Single Family Loan-Level Dataset
Summary Statistics

February 2019

Background

- Freddie Mac is making the Single Family Loan-Level Dataset available at the direction of its regulator, the Federal Housing Finance Agency (FHFA) as part of a larger effort to increase transparency and help investors build more accurate credit performance models in support of the risk-sharing initiatives highlighted in FHFA's Conservatorship Scorecard.[1]

- The Single Family Loan-Level Dataset includes loan-level origination and loan performance and actual loss data on a portion of Single Family mortgages acquired by Freddie Mac. Approximately 25.3 million loans are in the "full" Single Family Loan-Level Dataset, and additional approximately 1 million loans in the Single Family HARP Loan-Level Dataset, meeting the following selection criteria[2]:

  » Fully amortizing, 30-year fixed-rate mortgages originated from January 1, 1999, through December 31, 2017 with monthly loan performance data through June 30, 2018 that were sold to Freddie Mac or included in Freddie Mac Participation Certificates (PCs).
  » Fully amortizing, fixed-rate mortgages originated from January 1, 2005, through December 31, 2017 with monthly loan performance data through June 30, 2018 that were sold to Freddie Mac or included in Freddie Mac Participation Certificates (PCs).
  » Mortgages categorized as having verified or waived documentation (i.e. "full documentation").

- Freddie Mac has created a smaller dataset for those who may not require, or have the capability, to download the full dataset.

  The sample dataset is a simple random sample[3] of 50,000 loans selected from each vintage year of the full Single Family Loan-Level Dataset, totaling 950,000 loans. This sample dataset doesn't include loans from the Single Family HARP Loan-Level Dataset.

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[1]The 2018 Conservatorship Scorecard can be found at
https://www.fhfa.gov/AboutUs/Reports/ReportDocuments/2018-Scorecard-12212017.pdf
[2] Refer to the Appendix A for a summary of the criteria excluding loans from the Single Family Loan-Level Dataset
[3] In simple random sampling, each loan in the full Single Family Loan-Level Dataset has an equal probability of being selected once for inclusion in the sample dataset. A simple random sample is meant to be an unbiased representation of the larger population.

					Full Volume Dataset – Origination Summary Statistics			
Year	Loan Count	Total Original UPB ($B)	Average Original UPB ($)	Credit Score[1]	Original Combined Loan-to-Value (CLTV) Ratio[1]	Original Loan-to-Value (LTV) Ratio[1]	Original Debt-to-Income (DTI) Ratio[1]	Weighted Average Coupon (WAC)[1]
1999	1,095,011	137.91	125,942	712	77.6	77.5	33.2	7.3
2000	786,275	103.65	131,824	712	78.8	78.2	35.2	8.1
2001	1,755,390	259.45	147,801	715	76.2	75.5	33.7	7.0
2002	1,682,997	261.72	155,506	718	74.8	73.8	34.0	6.5
2003	1,927,050	311.17	161,475	725	73.5	72.1	32.8	5.7
2004	1,127,674	188.07	166,776	718	75.3	73.6	35.6	5.8
2005	1,690,993	289.25	171,054	725	72.2	70.5	36.3	5.8
2006	1,260,783	226.57	179,703	724	74.3	71.7	37.6	6.4
2007	1,220,654	223.91	183,435	725	75.8	73.1	37.8	6.3
2008	1,179,578	240.21	203,644	742	72.5	70.7	37.2	6.0
2009	1,974,690	423.29	214,357	763	67.7	65.9	32.3	4.9
2010	1,271,397	265.3	208,668	764	68.6	67.1	32.2	4.6
2011	955,418	208.15	217,863	765	69.3	68.0	32.3	4.3
2012	1,331,301	295.94	222,291	767	69.9	68.6	31.4	3.6
2013	1,300,286	283.49	218,019	760	72.5	71.4	32.6	3.8
2014	975,881	213.99	219,279	752	76.8	76.0	34.4	4.3
2015	1,316,566	301.53	229,030	753	75.1	74.3	34.4	4.0
2016	1,558,394	375.93	241,231	752	74.3	73.6	34.6	3.8
2017	1,217,105	286.35	235,267	748	75.9	75.4	35.7	4.2
Total	25,627,443	4895.86	191,040	742	73.2	72.0	34.2	5.2

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[1] Weighted averages using Original UPB

Full Volume Dataset – Performance Summary Statistics[1]

