

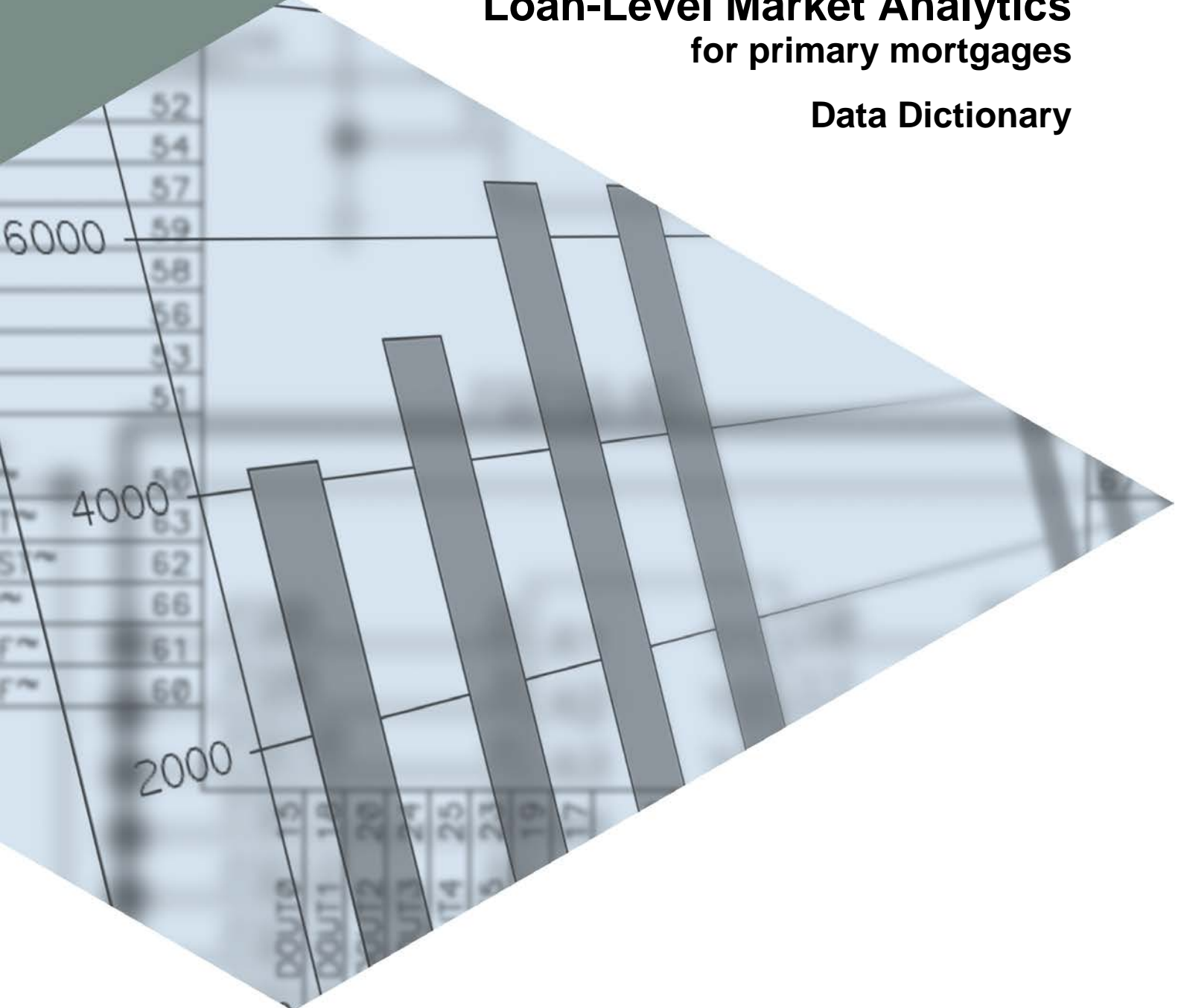


# **CoreLogic®**

## **Loan-Level Market Analytics**

for primary mortgages

### **Data Dictionary**



**CoreLogic®**  
**Loan-Level Market Analytics**  
**for primary mortgages**  
**Data Dictionary**

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40 Pacifica, Suite 900  
Irvine, CA 92618  
Phone 800.426.1466  
corelogic.com

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## Introduction

The CoreLogic® Loan-Level Market Analytics for primary mortgages dataset (LLMA) is comprised of a foundation of detailed loan data. In addition, optional integrated analytics modules are available for subscription that supplement and further enhances this foundation data. This data dictionary provides file layouts for the foundation data with column names, data type, field lengths, designation of the field as contributed or inferred, field descriptions and valid values (if applicable).

The following is a list of the foundation data file layouts included with LLMA. Descriptions for the data file layouts are included in the individual sections of this document:

- Loan Origination Data
- Loan Performance Data
- Events Data
- Inferred Modification Data
- Contributed Modification Data

The following is a list of the optional integrated analytics modules available for LLMA and provided as separate Data Dictionaries:

- Property Analytics  
Information about the property, including update property values, open lien information, CLTV and negative equity metrics, current property listing details, current occupancy indicators and property tax exemptions.
- Borrower Credit Insights  
Loan-level information, including credit scores, debt utilization, debt payment performance, credit inquiries and more. Historical data as well as updated information is available.
- Supplemental Loan Insights  
Information about piggyback loan data, loan terms from origination, lender refinance indicators, FHA refinance indicators, loan disposition data, subsequent property sale data, recorded loan medication data, REO timelines, and more.

## File Layout Conventions

### Data Types and Field Length/Decimal Designation

The available data types are as follows:

- C – identifies fields that contain alpha/numeric character values with a specified length.
- N – identifies fields that contain numeric values with no decimal precision and a specified length (e.g., a length of 3 can represent at most 999).
- D – identifies fields that contain numeric values with a specified length followed by the included decimal precision (e.g., 6,3 can represent at most 999.999).

### Data Source Designation

The designation for source of the data element (C/I column in file layouts) is represented as follows:

- C – data element is contributed.
- I – data element is inferred by CoreLogic.

