

MULTIFAMILY LOAN PERFORMANCE DATABASE OVERVIEW AND DATA DICTIONARY

This Multifamily Loan Performance Database (MLPD) provides historical information on a subset of the Freddie Mac multifamily loan portfolio. The MLPD comprises information regarding certain multifamily whole loans, K-deal loans, and SBL loans. It excludes loans that are credit revolvers, old book (pre-1994) loans, negotiated transactions/structured deals, and loans included in K001 and K002. The purpose of the MLPD is to provide transparency to Freddie Mac Multifamily loan performance for our core business in which we underwrite and invest. We validate the database against other reported information on our portfolio as a data check, but the database is for economic analysis and not accounting reporting, and so balances or other information in the database may not fully match what is reported in financial disclosures. Information on collateral underlying individual issuances of our K and SBL Certificates is available in the offering document for the relevant K or SBL deal.

The MLPD includes multifamily loans funded beginning in 1994, when Freddie Mac actively reentered the multifamily market using a revised underwriting process after minimal participation in the market for several years. The current database provides performance information through 2018Q2. The database is updated regularly, at least 90 days after the end of the previous quarter.

The complete MLPD is a panel database, meaning that it has multiple observations for each mortgage loan. It has loan-quarter observations, so a loan that existed in all of 2012 and 2013 would have eight observations across those two years. When a loan pays off or is sold out of Real Estate Owned (REO), the loan/property is no longer active, and no further information is added to the database for that loan.

A second dataset is MLPD's snapshot data, meaning that it has only one observation for each mortgage loan. The observation contains the loan's basic information such as loan terms etc. It also contains the loan's status and ending balance at its last quarter.

The data in each update of the MLPD is based on information as of the last reported date in the file, the end of 2018Q2 in this file. The information could become out of date and/or inaccurate. Freddie Mac does not undertake any obligation, and disclaims any duty, to update any of the information in the MLPD. Previously reported data is subject to change due to information updates and data corrections. In addition, Freddie Mac may reflect some data changes in the MLPD for the current period without adjusting prior periods.

The MLPD is provided for information purposes only and is not intended to provide any prediction regarding the future performance of loans or securities owned or guaranteed by Freddie Mac. Freddie Mac's future performance, including financial performance, is subject to various risks and uncertainties that could cause

actual results to differ materially from expectations. The factors that could affect the company's future results are discussed more fully in its reports filed with the SEC.

The following table is a summary of the data that is in the MLPD for the quarter ended June 30, 2018. The table will be updated with each release.

Funding Year	Number of Funded Loans	Average Origination UPB (\$ millions)	Total Origination UPB (\$ millions)	Average Origination LTV	Average Origination DCR	Average Origination Interest Rate	UPB as of 2018Q2 (\$ millions)	Total Defaulted UPB (at acquisition, \$ millions)	Credit Loss as of 2018Q2(\$ millions)
1994	122	3.6	439	0.68	1.48	9.0%		0.8	0.5
1995	230	4.7	1082	0.75	1.39	8.5%	0.3	6.1	-0.3
1996	377	3.6	1349	0.73	1.42	8.2%		0.0	0.0
1997	325	5.1	1651	0.73	1.52	7.9%		8.6	-2.9
1998	583	4.8	2799	0.71	1.68	6.9%	8.6	9.5	5.1
1999	679	7.3	4942	0.69	1.78	7.2%	9.6	32.2	7.5
2000	473	8.8	4164	0.70	1.52	8.0%	11.5	61.4	9.2
2001	716	8.8	6291	0.69	1.79	7.0%	7.5	15.1	8.8
2002	727	8.6	6254	0.69	1.84	6.4%	22.7	44.0	12.1
2003	706	9.0	6338	0.68	2.06	5.3%	164.3	8.5	4.6
2004	755	10.0	7575	0.72	1.81	5.0%	368.9	17.6	5.8
2005	810	10.9	8805	0.70	1.82	5.3%	430.3	8.6	-2.0
2006	941	12.2	11465	0.67	1.70	5.9%	602.8	183.3	50.1
2007	1,364	13.2	18034	0.68	1.57	5.8%	1057.5	93.8	37.9
2008	1,353	13.0	17548	0.68	1.61	5.7%	2110.8	242.1	52.8
2009	929	16.0	14836	0.69	1.74	5.3%	5469.9	7.9	1.3
2010	850	15.2	12891	0.69	1.65	5.0%	7505.0	14.2	5.2
2011	1,167	15.9	18555	0.69	1.70	4.7%	10821.5	12.6	1.8
2012	1,481	17.5	25947	0.68	1.95	4.0%	21039.0	0.0	0.0
2013	1,396	17.5	24403	0.67	1.97	4.0%	19511.9	18.8	9.9
2014	1,523	17.0	25936	0.69	2.12	3.9%	19080.0	0.0	0.0
2015	3,314	12.9	42856	0.70	2.06	3.7%	32846.4	0.0	0.0
2016	4,035	12.8	51551	0.70	2.00	3.8%	43464.5	0.0	0.0
2017	5,000	12.6	62992	0.69	1.85	4.1%	61648.1	0.0	0.0
2018	1,077	13.3	14308	0.69	1.82	4.3%	14163.0	0.0	0.0