Year	Loan Count	Prepay %[2]	Cumulative Default Event %[3]	Remaining %[4]	Cumulative Post-Default Event Repurchase %[5]	Ever D180 %[6]	D180 and Pre-D180 Credit Event %[7]	Cumulative Modification %[8]	Ever D120 %[9]	Ever D120 and Pre-D120 Credit Event % [10]	Pre-D120 Modification rate [11]	Cumulative Loss amount ($ B) [12]
1999	1,095,011	97.0%	1.3%	1.7%	0.1%	2.1%	2.3%	0.6%	2.9%	3.0%	0.1%	0.2
2000	786,275	97.6%	1.5%	0.9%	0.2%	2.1%	2.3%	0.6%	2.8%	2.9%	0.1%	0.2
2001	1,755,390	96.5%	1.6%	1.9%	0.2%	2.3%	2.6%	0.7%	3.1%	3.2%	0.1%	0.8
2002	1,682,997	94.4%	2.0%	3.5%	0.2%	2.9%	3.2%	1.0%	3.7%	3.8%	0.1%	1.1
2003	1,927,050	90.1%	2.4%	7.5%	0.1%	3.6%	3.9%	1.5%	4.5%	4.7%	0.2%	1.8
2004	1,127,674	87.1%	4.0%	8.9%	0.2%	5.8%	6.3%	2.6%	7.1%	7.3%	0.3%	2.3
2005	1,690,993	83.9%	6.0%	10.1%	0.2%	8.1%	8.7%	3.8%	9.7%	9.9%	0.5%	7.2
2006	1,260,783	83.0%	8.5%	8.5%	0.4%	10.9%	11.8%	5.2%	12.7%	13.1%	0.8%	8.9
2007	1,220,654	80.7%	9.6%	9.7%	0.8%	12.8%	13.8%	6.2%	14.9%	15.3%	0.9%	9.4
2008	1,179,578	86.1%	5.0%	8.9%	0.4%	7.5%	8.0%	3.8%	8.8%	9.0%	0.4%	4.5
2009	1,974,690	82.5%	0.7%	16.8%	0.0%	1.2%	1.3%	0.5%	1.5%	1.6%	0.0%	0.8
2010	1,271,397	72.3%	0.3%	27.3%	0.0%	0.7%	0.8%	0.4%	1.0%	1.0%	0.0%	0.2
2011	955,418	64.2%	0.2%	35.6%	0.0%	0.5%	0.5%	0.3%	0.7%	0.7%	0.0%	0.1
2012	1,331,301	39.4%	0.1%	60.5%	0.0%	0.3%	0.3%	0.2%	0.4%	0.4%	0.0%	0
2013	1,300,286	36.6%	0.1%	63.4%	0.0%	0.3%	0.3%	0.2%	0.5%	0.5%	0.0%	0
2014	975,881	41.0%	0.1%	58.9%	0.0%	0.4%	0.4%	0.3%	0.6%	0.6%	0.0%	0
2015	1,316,566	24.4%	0.0%	75.6%	0.0%	0.3%	0.3%	0.2%	0.5%	0.5%	0.0%	0
2016	1,558,394	11.3%	0.0%	88.7%	0.0%	0.2%	0.2%	0.2%	0.3%	0.3%	0.0%	0
2017	1,217,105	4.7%	0.0%	95.3%		0.1%	0.1%	0.1%	0.2%	0.2%	0.0%	0
Total	25,627,443	67.9%	2.3%	29.8%	0.1%	3.3%	3.5%	1.5%	4.0%	4.1%	0.2%	38

[1] Reflects monthly performance data through June 30, 2018

[2] Count of loans that prepaid in full or were repurchased prior to default (Zero Balance Code = 01 or 06) divided by Loan Count; partial prepayments (curtailments) are excluded from the calculation

[3] Count of loans that were terminated in the dataset due to a non-prepayment default event (Zero Balance Code = 02, 03, 09, or 15) divided by Loan Count

[4] Count of active loans, divided by Loan Count

[5] Count of loans that were terminated in the dataset due to a non-prepayment default event and subsequently repurchased (Zero Balance Code = 02, 03, 09, or 15 AND repurchase flag = 'Y'), divided by Loan Count

[6] Count of loans that reached a delinquency status of D180, including at REO Acquisition, divided by Loan Count

[7] Count of loans that reached a delinquency status of D180, including at REO Acquisition, and loans that were terminated in the dataset due to a non-prepayment credit event (Zero Balance Code = 02, 03, 09, or 15) divided by Loan Count.