### Field Names in Data Layout

The file layouts include two field names as follows:

- Name in Output File – this column in the file layouts provides the field name as it appears in the text data and is formatted to conform to accepted database standards. This is the field name as it will be referenced by your database administrator to run queries on the LLMA database.
- Field Name – this column in the file layouts provides an aliased field name (or short description) to reference outside of the database processing. In most instances, this aliased field name matches the name in the output file without the formatting required for database administration; but, this is not always the case. The alias name is also used in pseudo code included in the field descriptions.

## Origination Data

Origination Data contains information regarding the loan, the property and the borrower at the time of origination where each **Loan ID** is unique. Some Originations fields also include updated metrics.

#	Name in Output File	Type	Length/ Decimal	C/I	Field Name	Description
		Valid Values (where applicable)				
1	loan_id	N	11	I	Loan ID	Unique loan identifier assigned by CoreLogic when the loan is first reported. This loan identifier is the primary key linking the datasets together.
2	add_date	N	3	I	Add Date	Data period when the loan was first included in the data. Represented as a CoreLogic defined numeric value (e.g., 313 = Jan 2015). Refer to <a href="#">Appendix B - Data Periods</a> for valid values.
3	property_zip	C	5	C	Property Zip	Five-digit US Postal Code for the property related to the loan.
4	state	C	2	C	State	Two-position US Postal Code state of the property related to the loan.
5	property_type	C	1	C	Property Type	Type of property associated with the loan.  <div> 1 = SFR (Single Family Residence)  2 = Condominium  3 = Co-Operative  4 = Multi-Family (2-4 Units) </div> <div> 5 = Townhouse  6 = Planned Unit Development  7 = Multi-Family (5+ Units)  8 = Commercial Property </div> <div> 9 = Mixed Use Property  M = Manufactured Housing  U = No Info </div>
6	number_of_units	N	2	C	Number of Units	Number of units mortgaged by the loan. Valid values are 0-99, NULL otherwise.
7	occupancy_type	C	1	C	Occupancy Type	Stated occupancy status of the property at the time of origination.  <div> 1 = Owner Occupied  2 = Second Home </div> <div> 3 = Non-Owner Occupied  U = No Info </div>
8	origination_date	C	6	C	Origination Date	Formatted as YYYYMM. Origination date of the loan. This does not necessarily correspond to the recording date or the date the loan was first included in the contributed data (e.g., a loan with an origination date of Jan 2010 would have a value of 201001). Note: The day of origination is not included.

#	Name in Output File	Type	Length/ Decimal	C/I	Field Name	Description
		Valid Values (where applicable)				
9	maturity_date	C	6	C	Maturity Date	Formatted as YYYYMM. Date of the final payment based on the origination date and the term of the loan (e.g., a 15-year loan with a first payment date of Jan 2010 would have a maturity date of 202512).
10	first_payment_date	C	6	C	First Payment Date	Formatted as YYYYMM. Date when the first loan payment is due. Depending on the origination date, the first payment due date is normally either on the first day of: (1) the first subsequent month following the origination date or (2) the second subsequent month following the origination date (e.g., a loan with an origination of Jan 2010 would normally have a first payment date of 201002 or 201003). There are exceptions to these rules as the first pay date could be even later, but should always be after the origination date. Note: The day of the month is not included.
11	original_balance	D	10,2	C	Original Balance	Funded amount for this loan provided at the time of origination.
12	sale_price	D	10,2	C	Sale Price	Purchase price of the property.
13	appraised_value	D	10,2	C	Appraised Value	Reported fair market value of a property.

#	Name in Output File	Type	Length/ Decimal	C/I	Field Name	Description
		Valid Values (where applicable)				
14	product_type	C	2	C	Product Type	Product type for the loan.
		10 = Fixed Rate Loan 11 = IO 10/25 Fixed 20 = ARM 21 = IO 10/25 ARM 22 = IO 5/30 ARM 30 = GPM (Graduated Payment) 40 = GEM 50 = Balloon Unknown 51 = Balloon 5 52 = Balloon 7 53 = Balloon 10 54 = Balloon 15/30 55 = Balloon 15/40 5A = ARM Balloon 5Z = Balloon Other 60 = Two Step Unknown 61 = Two Step 5/25 62 = Two Step 7/23 63 = Two Step 10/20 64 = Two Step IO 5/25 6Z = Two Step Other 70 = GPARM 80 = Hybrid 2/1 81 = Hybrid 3/1 82 = Hybrid 5/1 83 = Hybrid 7/1 84 = Hybrid 10/1 8Z = Hybrid Other U = No Info				
15	original_term	N	3	C	Original Term	Term of the loan at origination. Number of months the borrower needs to pay back the loan.
16	initial_interest_rate	D	5,3	C	Initial Interest Rate	Initial interest rate at origination. If valid, the reported initial interest rate may only be updated within 6 months after the origination date.
17	back_end_ratio	D	6,3	C	Back End Ratio	Total of all debt payments including the new mortgage payment (principal, interest, insurance and taxes, (PITI)) divided by the gross monthly income of the borrower(s).
18	loan_type	C	1	C	Loan Type	Identifies whether the loan was originated under a government program.
		1 = Conventional Loan 2 = VA Loan 3 = FHA Loan 4 <sup>1</sup> = Other Government Loan 5 = Affordable Housing Loan 6 = Construction Loan P = Pledged Asset Loan U = No Info <sup>1</sup> Includes state or local housing programs.				
19	loan_purpose	C	1	C	Loan Purpose	Borrower's stated purpose for the loan.
		1 = Purchase 2 = Refinance Cash-Out 3 = Refinance No Cash Out 5 = Refinance Cash Out Unknown 6 = Construction Loan 7 = Debt Consolidation Loan 8 = Home Improvement 9 = Education Loan A = Medical Loan B = Vehicle Purchase Loan U = No Info				



#	Name in Output File	Type	Length/ Decimal	C/I	Field Name	Description
		Valid Values (where applicable)				
20	payment_frequency	C	1	C	Payment Frequency	The payment frequency for the loan.
		1 = Weekly Payments 2 = Bi-weekly Payments 3 = Semi-Monthly Payments 4 = Monthly Payments 5 = Quarterly Payments 6 = Semi-Annual Payments 7 = Annual Payments U = No Info				
21	channel	C	1	C	Channel	Lender's origination source of the loan.
		1 = Retail Branch 2 = Wholesale 3 = Mortgage Broker 4 = Realtor Originated 5 = Relocation Corporate 6 = Relocation Mortgage Broker 7 = Builder 8 = Direct Mail 9 = Other Direct A = Internet B = Other Retail C = Mortgage Banker D = Corresponded Lender U = No Info				
22	buydown_flag	C	1	C	Buydown Flag	Indicates situations where the borrower paid additional points at closing in order to obtain a reduction to the interest rate.
		Y = Yes N = No U = No Info				
23	documentation_type	C	1	C	Documentation Type	The documentation requirements used for underwriting the loan.
		1 = Full Documentation 2 = Low or Minimal Documentation 3 = No Asset/Income Verification U = No Info				