The aggregate unpaid principal balance (UPB) of the portfolio of loans included in the MLPD differs from the UPB of the multifamily loan portfolio for Freddie Mac's Multifamily business segment, as reported in our periodic reports filed with the [SEC](#). The MLPD excludes certain types of loans that are not representative of our traditional book of business, like credit revolvers, old book loans and deals that may have significant credit enhancement.

The database displays certain information on losses for defaulted loans. This information is summarized in five fields: Pre-Foreclosure and Foreclosure Expense (Income), REO Operating Expense (Income), Selling Expense (Income), Sales Price, and Credit Loss. All five are cumulative amounts and are shown at the last available quarter for the defaulted loans. We note here that these are economic losses and are based on actual transaction amounts. As such, the amounts presented in the database won't necessarily match to accounting definition of credit losses. Credit losses in the Freddie Mac Multifamily portfolio continue to decline, as only a few loans defaulted in recent quarters. As such, the differences in accounting reported credit losses and economic losses reported in the MLPD have become less important. Furthermore, some immaterial differences between the economic and accounting losses are also due to the unavailability of loan level losses of some expenses (incomes). Nevertheless, we expect to make updates to reported amounts as we continue to accrue additional losses or gains over the time (especially for the loans that defaulted most recently). Summary tables depicting losses by various categories along with portfolio summary for these categories, as well as severity estimated based on liquidated properties are included in the Multifamily Loan Performance Dataset Loss Summary report, which can be found on the web at <http://www.freddiemac.com/multifamily/investors/securities.html>

The database itself is stored at <http://www.freddiemac.com/multifamily/investors/securities.html> .

Additional information for multifamily products can be found on the Freddie Mac website.
<http://www.freddiemac.com/multifamily/>

Data Dictionary and layout

The file is a bar-delimited text file. The formats are based SAS 9.2 definitions.

Location in the data	Variable	Field Name	Type	Format	Description	Values and description
1	Loan ID	lnno	Char	\$9.00	Loan Number	Each loan has a unique identification number
2	Quarter	quarter	Char	\$8.00	Calendar quarter.	Any valid date (i.e. y12q4 for the second quarter of 2012)
3	Loan Status	mrtg_status	Char	\$9.00	Code that identifies the mortgage status in a given quarter.	100 = Current or less than 60 day delinquent 200 = 60 or more days delinquent 250 = Modification with a loss 300 = Foreclosure 450 = Real estate owned 500 = Closed
4	Ending Balance	amt_upb_endg	Num	17.2	Unpaid principal balance at the end of the quarter.	Any non-negative value
5	Liquidation Date	liq_dte	Date	date9	Loan payoff date.	Any valid date or null (DDMMMYYYY)
6	Liquidation Balance	liq_upb_amt	Num	17.2	Unpaid principal balance amount at the date of payoff.	Any non-negative value
7	Date Sold	dt_sold	Date	date9	Actual sale date when the title passes from Freddie Mac.	Any valid date or null (DDMMMYYYY)
8	Fixed to Float code	cd_fxfltr	Char	\$6.00	Code for Fixed-to-Float loans	FLFXFL = Float to Fixed to Float loan FLTFLT = Float to Float loan FXDFLT = Fixed to Float loan Null = Not Fixed to Float
9	Amortization Term	cnt_amtn_per	Num	5	Mortgage Amortization period in months.	Any non-negative value
10	Balloon Term	cnt_blln_term	Num	4	Balloon term in months	Any non-negative value
11	Interest Only Period	cnt_io_per	Num	4	Interest Only period in months	Any non-negative value
12	Interest Only End	dt_io_end	Char	date9	Date the interest only period ends.	Any valid date or null (DDMMMYYYY)
13	Mortgage Term	cnt_mrtg_term	Num	5	Count of the mortgage term.	Any non-negative value
14	Residential Units	cnt_rsdntl_unit	Num	9	Residential unit count.	Any non-negative value
15	Yield Maintenance Period	cnt_yld_maint	Num	11	Yield Maintenance Count.	Any non-negative value
16	Rate Type	code_int	Char	\$3.00	The type of interest calculation that is used.	FIX: Fix rate mortgage VAR: Variable rate mortgage
17	Original DCR	rate_dcr	Num	12.7	Debt Service Coverage Ratio rate as of loan origination.	Any non-negative value
18	Note Rate	rate_int	Num	11.7	Current interest rate of the loan.	Any non-negative value
19	Original LTV	rate_ltv	Num	10.7	Loan-to-Value ratio as of Loan Origination.	Any non-negative value