[8] Count of loans that were modified divided by Loan Count. Repeat mods on a loan are not part of the calculation.

[9] Count of loans that reached a delinquency status of D120, including at REO Acquisition, divided by loan count.

[10] Count of loans that reached a delinquency status of D120, including at REO acquisition, and loans that were terminated in the dataset due to a non-prepayment credit event (Zero Balance Code = 02, 03, 09, or 15) divided by Loan Count.

[11] Count of loans that were modified at or before a delinquency status of D120 divided by Loan count. Repeat modifications s on a loan are not part of the calculation.

[12] Sum of actual loss column for loans with a non-prepayment credit event (zero balance code = 02, 03, 09, or 15).

Year	Total Original UPB ($B)	% of Original UPB Prepaid[2]	UPB-Weighted Cumulative Default Event %[3]	% of Original UPB Remaining[4]	UPB-Weighted Cumulative Post-Default Event Repurchase %[5]	% of Original UPB Ever D180[6]	% of Original UPB D180 and Pre D180 Credit Event[7]	UPB-Weighted Cumulative Modification %[8]	UPB weighted Ever D120%[9]	UPB Weighted Ever D120 and Pre-D120 Credit Event%[10]	UPB Weighted Pre-D120 Modification rate[11]
1999	137.91	91.4%	1.0%	0.7%	0.1%	2.2%	2.2%	0.1%	1.6%	1.7%	0.5%
2000	103.65	95.7%	1.0%	0.4%	0.2%	2.1%	2.2%	0.1%	1.5%	1.7%	0.5%
2001	259.45	93.6%	1.1%	0.8%	0.2%	2.1%	2.2%	0.1%	1.6%	1.8%	0.5%
2002	261.72	90.8%	1.3%	1.6%	0.1%	2.5%	2.6%	0.1%	1.9%	2.1%	0.7%
2003	311.17	81.7%	1.8%	4.0%	0.1%	3.5%	3.6%	0.1%	2.8%	3.0%	1.3%
2004	188.07	79.9%	3.3%	5.1%	0.1%	5.9%	6.1%	0.3%	4.9%	5.3%	2.4%
2005	289.25	73.3%	5.8%	5.6%	0.2%	9.1%	9.4%	0.5%	7.8%	8.4%	3.8%
2006	226.57	76.2%	8.6%	5.4%	0.5%	12.7%	13.1%	0.9%	11.0%	11.9%	5.5%
2007	223.91	75.5%	9.7%	6.4%	0.8%	15.1%	15.5%	1.0%	13.2%	14.2%	6.7%
2008	240.21	82.0%	4.8%	5.3%	0.4%	8.6%	8.8%	0.5%	7.4%	7.9%	4.0%
2009	423.29	77.3%	0.6%	9.6%	0.0%	1.3%	1.3%	0.0%	1.0%	1.1%	0.5%
2010	265.3	68.8%	0.2%	16.1%	0.0%	0.8%	0.8%	0.0%	0.6%	0.6%	0.3%
2011	208.15	62.3%	0.1%	22.0%	0.0%	0.5%	0.5%	0.0%	0.4%	0.4%	0.2%
2012	295.94	35.4%	0.1%	45.7%	0.0%	0.3%	0.3%	0.0%	0.2%	0.2%	0.1%
2013	283.49	34.1%	0.1%	50.2%	0.0%	0.4%	0.4%	0.0%	0.3%	0.3%	0.2%
2014	213.99	43.1%	0.1%	47.6%	0.0%	0.6%	0.6%	0.0%	0.3%	0.3%	0.3%
2015	301.53	25.1%	0.0%	66.7%	0.0%	0.4%	0.4%	0.0%	0.2%	0.2%	0.2%
2016	375.93	11.0%	0.0%	83.4%	0.0%	0.3%	0.3%	0.0%	0.2%	0.2%	0.2%
2017	286.35	4.9%	0.0%	92.3%	.	0.2%	0.2%	0.0%	0.1%	0.1%	0.1%
Total	4895.86	59.7%	1.9%	28.0%	0.1%	3.3%	3.4%	0.2%	2.8%	3.0%	1.4%

[1] Reflects monthly performance data through June 30, 2018.