#	Name in Output File	Type	Length/ Decimal	C/I	Field Name	Description
		Valid Values (where applicable)				
24	pmi_company_code	C	3	C	PMI Company Code	The name of the company providing the lender's mortgage insurance (aka private mortgage insurance).
<div> <div> 1 = General Electric (GE) Insurance Co.  2 = Verex Assurance  3 = GE Residential Mortgage Insurance Corp. of North Carolina  4 = Insured Credit Services  5 = Investors Mortgage Insurance Co.  6 = Liberty Mutual Insurance Co.  7 = Mortgage Guaranty Insurance Co. (MGIC)  8 = Integon Mortgage Insurance Co.  9 = Foremost Guaranty Corporation  10 = TMIC Insurance Co. Inc. (aka Ticor)  11 = PMI Mortgage Insurance Co.  12 = United Guaranty Residential Insurance  13 = Republic Mortgage Insurance Co.  14 = Maryland Housing Fund  15 = Commercial Credit Mortgage Insurance Co.  16 = Home Guaranty Insurance Corporation  17 = Commonwealth Mortgage Assurance Co.  18 = Tennessee Housing Authority  19 = Pennsylvania Mortgage Insurance Co.  20 = Continental Mortgage Assurance Co.  21 = United States Mortgage Insurance Co.  22 = United Guaranty Commercial Insurance Co.  23 = U.S. Fire Insurance Co.  24 = Vermont Home Mortgage Guaranty  25 = Alaska Housing Finance Corporation  26 = Wisconsin Mortgage Insurance Co.  27 = Policyholders Benefit Corporation </div> <div> 28 = Cavalier  29 = TICOR Indemnity Co.  30 = NYC Rehabilitation Mortgage Ins. Corp.  31 = Connecticut Housing Finance Authority  32 = Union Bank  33 = Chase for Willow Lakes  34 = Council Ridge Corporation  35 = SONYMA  36 = Triad Guaranty Insurance  37 = General Electric of California  38 = General Electric of Florida  39 = Republic Mortgage Insurance of North Carolina  40 = WISC MTG  41 = United Guaranty  42 = Excel Mortgage  43 = United Guaranty Res. Insurance of IO  44 = Comm Mortgage  47 = United of North Carolina  48 = Amerin Guaranty Corp.  50 = DuPont  57 = Radian  58 = California Housing Insurance Fund  59 = CMG Mortgage Insurance Co.  60 = Freeform Vendor  61 = Genworth Mortgage Insurance Corporation  63 = Republican Mortgage Inc.  255 = PMI Company Unknown  U = No Info </div> </div>						

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#	Name in Output File	Type	Length/ Decimal	C/I	Field Name	Description
Valid Values (where applicable)						
32	periodic_rate_floor	D	6,3	C	Periodic Rate Floor	Limit on how much the interest rate can decrease during any one adjustment period regardless of the margin and index.
33	lifetime_rate_cap	D	6,3	C	Lifetime Rate Cap	Maximum interest rate allowed at any time for an adjustable rate loan.
34	lifetime_rate_floor	D	6,3	C	Lifetime Rate Floor	Minimum interest rate allowed at any time for an adjustable rate loan.
35	rate_reset_frequency	N	3	C	Rate Reset Frequency	Number of months between rate resets for adjustable rate loans.
36	pay_reset_frequency	N	3	C	Pay Reset Frequency	Number of months between payment resets for adjustable rate loans.
37	first_rate_reset_period	N	3	C	First Rate Reset	Number of months between the origination date and the date an ARM loan is scheduled to reset for the first time.
38	fico_score_at_origination	N	3	C	FICO Score at Origination	Borrower's FICO credit score at the time of origination used for underwriting.
39	lien	C	1	C	Lien Position	Expected lien position of the loan (in relation to other open liens on the property). For this dataset, these should all be first liens.
		1 = 1st Lien Position				
40	prepay_penalty_flag	C	1	C	Prepayment Penalty Flag	Identifies loans that require a prepayment penalty if the loan is prepaid within a specified period of time after origination.
		Y = Yes                      N = No                      U = No Info				
41	prepay_penalty_term	N	3	C	Prepayment Penalty Term	Number of months in the prepayment penalty period. <i>If Prepayment Penalty Flag = true and contributed Prepayment Penalty Term = NULL then Prepayment Penalty Term = NULL</i>

[illegible]

#	Name in Output File	Type	Length/ Decimal	C/I	Field Name	Description
		Valid Values (where applicable)				
50	orig_active_status	C	2	I	Origination Active Status	<p>Active status at Origination.</p> <p><i>Control field to determine if the loan data is located in a Historical or Recent file. This information will help users purge the Originations file from all Historical Inactive records for more accurate analysis on recent records (e.g., If the loan becomes Active after being moved to the Historical file, its Origination Active Status status will remain Historical Inactive and its Performance information will remain in the Historical file.)</i></p> <p>If no loan activity received on or after December 2013 then  Origination Active Status = Historical Inactive  Else if (Performance) <i>Active Status</i> is Active then  Origination Active Status = Recent Active  Else if (Performance) <i>Active Status</i> = Inactive then  Origination Active Status = Recent Inactive</p>
		RI = Recent Inactive                      RA = Recent Active                      HI = Historical Inactive				
51	period	N	3	I	Period	<p>Reporting period as of the date of the data.</p> <p>Represented as a CoreLogic defined numeric value (e.g., 313 = Jan 2015). Refer to the <a href="#">Appendix B - Data Periods</a> for valid values.</p>
52	product_type_category	C	1	C	Product Type Category	<p>Based on the aggregation of the primary Product Type field which contains the product type as of the loan origination date.</p> <p>If <i>Product Type</i> is Fixed Rate Loan, IO 10/25 Fixed, Balloon Unknown, Balloon 5, Balloon 7, Balloon 10, Balloon 15/30, Balloon 15/40, or Balloon Other then  Product Type Category = Fixed</p> <p>Else if <i>Product Type</i> is ARM, ARM Balloon, GPARM, IO 10/25 ARM, IO 5/30 ARM, GPM, GEM, Two Step Unknown, Two Step 5/25, Two Step 7/23, Two Step 10/20, Two Step IO 5/25, Two Step Other, Hybrid 2/1, Hybrid 3/1, Hybrid 5/1, Hybrid 7/1, Hybrid 10/1 or Hybrid Other then  Product Type Category = ARM</p> <p>Else  Product Type Category = Unknown</p>
		F = Fixed                                      A = ARM                                      U = No Info				