20	Original Balance	amt_upb_pch	Num	17.2	Unpaid principal balance when the loan was purchased by Freddie Mac or the bond was settled at the time of purchase.	Any non-negative value
21	Fund Date	dt_fund	Date	date9	Date Freddie Mac purchased the loan.	Any valid date (DDMMYYYY)
22	Maturity Date	dt_mty	Date	date9	Maturity date.	Any valid date (DDMMYYYY)
23	Property State	code_st	Char	\$2.00	State identifier.	State codes
24	Property Metro	geographical_region	Char	\$45.00	Geographical region.	Geographic area name
25	Link ID indicator	id_link_grp	Num	9	Identification number for the linked loans related to the same property.	Any valid number for the loans that are linked to other loans, missing for those that aren't.
26	Lien Number	Lien_number	Character	\$60.	Only properties with 2 or more liens have non-null values.	'First Mortgage' 'Second Mortgage' etc
27	Senior housing indicator	Code_sr	Char	\$6.	Senior housing code	ASL = Assisted living CCR = Continuing Care ICC = Independent and/or Congregate SAP = Senior apartments
28	REO Operating Expense (Income)	REO_Operating_ExpInc	Num	17.2	Cumulative expenses (income) related to REO operations.	Non-defaulted loans – Missing. Defaulted loans – if information available, value is in last observation. Otherwise missing.
29	Pre-Foreclosure and Foreclosure Expense (Income)	PreFcl_Fcl_ExpInc	Num	17.2	Cumulative expenses (income) related to pre-foreclosure and foreclosure processes	Non-defaulted loans – Missing. Defaulted loans – if information available, value is in last observation. Otherwise missing.
30	Selling Expenses (Income)	Selling_ExpInc	Num	17.2	Cumulative expenses (income) related to the property selling process.	Non-defaulted loans – Missing. Defaulted loans – if information available, value is in last observation. Otherwise missing. The value is zero for the defaulted loans that haven't been disposed.
31	Sales Price	Sales_Price	Num	17.2	Sales price.	Non-defaulted loans – Missing. Defaulted loans – if information available, value is in last observation. Otherwise missing. The value is zero for the defaulted loans that haven't been disposed.
32	Deal Name	Dealname	Char	\$6.	Name of K/SBL deal	Deal name for loans in K-deal or SBL deal. "NONE" for all other loans.
33	Securitized	Securitized	Char	\$3.	Indicate if a k-deal loan has been securitized or not	For K-deal and SBL deal loans: "NO" for quarters before securitization "YES" for quarters after. All other loans: "N/A" for all quarters
34	Flag of Defeasance	Flag_Defeased	Num		Flag if a K/SBL loan's defeasance status	1 – a loan was in defeasance in the quarter. Otherwise, it's missing.
35	Credit Loss	Credit_loss	Num		Credit loss in dollar amount	Any valid number for loans with a credit loss, missing for others.