[2] Calculated by dividing the ending UPB of all prepaid loans (Zero Balance Code = 01or 06) by the Total Original UPB. The UPB is determined using the priority in Footnote 12.

[3] Calculated by dividing the sum of the default event UPB by the Total Original UPB. The calculation does not include Prepayments or pre-default Repurchases (Zero Balance Code = 01 or 06). The UPB is determined using the priority in Footnote 12.

[4] Calculated by dividing the ending UPB of all active loans (for which the Zero Balance Code is null in the terminal record) by the Total Original UPB. The UPB is determined using the priority in Footnote 12.

[5] Calculated by dividing the sum of the post-default event repurchase UPB by the Total Original UPB, for loans that were terminated due to a non-prepayment default event (see Footnote 3) and subsequently repurchased (Zero Balance Code = 02, 03, 09, or 15 AND repurchase flag = 'Y'). See Footnote 12 for determining the post-default event repurchase UPB

[6] Calculated by dividing the ending UPB of all loans that reached a delinquency status of D180, including at REO Acquisition, by the Total Original UPB. The UPB is determined using the priority in Footnote 12.

[7] Calculated by dividing the ending UPB of all loans that reached a delinquency status as of D180, including at REO Acquisition, and loans that were terminated in the dataset due to a non-prepayment credit event (Zero Balance Code = 02, 03, 09, or 15) by the Total Original UPB. The UPB is determined using the priority in Footnote 12.

[8] Calculated by dividing the sum of the modification UPB by the Total Original UPB. The modification UPB is the current actual UPB as of the month of modification (modification flag = 'Y'). Repeat mods on a loan are not part of the calculation.

[9] Calculated by dividing the ending UPB of all loans that reached a delinquency status of D120, including at REO Acquisition, by the Total Original UPB. The UPB is determined using the priority in Footnote 12.

[10] Calculated by dividing the ending UPB of all loans that reached a delinquency status as of D120, including at REO Acquisition, and loans that were terminated in the dataset due to a non-prepayment credit event (Zero Balance Code = 02, 03, 09, or 15) by the Total Original UPB. The UPB is determined using the priority in Footnote 12.

[11] Calculated by dividing the ending UPB of all loans that were modified at or before D120 by the Total Original UPB. Repeat mods on a loan are not part of the calculation.

[12] If the ending UPB on the terminal record is null, determine the UPB by using the following priority: 1. Use the Current Actual UPB from the previous period; 2. if the Current Actual UPB in the previous period is null, use the Original UPB.

					Sample Dataset – Origination Summary Statistics			
Year	Loan Count	Total Original UPB ($B)	Average Original UPB ($)	Credit Score[1]	Original Combined Loan-to-Value (CLTV) Ratio[1]	Original Loan-to-Value (LTV) Ratio[1]	Original Debt-to-Income (DTI) Ratio[1]	Weighted Average Coupon (WAC)[1]
1999	50000	6.3	125,690	711	78.0	77.9	33.6	7.4
2000	50000	6.5	130,919	712	79.0	78.4	35.2	8.1
2001	50000	7.4	148,132	715	76.5	75.7	33.8	7.0
2002	50000	7.7	154,680	717	75.0	74.0	34.1	6.6
2003	50000	8.0	160,694	723	73.8	72.4	33.1	5.8
2004	50000	8.3	166,462	718	75.4	73.6	35.8	5.8
2005	50000	8.5	170,593	725	72.1	70.3	36.4	5.8
2006	50000	9.0	179,593	724	74.3	71.8	37.6	6.4
2007	50000	9.2	183,550	725	75.7	73.0	37.8	6.3
2008	50000	10.2	203,881	743	72.4	70.8	37.1	6.0
2009	50000	10.7	213,825	763	67.9	66.2	32.6	4.9
2010	50000	10.4	208,389	763	68.7	67.2	32.4	4.6
2011	50000	10.9	217,079	764	69.5	68.1	32.4	4.4
2012	50000	11.1	222,672	767	69.9	68.5	31.4	3.6
2013	50000	10.9	217,600	759	73.1	72.0	32.9	3.9
2014	50000	11.0	219,882	752	76.8	76.1	34.3	4.3
2015	50000	11.5	229,368	752	75.1	74.4	34.4	4.0
2016	50000	12.0	239,713	751	74.3	73.7	34.7	3.8
2017	50000	11.8	235,159	748	75.9	75.4	35.6	4.2
Total	950,000	181.4	190,941	742	73.6	72.3	34.4	5.2