#	Name in Output File	Type	Length/ Decimal	C/I	Field Name	Description
		Valid Values (where applicable)				
53	loan_purpose_category	C	1	C	Loan Purpose Category	Summarized purpose of the loan based on aggregation of the primary <i>Loan Purpose</i> field.
		R = Refinance                      P = Purchase                      U = No Info				
54	mortgage_insurance_flag	C	1	C	Mortgage Insurance	Indicates the presence of mortgage insurance at origination. If <i>PMI Company Code</i> <sup>1</sup> = '0' then Mortgage Insurance Flag = Reported with no MI Else if 1 >= <i>PMI Company Code</i> >= 999 then Mortgage Insurance = Reported with MI Else Mortgage Insurance = No Info <sup>1</sup> <i>PMI Company Code</i> = 0 would only come from legacy LLMA records. No new LLMA records can have this value.
		Y = Yes                      N = No                      U = No Info				
55	gse_eligible_flag	C	1	I	GSE eligible at origination	Indicates whether the loan is conforming to the Government Sponsored Entity (GSE) standard eligible requirements criteria.
		0 = Non-Conforming 1 = Conforming (standard GSE policy)				2 = Jumbo Conforming (expanded GSE policy starting in 2008) U = No Info

## Performance Data

Performance Data contain updated information regarding monthly payment, payment status, current interest rate, investor code, current balance and more. This information is updated monthly, with separate files available for historical data.

#	Name in Output File	Type	Length Decimal	C/I	Field Name	Description
		Valid Values (where applicable)				
1	loan_id	N	11	I	Loan ID	Unique loan identifier assigned by CoreLogic when the loan is first reported.
2	last_paid_interest_date	C	8	C	Last Paid Interest Date	Formatted as YYYYMMDD. Date of last paid interest by borrower (e.g., if the last payment date was January 15, 2015 the value would be represented as 20150115).
3	current_balance	D	11,2	C	Current Balance	Current unpaid principal balance.
4	current_interest_rate	D	5,3	C	Current Interest Rate	Current interest rate of the loan.
5	total_payment_due	D	10, 2	C	Total Payment Due	Total amount due, may include principal, interest, taxes and insurance.
6	scheduled_principal	D	10, 2	C	Scheduled Principal	Principal portion of the Scheduled Principal P&I (Payment and Interest) field due for the given period.
7	scheduled_monthly_pi	D	10, 2	C	Scheduled Payment & Interest	Scheduled monthly mortgage principal and interest payment.
8	mba_delinquency_status	C	1	I	MBA Delinquency Status	Status of the borrower payments of the loan in accordance with MBA standards including indicators of Foreclosure, Bankruptcy and REO.
		<div> <div>0 = Paid Off 3 = 30 Days Delinquent 6 = 60 Days Delinquent 9 = 90+ Days Delinquent</div> <div>C = Current F = Foreclosure R = REO S = Servicing Sold Released</div> <div>T = Loan Status No Longer Provided/Available X = Unknown/Missing LPI Date Z = Incompatible</div> </div>				



#	Name in Output File	Type	Length Decimal	C/I	Field Name	Description
		Valid Values (where applicable)				
9	ots_delinquency_status	C	1	I	OTS Delinquency Status	Status of the borrower payments of the loan in accordance with OTS standards including indicators of Foreclosure, Bankruptcy, and REO.
		0 = Paid Off 3 = 30 Days Delinquent 6 = 60 Days Delinquent 9 = 90+ Days Delinquent C = Current F = Foreclosure R = REO S = Servicing Sold Released T = Loan Status No Longer Provided/Available X = Unknown/Missing LPI Date Z = Incompatible				
10	mba_days_delinquent	N	3	I	MBA Days Delinquent	Calculated number of days delinquent using MBA methodology.
11	ots_days_delinquent	N	3	I	OTS Days Delinquent	Calculated number of days delinquent using OTS methodology.
12	delinquency_history_string	C	12	I	Delinquency History String	Rolling 12 months MBA Delinquency Status. (e.g., CCC3CCC3CCCC with the left-most recent reporting period being the first character in the string.
13	active_status	C	1	I	Active Status	Indicates whether loans are active or inactive. If <i>MBA Delinquent Status</i> is not Paid Off, REO, Servicing Sold Released or Loan no longer available and <i>Current Balance</i> > 0 then Active Status = Active Else Active Status = Inactive
		A = Active I = Inactive				
14	period_of_payment	N	3	I	Period of Payment	The period number corresponding to the month and year of the reporting period. Represented as a CoreLogic defined numeric value (e.g., 313 = Jan 2015). Refer to <a href="#">Appendix B - Data Periods</a> for valid values.
15	current_investor_code	C	3	C	Current Investor Code	Current type of entity where the loan ownership resides.
		240 = Portfolio 250 = Ginnie Mae (GNMA) 253 = GSE U = No Info				

