaining Months to Maturity |
| WA Mortgage Life Ceiling (Gross)         | WA Life Interest Rate Ceiling            |
| WA Mortgage Life Floor (Gross)           | WA Life Interest Rate Floor              |

| Legacy                                | Aligned                                      |
|---------------------------------------|--|
| WA Loan Age                           | WA Loan Age                                  |
| WA Loan Term                          | WA Loan Term                                 |
| WA Loan-To-Value                      | WA Loan-To-Value (LTV)                       |
| WA Months to Amortize                 | WA Months to Amortization                    |
| WA Months to Adjust                   | WA Months to Next Rate Adjustment Date       |
| WA Months to Adjust (Step Rate)       | WA Months to Next Step Rate Adjustment       |
| WA Loan Size                          | WA Mortgage Loan Amount                      |
| WA Mortgage Margin                    | WA Mortgage Margin                           |
| New Attribute                         | WA Negative Amortization Limit               |
| New Attribute (NA for FRE)            | WA Net Accrual Interest Rate                 |
| PC Coupon                             | WA Net Interest Rate                         |
| WA Mortgage Life Ceiling (Net)        | WA Net Life Interest Rate Ceiling            |
| WA Mortgage Life Floor (Net)          | WA Net Life Interest Rate Floor              |
| WA Origination Combined Loan-To-Value | WA Origination Combined Loan-To-Value (CLTV) |
| WA Origination Debt-To-Income         | WA Origination Debt-To-Income (DTI)          |
| WA Origination Coupon                 | WA Origination Interest Rate                 |
| WA Origination Loan Term              | WA Origination Loan Term                     |
| WA Origination Loan-To-Value          | WA Origination Loan-To-Value (LTV)           |
| WA Origination Loan Size              | WA Origination Mortgage Loan Amount          |
| WA Updated Credit Score               | WA Updated Credit Score                      |

**For questions related to Freddie Mac's implementation of the Single Security Aligned Disclosure file formats, please contact:**

**Freddie Mac Investor Inquiry  
1551 Park Run Dr., MS D50  
McLean, VA 22102**

**(800) 336-3672**

- Select option 5 for Investor Relations and then option 3 for Mortgage-backed securities.