[1] Weighted averages using Original UPB

											Cumulative
Year	Loan Count	Prepay %[2]	Cumulative Default Event %[3]	Remaining %[4]	Cumulative Post-Default Event Repurchase %[5]	Ever D180 %[6]	D180 and Pre-D180 Credit Event %[7]	Cumulative Modification %[8]	Ever D120% [9]	Ever D120 and Pre-D120 Credit Event% [10]	Pre-D120 Modification rate [11]	Loss amount ($ B) [12]

Year	Loan Count	Prepay %[2]	Cumulative Default Event %[3]	Remaining %[4]	Cumulative Post-Default Event Repurchase %[5]	Ever D180 %[6]	D180 and Pre-D180 Credit Event %[7]	Cumulative Modification %[8]	Ever D120% [9]	Ever D120 and Pre-D120 Credit Event% [10]	Pre-D120 Modification rate [11]	Cumulative Loss amount ($ B) [12]
1999	50000	97.1%	1.4%	1.5%	0.2%	2.2%	2.5%	0.6%	3.2%	3.2%	0.1%	0
2000	50000	97.5%	1.6%	0.9%	0.2%	2.1%	2.4%	0.5%	2.9%	3.0%	0.1%	0
2001	50000	96.4%	1.7%	1.9%	0.2%	2.3%	2.6%	0.7%	3.1%	3.1%	0.1%	0
2002	50000	94.6%	2.0%	3.4%	0.2%	2.9%	3.2%	1.0%	3.7%	3.8%	0.1%	0
2003	50000	90.0%	2.5%	7.5%	0.1%	3.8%	4.1%	1.5%	4.8%	4.9%	0.2%	0.1
2004	50000	87.1%	3.9%	9.0%	0.2%	5.7%	6.2%	2.6%	7.1%	7.3%	0.3%	0.1
2005	50000	84.2%	5.7%	10.1%	0.2%	7.7%	8.4%	3.7%	9.4%	9.6%	0.6%	0.2
2006	50000	82.8%	8.7%	8.5%	0.4%	11.2%	12.1%	5.2%	12.9%	13.3%	0.8%	0.4
2007	50000	80.6%	9.8%	9.6%	0.8%	12.9%	13.9%	6.3%	15.0%	15.4%	1.0%	0.4
2008	50000	86.9%	4.5%	8.6%	0.3%	6.9%	7.4%	3.7%	8.2%	8.4%	0.4%	0.2
2009	50000	81.7%	0.7%	17.6%	0.0%	1.1%	1.2%	0.5%	1.5%	1.5%	0.0%	0
2010	50000	73.2%	0.3%	26.4%	0.0%	0.7%	0.8%	0.4%	1.0%	1.0%	0.0%	0
2011	50000	65.5%	0.2%	34.3%	0.0%	0.5%	0.5%	0.3%	0.7%	0.7%	0.0%	0
2012	50000	40.7%	0.1%	59.3%	0.0%	0.2%	0.2%	0.2%	0.3%	0.3%	0.0%	0
2013	50000	38.7%	0.1%	61.2%	0.0%	0.3%	0.3%	0.2%	0.5%	0.5%	0.0%	0
2014	50000	42.3%	0.1%	57.7%	0.0%	0.4%	0.4%	0.4%	0.7%	0.7%	0.0%	0
2015	50000	24.5%	0.0%	75.5%	0.0%	0.3%	0.3%	0.3%	0.5%	0.5%	0.0%	0
2016	50000	12.1%	0.0%	87.9%	0.0%	0.2%	0.2%	0.2%	0.4%	0.4%	0.0%	0
2017	50000	4.8%	0.0%	95.2%	0.0%	0.1%	0.1%	0.1%	0.2%	0.2%	0.0%	0
Total	**950,000**	**67.4%**	**2.3%**	**30.3%**	**0.1%**	**3.2%**	**3.5%**	**1.5%**	**4.0%**	**4.1%**	**0.2%**	**1.4**

[1] Reflects monthly performance data through June 30, 2018

[2] Count of loans that prepaid in full or were repurchased prior to default (Zero Balance Code = 01 or 06) divided by Loan Count; partial prepayments (curtailments) are excluded from the calculation