#	Name in Output File	Type	Length Decimal	C/I	Field Name	Description
Valid Values (where applicable)						
16	current_product_type	C	2	C	Current Product Type	Current product type associated with the loan as defined by the contributor.
		10 = Fixed Rate Loan 11 = IO 10/25 Fixed 20 = ARM 21 = IO 10/25 ARM 22 = IO 5/30 ARM 30 = GPM (Graduated Payment) 40 = GEM 50 = Balloon Unknown 51 = Balloon 5 52 = Balloon 7 53 = Balloon 10 54 = Balloon 15/30 55 = Balloon 15/40 5A = ARM Balloon 5Z = Balloon Other 60 = Two Step Unknown 61 = Two Step 5/25 62 = Two Step 7/23 63 = Two Step 10/20 64 = Two Step IO 5/25 6Z = Two Step Other 70 = GPARM 80 = Hybrid 2/1 81 = Hybrid 3/1 82 = Hybrid 5/1 83 = Hybrid 7/1 84 = Hybrid 10/1 8Z = Hybrid Other NULL = No Info				
17	loan_age	N	4	I	Loan Age	Age of loan in months. Valid values are between 0-900, NULL otherwise.
18	mba_worst_ever	N	3	I	MBA Worst Ever	Worst number of days delinquent up to 180 days using MBA method.
		0 = 0 Days 30 = 30 Days 60 = 60 Days 90 = 90 Days 120 = 120 Days 150 = 150 Days 180 = 180 Days U = No Info				
19	ots_worst_ever	N	3	I	OTS Worst Ever	Worst number of days delinquent up to 180 days using OTS method.
		0 = 0 Days 30 = 30 Days 60 = 60 Days 90 = 90 Days 120 = 120 Days 150 = 150 Days 180 = 180 Days U = No Info				
20	bk_flag	C	1	C	Bankruptcy Flag	Specify if the borrower is currently in bankruptcy.
		Y = Yes N = No				

## Events Data (New Dataset)

Events data contains information related to the most recent change/update of a loan currently reported in the Originations or Performance datasets. Events that can occur multiple times but only the most recent one is reported. The file should contain a record for every loan, regardless of the active status of that loan.

[illegible]<sup>1</sup> Contributed or Inferred

#	Name in Output File	Type	Length/ Decimal	C/I <sup>1</sup>	Field Name	Description
Valid Values (where applicable)						
4	epd_gse	C	1	I	EPD GSE	Indicates early payment default using Government Sponsored Entity (GSE) methodology. If <i>MBA Days Delinquency</i> presence >= 90 and <i>First Payment Date</i> < = 12 months then EPD GSE = 'Y' Else EPD GSE = 'N'
		Y = Yes                                  N = No				
5	foreclosure_start_date	C	6	I	Foreclosure Start Date	Formatted as YYYYMM. If loan has at least one foreclosure event then Foreclosure Start Date = first period in the latest series of foreclosures Else Foreclosure Start Date = NULL
6	foreclosure_end_date	C	6	I	Foreclosure End Date	Formatted as YYYYMM. If loan has at least one foreclosure event then Foreclosure End Date = last period in the latest series of foreclosures Else (no foreclosure event or the latest foreclosure event has not ended) Foreclosure End Date = NULL
7	bankruptcy_start_date	C	6	I	Bankruptcy Start Date	Formatted as YYYYMM. If borrower has at least 1 Bankruptcy event then Bankruptcy Start Date = first period in the latest series of bankruptcies Else Bankruptcy Start Date = NULL

#	Name in Output File	Type	Length/ Decimal	C/I <sup>1</sup>	Field Name	Description
		Valid Values (where applicable)				
8	bankruptcy_end_date	C	6	I	Bankruptcy End Date	Formatted as YYYYMM. If borrower has at least one bankruptcy event then Bankruptcy End Date = last period in the latest series of bankruptcies Else (no bankruptcy event or the latest bankruptcy event has not ended) Bankruptcy End Date = NULL
9	bankruptcy_chapter	C	2	I	Bankruptcy Chapter	Type of bankruptcy filing. Occurs only on loans with a valid <i>Bankruptcy Start Date</i> .
		7 = Chapter 7 11 = Chapter 11 12 = Chapter 12 13 = Chapter 13 U = No info				
10	payoff_period	N	3	I	Payoff Period	Period when loan was first paid off since last time <i>MBA Delinquency Status</i> was 30, 60 or 90 Days delinquent, Current, Foreclosed and <i>Current Balance</i> was greater than \$0. Represented as a CoreLogic defined numeric value (e.g., 313 = Jan 2015). Refer to <a href="#">Appendix B - Data Periods</a> for valid values.
11	payoff_date	C	6	I	Payoff Date	Formatted as YYYYMM. Date when the loan was paid off.
12	first_period_30_days_delinquent	N	3	I	First Time 30	The first period the loan experienced an <i>MBA Delinquency Status</i> of 30 days. Represented as a CoreLogic defined numeric value (e.g., 313 = Jan 2015). Refer to <a href="#">Appendix B - Data Periods</a> for valid values. If <i>MBA Delinquent Status</i> was always > 30 days then First Time 30 = NULL Else First Time 30 = Period when <i>MBA Delinquency Status</i> was first 30 days delinquent

#	Name in Output File	Type	Length/ Decimal	C/I <sup>1</sup>	Field Name	Description
		Valid Values (where applicable)				
13	first_period_60_days_delinquent	N	3	I	First Time 60	<p>The first period the loan experienced an <i>MBA Delinquency Status</i> of 60 days.</p> <p>Represented as a CoreLogic defined numeric value (e.g., 313 = Jan 2015). Refer to <a href="#">Appendix B - Data Periods</a> for valid values.</p> <p>If <i>MBA Delinquency Status</i> was always &gt; 60 days then First Time 60 = NULL</p> <p>Else First Time 60 = period when <i>MBA Delinquency Status</i> was first 60 days delinquent</p>
14	first_period_90_days_delinquent	N	3	I	First Time 90	<p>The first period the loan experienced an <i>MBA Delinquency Status</i> of 90 days.</p> <p>Represented as a CoreLogic defined numeric value (e.g., 313 = Jan 2015). Refer to <a href="#">Appendix B - Data Periods</a> for valid values.</p> <p>If <i>MBA Delinquent Status</i> was always &gt; 90 days then First Time 90 = NULL</p> <p>Else First Time 90 = Period when <i>MBA Delinquency Status</i> was first 90 days delinquent</p>

## Inferred Modification Data

Inferred Modification Data<sup>2</sup> contains information derived from changes observed in the Loan Origination Data and Loan Performance Data that cannot otherwise be attributed to expected changes to the loan terms (e.g., ARM changes).

#	Name in Output File	Type	Length	C/I <sup>3</sup>	Field Name	Description
Valid Values (where applicable)						
1	loan_id	N	11	I	Loan ID	Unique loan identifier assigned by CoreLogic when the loan is first reported.
2	mod_period	N	3	I	Modification Period	Period of modification. Represented as a CoreLogic defined numeric value (e.g., 313 = Jan 2015). Refer to <a href="#">Appendix B - Data Periods</a> for valid values.
3	mod_rate_type	C	1	I	Modified Interest Rate Type	Interest Rate Type as of the modification effective date.
		I = Inferred                      A = Provided by Data Source				
4	p_rate_to_mod	D	5,3	I	Pre-Mod Interest Rate	Interest rate of the loan prior to the modification effective date.
5	mod_rate	D	5,3	I	Modified Interest Rate	Interest Rate as of the modification effective date.
6	capitalization_type	C	1	I	Modified Capitalization Type	Capitalization Type as of the modification effective date.
		I = Inferred Capitalization                      NULL = No Known Capitalization				
7	capiatlization_amt	D	11,2	I	Modified Capitalization Amount	Capitalization Amount as of the modification effective date.

<sup>2</sup> All modification changes identified for a given period will be reported in the same record. Conversely, if the interest rate and monthly P&I payment were modified in two different periods, there will be two records associated with these related changes; one record for the first period that reported the interest rate change and one record for the second period that reported the P&I change.

<sup>3</sup> Contributed or Inferred





## Contributed Modification Data

Contributed Modifications Data contains information collected from our data contributors and containing robust information on loan modification events.

[illegible]

<sup>4</sup> Contributed or Inferred

#	Name in Output File	Type	Length/ Decimal	C/I <sup>4</sup>	Field Name	Description
		Valid Values (where applicable)				
9	mod_capitalization_amt	D	11,2	C	Capitalization Amount	Amount, if any, added to or reduced from the pre-mod UPB.
10	mod_deferred_flag	C	1	C	Deferred Flag	Deferred Flag as of the modification effective date.
		Y = Yes		N = No		U = No Info
11	mod_deferred_amt	D	11,2	C	Deferred Amount	Amount, if any, that is not considered in the amortization schedule. Typically this amount is due as a balloon payment on the maturity date.
12	mod_prin_forgiveness_flag	C	1	C	Principal Forgiveness Flag	Principal Forgiveness Flag as of the modification effective date.
		Y = Yes		N = No		U = No Info
13	mod_prin_forgiveness_amt	D	11,2	C	Principal Forgiveness Amount	Principal amount, if any that is permanently forgiven as part of the loan modification.
14	mod_rate_reduction	C	1	C	Rate Reduction	Indicates the delta between the rates pre- and post-modification.
		Y = Yes		N = No		U = No Info
15	mod_term_extension	C	1	C	Term Extension	Indicates the delta between the terms pre- and post-modification.
		Y = Yes		N = No		U = No Info
16	mod_step_flag	C	1	C	Modified Step Flag	Step Flag as of the modification effective date.
		Y = Yes		N = No		U = No Info

#	Name in Output File	Type	Length/ Decimal	C/I <sup>4</sup>	Field Name	Description
		Valid Values (where applicable)				
17	postmod_product_type	C	2	C	Modified Product Type	New product type as of the modification effective date. Use existing decodes from LLMA Base data product type.
		10 = Fixed Rate Loan 11 = IO 10/25 Fixed 20 = ARM 21 = IO 10/25 ARM 22 = IO 5/30 ARM 30 = GPM (Graduated Payment) 40 = GEM 50 = Balloon Unknown 51 = Balloon 5 52 = Balloon 7 53 = Balloon 10 54 = Balloon 15/30 55 = Balloon 15/40 5A = ARM Balloon 5Z = Balloon Other 60 = Two Step Unknown 61 = Two Step 5/25 62 = Two Step 7/23 63 = Two Step 10/20 64 = Two Step IO 5/25 6Z = Two Step Other 70 = GPARM 80 = Hybrid 2/1 81 = Hybrid 3/1 82 = Hybrid 5/1 83 = Hybrid 7/1 84 = Hybrid 10/1 8Z = Hybrid Other U = No Info				
18	postmod_maturity_date	C	8	C	Modified Maturity Date	Formatted as YYYYMMDD. New loan maturity date as of the modification effective date.
19	life_of_loan_term	N	3	C	Life of Loan Term	Life of loan term = <i>Modified Maturity Date - First Payment Date</i> . Provided as number of months.
20	postmod_term	N	3	C	Modified Term	New loan term = <i>Modified Maturity Date - Modified First Payment Date</i> . Provided as number of months.
21	postmod_interest_rate	D	5,2	C	Modified Interest Rate	New loan interest rate as of the modification effective date.
22	postmod_sch_pi	D	11,2	C	Modified Scheduled P&I Amount	New scheduled P&I amount as of the modification effective date.
23	premod_bal	D	11,2	C	Pre-Mod Balance	Unpaid Principal Balance (UPB) of the loan prior to the modification effective date.

#	Name in Output File	Type	Length/ Decimal	C/I <sup>4</sup>	Field Name	Description
		Valid Values (where applicable)				
24	premod_product_type	C	2	C	Pre-Mod Product Type	Product Type prior to the modification effective date.
		10 = Fixed Rate Loan 11 <sup>1</sup> = IO 10/25 Fixed 20 = ARM 21 <sup>2</sup> = IO 10/25 ARM 22 = IO 5/30 ARM 30 = GPM (Graduated Payment) 40 = GEM 50 = Balloon Unknown 51 = Balloon 5 52 = Balloon 7 53 = Balloon 10 54 = Balloon 15/30 55 = Balloon 15/40 5A = ARM Balloon 5Z = Balloon Other 60 = Two Step Unknown 61 = Two Step 5/25 62 = Two Step 7/23 63 = Two Step 10/20 64 = Two Step IO 5/25 6Z = Two Step Other 70 = GPARM 80 = Hybrid 2/1 81 = Hybrid 3/1 82 = Hybrid 5/1 83 = Hybrid 7/1 84 = Hybrid 10/1 8Z = Hybrid Other U = No Info				
25	premod_maturity_date	C	8	C	Pre-Mod Maturity Date	Formatted as YYYYMMDD. Maturity date of the loan prior to the modification effective date.
26	premod_term	N	3	C	Pre-Mod Loan Term	Loan term prior to the modification effective date.
27	premod_interest_rate	D	5,2	C	Pre-Mod Interest Rate	Interest rate of the loan prior to the modification effective date.
28	premod_sch_pi	C	11,2	C	Pre-Mod Scheduled P&I Amount	Scheduled P&I payment amount prior to the modification effective date.