[3] Count of loans that were terminated in the dataset due to a non-prepayment default event (Zero Balance Code = 02, 03, 09, or 15) divided by Loan Count

[4] Count of active loans, divided by Loan Count

[5] Count of loans that were terminated in the dataset due to a non-prepayment default event and subsequently repurchased (Zero Balance Code = 02, 03, 09, or 15 AND repurchase flag = 'Y'), divided by Loan Count

[6] Count of loans that reached a delinquency status of D180, including at REO Acquisition, divided by Loan Count

[7] Count of loans that reached a delinquency status of D180, including at REO Acquisition, and loans that were terminated in the dataset due to a non-prepayment credit event (Zero Balance Code = 02, 03, 09, or 15) divided by Loan Count

[8] Count of loans that were modified divided by Loan Count. Repeat modifications on a loan are not part of the calculation.

[9] Count of loans that reached a delinquency status of D120, including at REO Acquisition, divided by loan count.

[10] Count of loans that reached a delinquency status of D120, including at REO acquisition, and loans that were terminated in the dataset due to a non-prepayment credit event (Zero Balance Code = 02, 03, 09, or 15) divided by Loan Count.

[11] Count of loans that were modified at or before a delinquency status of D120 divided by Loan count. Repeat modifications on a loan are not part of the calculation.

[12] Sum of actual loss column for loans with a non-prepayment credit event (zero balance code = 02, 03, 09, or 15).

Year	Total Original UPB ($B)	% of Original UPB Prepaid[2]	UPB-Weighted Cumulative Default Event %[3]	% of Original UPB Remaining[4]	UPB-Weighted Cumulative Post-Default Event Repurchase %[5]	% of Original UPB Ever D180[6]	% of Original UPB D180 and Pre D180 Credit Event[7]	UPB-Weighted Cumulative Modification %[8]	UPB weighted Ever D120%[9]	UPB Weighted Ever D120 and Pre-D120 Credit Event%[10]	UPB Weighted Pre-D120 Modification rate[11]
1999	6.3	92.1%	1.0%	0.6%	0.1%	2.4%	2.5%	0.1%	1.7%	1.9%	0.5%
2000	6.5	95.5%	1.1%	0.4%	0.2%	2.2%	2.3%	0.1%	1.6%	1.8%	0.4%
2001	7.4	93.6%	1.1%	0.8%	0.2%	2.2%	2.2%	0.1%	1.6%	1.8%	0.5%
2002	7.7	91.2%	1.3%	1.6%	0.1%	2.6%	2.6%	0.1%	2.0%	2.2%	0.7%
2003	8.0	82.1%	1.9%	4.0%	0.0%	3.8%	3.9%	0.1%	3.0%	3.2%	1.3%
2004	8.3	79.9%	3.2%	5.2%	0.2%	6.1%	6.2%	0.3%	5.0%	5.3%	2.4%
2005	8.5	73.4%	5.6%	5.8%	0.2%	9.1%	9.3%	0.6%	7.6%	8.2%	3.9%
2006	9.0	76.1%	8.7%	5.5%	0.4%	13.0%	13.4%	0.9%	11.3%	12.2%	5.6%
2007	9.2	75.6%	9.9%	6.4%	0.8%	15.4%	15.8%	1.1%	13.3%	14.4%	6.8%
2008	10.2	83.2%	4.3%	5.0%	0.3%	7.9%	8.1%	0.4%	6.7%	7.2%	3.8%
2009	10.7	76.7%	0.6%	10.1%	0.0%	1.2%	1.3%	0.0%	0.9%	1.0%	0.4%
2010	10.4	69.6%	0.2%	15.6%	0.0%	0.8%	0.8%	0.0%	0.6%	0.6%	0.3%
2011	10.9	63.5%	0.1%	21.3%	0.0%	0.5%	0.5%	0.0%	0.4%	0.4%	0.2%
2012	11.1	37.0%	0.0%	44.1%	0.0%	0.2%	0.2%	0.0%	0.2%	0.2%	0.1%
2013	10.9	36.7%	0.1%	48.4%	0.0%	0.5%	0.5%	0.0%	0.3%	0.3%	0.2%
2014	11.0	44.5%	0.0%	46.2%	0.0%	0.6%	0.6%	0.0%	0.4%	0.4%	0.3%
2015	11.5	25.2%	0.0%	66.6%	0.0%	0.5%	0.5%	0.0%	0.2%	0.2%	0.2%
2016	12.0	11.9%	0.0%	82.4%	0.0%	0.4%	0.4%	0.0%	0.2%	0.2%	0.2%
2017	11.8	5.0%	0.0%	92.0%	0.0%	0.2%	0.2%	0.0%	0.1%	0.1%	0.1%
Total	**181.4**	**59.6%**	**1.9%**	**28.5%**	**0.1%**	**3.4%**	**3.5%**	**0.2%**	**2.8%**	**3.0%**	**1.4%**