## Appendix A - Codes

Note: These codes are included with the field description in each of the dataset layouts. This separate appendix is provided for your convenience.

Name in Output File	Valid Values
active_status	A = Active; I = Inactive
arm_index_id	10 = T-Bill Unknown; 11 = T-Bill 3 Months; 12 = T-Bill 6 Months; 13 = T-Bill 1 Year; 14 = T-Bill 3 Year; 15 = T-Bill 5 Year; 1Z = T-Bill Other; 20 = COFI Unknown Type; 21 = COFI 11 Day; 22 = COFI NM; 2Z = COFI Other; 30 = LIBOR Unknown Type; 31 = LIBOR 3 Month; 32 = LIBOR 6 Month; 33 = LIBOR 1 Year; 3Z = LIBOR Other; 40 = FHLBB National Mortgage Rate; 50 = Bank Prime Rate; 60 = Certificate of Deposit; 70 = FNMA/FHMLC; 80 = MTA (Monthly Treasury Average); 90 = CMT (Constant Maturity Treasury); U = No Info
bankruptcy_chapter	7 = Chapter 7; 11 = Chapter 11; 12 = Chapter 12; 13 = Chapter 13; U = No info
bk_flag	Y = Yes; N = No
buydown_flag	Y = Yes; N = No; U = No Info
channel	1 = Retail Branch; 2 = Wholesale; 3 = Mortgage Broker; 4 = Realtor Originated; 5 = Relocation Corporate; 6 = Relocation Mortgage Broker; 7 = Builder; 8 = Direct Mail; 9 = Other Direct; A = Internet; B = Other Retail; C = Mortgage Banker; D = Corresponded Lender; U = No Info
collateral_type	P = Prime; S = Subprime; U = No Info
convertible_flag	N = No; Y = Yes
current_investor_code	240 = Portfolio; 250 = Ginnie Mae (GNMA); 253 = GSE; U = No Info
documentation_type	1 = Full Documentation; 2 = Low or minimal doc; 3 = No asset/income verification; U = No Info
epd_fha	Y = Yes; N = No
epd_gse	Y = Yes; N = No
gse_eligible_flag	0 = Non-Conforming; 1 = Conforming (standard GSE policy); 2 = Jumbo Conforming (expanded GSE policy effective starting in 2008) ; U = No Info
Inferred_collateral_type	P = Prime; S = Subprime; U = No Info

Name in Output File	Valid Values
io_flag	Y = Yes; N = No; U = No Info
lien	1 = 1st Lien Position
loan_purpose	1 = Purchase; 2 = Refinance Cash-Out; 3 = Refinance No Cash Out; 5 = Refinance Cash Out Unknown; 6 = Construction Loan; 7 = Debt Consolidation Loan; 8 = Home Improvement; 9 = Education Loan; A = Medical Loan; B = Vehicle Purchase Loan; U = No Info
loan_purpose_category	R = Refinance; P = Purchase; U = No Info
loan_type	1 = Conventional Loan; 2 = VA Loan; 3 = FHA Loan ; 4 <sup>1</sup> = Other Government Loan; 5 = Affordable Housing Loan; 6 = Construction Loan; P = Pledged Asset Loan; U = No Info <sup>1</sup> Includes state or local housing programs
mba_delinquency_status	0 = Paid Off; 3 = 30 Days Delinquent; 6 = 60 Days Delinquent; 9 = 90+ Days Delinquent; C = Current; F = Foreclosure; R = REO; S = Servicing Sold Released; T = Loan Status No Longer Provided/Available; X = Unknown/Missing LPI date; Z = Incompatible
mba_worst_ever	0 = 0 Days; 30 = 30 Days; 60 = 60 Days; 90 = 90 Days; 120 = 120 Days; 150 = 150 Days; 180 = 180 Days; U = No Info
mod_capitalization_flag	Y = Yes; N = No; U = No Info
mod_deferred_flag	Y = Yes; N = No; U = No Info
mod_prin_forgiveness_flag	Y = Yes; N = No; U = No Info
mod_program	1 = HAMP Mod; 2 = Proprietary Mod; 3 = GSE Mod; 4 = Hope Now Mod; U =No Info
mod_rate_reduction	Y = Yes; N = No; U = No Info
mod_rate_type	I = Inferred ; A = Provided by Data Source
mod_step_flag	Y = Yes; N = No; U = No Info
mod_term_extension	Y = Yes; N = No; U = No Info
mortgage_insurance_flag	Y = Yes; N = No; U = No Info
negative_amortization_flag	Y = Yes; N = No; U = No Info

Name in Output File	Valid Values
occupancy_type	1 = Owner Occupied; 2 = Second Home; 3 = Non-Owner Occupied; U = No Info
orig_active_status	RI = Recent Inactive; RA = Recent Active; HI = Historical Inactive
ots_delinquency_status	0 = Paid Off; 3 = 30 Days Delinquent; 6 = 60 Days Delinquent; 9 = 90+ Days Delinquent; C = Current; F = Foreclosure; R = REO; S = Servicing Sold Released; T = Loan Status No Longer Provided/Available; X = Unknown/Missing LPI Date
ots_worst_ever	0 = 0 Day; 30 = 30 Days; 60 = 60 Days; 90 = 90 Days; 120 = 120 Days; 150 = 150 Days; 180 = 180 Days; U = No Info
paid_off_flag	Y = Yes; N = No; U = No Info
payment_frequency	1 = Weekly Payments; 2 = Bi-weekly Payments; 3 = Semi-Monthly Payments; 4 = Monthly Payments; 5 = Quarterly Payments; 6 = Semi-Annual Payments; 7 = Annual Payments ; U = No Info
pmi_company_code	1 = General Electric (GE) Insurance Co.; 2 = Verex Assurance; 3 = GE Residential Mortgage Insurance Corp. of North Carolina; 4 = Insured Credit Services; 5 = Investors Mortgage Insurance Co.; 6 = Liberty Mutual Insurance Co.; 7 = Mortgage Guaranty Insurance Co. (MGIC); 8 = Integon Mortgage Insurance Co.; 9 = Foremost Guaranty Corporation; 10 = TMIC Insurance Co. Inc. (aka Ticor); 11 = PMI Mortgage Insurance Co.; 12 = United Guaranty Residential Insurance; 13 = Republic Mortgage Insurance Co.; 14 = Maryland Housing Fund; 15 = Commercial Credit Mortgage Insurance Co.; 16 = Home Guaranty Insurance Corporation; 17 = Commonwealth Mortgage Assurance Co.; 18 = Tennessee Housing Authority; 19 = Pennsylvania Mortgage Insurance Co.; 20 = Continental Mortgage Assurance Co.; 21 = United States Mortgage Insurance Co.; 22 = United Guaranty Commercial Insurance Co.; 23 = U.S. Fire Insurance Co.; 24 = Vermont Home Mortgage Guaranty; 25 = Alaska Housing Finance Corporation; 26 = Wisconsin Mortgage Insurance Co.; 27 = Policyholders Benefit Corporation; 28 = Cavalier; 29 = TICOR Indemnity Co.; 30 = NYC Rehabilitation Mortgage Ins. Corp.; 31 = Connecticut Housing Finance Authority; 32 = Union Bank; 33 = Chase for Willow Lakes; 34 = Council Ridge Corporation; 35 = SONYMA; 36 = Triad Guaranty Insurance; 37 = General Electric of California; 38 = General Electric of Florida; 39 = Republic Mortgage Insurance of North Carolina; 40 = WISC MTG; 41 = United Guaranty; 42 = Excel Mortgage; 43 = United Guaranty Res. Insurance of IO; 44 = Comm Mortgage; 47 = United of North Carolina; 48 = Amerin Guaranty Corp.; 50 = DuPont; 57 = Radian; 58 = California Housing Insurance Fund; 59 = CMG Mortgage Insurance Co.; 60 = Freeform Vendor; 61 = Genworth Mortgage Insurance Corporation; 63 = Republican Mortgage Inc.; 255 = PMI Company Unknown; U = No Info
pool_insurance_flag	Y = Yes; N = No; U = No Info
prepay_penalty_flag	Y = With Prepayment Penalty at Origination; N = No Prepayment Penalty at Origination; U = No Info
property_type	1 = SFR (Single Family Residence); 2 = Condominium 3 = Co-Operative' 4 = Multi-Family (2-4 Units); 5 = Townhouse; 6 = Planned Unit Development; 7 = Multi-Family (5+ Units); 8 = Commercial Property; 9 = Mixed Use Property; M = Manufactured Housing; U = No Info

Name in Output File	Valid Values
product_type	10 = Fixed Rate Loan; 11 <sup>1</sup> = IO 10/25 Fixed; 20 = ARM; 21 <sup>2</sup> = IO 10/25 ARM; 22 = IO 5/30 ARM; 30 = GPM (Graduated Payment); 40 = GEM; 50 = Balloon Unknown; 51 = Balloon 5; 52 = Balloon 7; 53 = Balloon 10; 54 = Balloon 15/30; 55 = Balloon 15/40; 5A = ARM Balloon; 5Z = Balloon Other; 60 = Two Step Unknown; 61 = Two Step 5/25; 62 = Two Step 7/23; 63 = Two Step 10/20; 64 = Two Step IO 5/25; 6Z = Two Step Other; 70 = GPARM; 80 = Hybrid 2/1; 81 = Hybrid 3/1; 82 = Hybrid 5/1; 83 = Hybrid 7/1; 84 = Hybrid 10/1; 8Z = Hybrid Other; U = No Info
product_type_category	A = ARM at Origination; F = Fixed Rate Mortgage at Origination; U = No Info
sch_monthly_pay_type	I = Inferred; A = Provided by Data Source



## Appendix B - Data Periods

The following table provides the values for the CoreLogic Data Period used in servicing loan-level data.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
<b>1999</b>	121	122	123	124	125	126	127	128	129	130	131	132	<b>1999</b>
<b>2000</b>	133	134	135	136	137	138	139	140	141	142	143	144	<b>2000</b>
<b>2001</b>	145	146	147	148	149	150	151	152	153	154	155	156	<b>2001</b>
<b>2002</b>	157	158	159	160	161	162	163	164	165	166	167	168	<b>2002</b>
<b>2003</b>	169	170	171	172	173	174	175	176	177	178	179	180	<b>2003</b>
<b>2004</b>	181	182	183	184	185	186	187	188	189	190	191	192	<b>2004</b>
<b>2005</b>	193	194	195	196	197	198	199	200	201	202	203	204	<b>2005</b>
<b>2006</b>	205	206	207	208	209	210	211	212	213	214	215	216	<b>2006</b>
<b>2007</b>	217	218	219	220	221	222	223	224	225	226	227	228	<b>2007</b>
<b>2008</b>	229	230	231	232	233	234	235	236	237	238	239	240	<b>2008</b>
<b>2009</b>	241	242	243	244	245	246	247	248	249	250	251	252	<b>2009</b>
<b>2010</b>	253	254	255	256	257	258	259	260	261	262	263	264	<b>2010</b>
<b>2011</b>	265	266	267	268	269	270	271	272	273	274	275	276	<b>2011</b>
<b>2012</b>	277	278	279	280	281	282	283	284	285	286	287	288	<b>2012</b>
<b>2013</b>	289	290	291	292	293	294	295	296	297	298	299	300	<b>2013</b>
<b>2014</b>	301	302	303	304	305	306	307	308	309	310	311	312	<b>2014</b>
<b>2015</b>	313	314	315	316	317	318	319	320	321	322	323	324	<b>2015</b>
<b>2016</b>	325	326	327	328	329	330	331	332	333	334	335	336	<b>2016</b>
<b>2017</b>	337	338	339	340	341	342	343	344	345	346	347	348	<b>2017</b>
<b>2018</b>	349	350	351	352	353	354	355	356	357	358	359	360	<b>2018</b>
<b>2019</b>	361	362	363	364	365	366	367	368	369	370	371	372	<b>2019</b>
<b>2020</b>	373	374	375	376	377	378	379	380	381	382	383	384	<b>2020</b>
	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	