Sample Dataset – Performance Summary Statistics[1] (Cont'd)

[1] Reflects monthly performance data June 30, 2018

[2] Calculated by dividing the ending UPB of all prepaid loans (Zero Balance Code = 01 or 06) by the Total Original UPB. The UPB is determined using the priority in Footnote 12.

[3] Calculated by dividing the sum of the default event UPB by the Total Original UPB. The calculation does not include Prepayments or pre-default Repurchases (Zero Balance Code = 01 or 06). The UPB is determined using the priority in Footnote 12.

[4] Calculated by dividing the ending UPB of all active loans (for which the Zero Balance Code is null in the terminal record) by the Total Original UPB. The UPB is determined using the priority in Footnote 12.

[5] Calculated by dividing the sum of the post-default event repurchase UPB by the Total Original UPB, for loans that were terminated due to a non-prepayment default event (see Footnote 3) and subsequently repurchased (Zero Balance Code = 02, 03, 09, or 15 AND repurchase flag = 'Y'). See Footnote 12 for determining the post-default event repurchase UPB

[6] Calculated by dividing the ending UPB of all loans that reached a delinquency status of D180, including at REO Acquisition, by the Total Original UPB. The UPB is determined using the priority in Footnote 12.

[7] Calculated by dividing the ending UPB of all loans that reached a delinquency status as of D180, including at REO Acquisition, and loans that were terminated in the dataset due to a non-prepayment credit event (Zero Balance Code = 02, 03, 09, or 15) by the Total Original UPB. The UPB is determined using the priority in Footnote 12.

[8] Calculated by dividing the sum of the modification UPB by the Total Original UPB. The modification UPB is the current actual UPB as of the month of modification (modification flag = 'Y'). For repeat modifications, the modification UPB of each is included. The UPB is determined using the priority in Footnote 12.

[9] Calculated by dividing the ending UPB of all loans that reached a delinquency status of D120, including at REO Acquisition, by the Total Original UPB. The UPB is determined using the priority in Footnote 12.

[10] Calculated by dividing the ending UPB of all loans that reached a delinquency status as of D120, including at REO Acquisition, and loans that were terminated in the dataset due to a non-prepayment credit event (Zero Balance Code = 02, 03, 09, or 15) by the Total Original UPB. The UPB is determined using the priority in Footnote 12.

[11] Calculated by dividing the ending UPB of all loans that were modified at or before D120 by the Total Original UPB. Repeat modifications on a loan are not part of the calculation.

[12] If the ending UPB on the terminal record is null, determine the UPB by using the following priority: 1. Use the Current Actual UPB from the previous period; 2. if the Current Actual UPB in the previous period is null, use the Original UPB.

Origination Summary Statistics – Variances (Sample – Full)						
Year	Average Original UPB ($)	Credit Score	Original Combined Loan-to-Value (CLTV) Ratio	Original Loan-to-Value (LTV) Ratio	Original Debt-to-Income (DTI) Ratio	Weighted Average Coupon (WAC)
1999	-252	-1	0	0	0	0
2000	-905	0	0	0	0	0
2001	331	0	0	0	0	0
2002	-826	-1	0	0	0	0
2003	-781	-2	0	0	0	0
2004	-314	0	0	0	0	0
2005	-461	0	0	0	0	0
2006	-110	0	0	0	0	0
2007	115	0	0	0	0	0
2008	237	1	0	0	0	0
2009	-532	0	0	0	0	0
2010	-279	-1	0	0	0	0
2011	-784	-1	0	0	0	0
2012	381	0	0	0	0	0
2013	-419	-1	1	1	0	0
2014	603	0	0	0	0	0
2015	338	-1	0	0	0	0
2016	-1,518	-1	0	0	0	0
2017	-108	0	0	0	0	0

Performance Summary Statistics – Variances (Sample – Full)										
Year	Prepay %	Cumulative Default Event %	Remaining %	Cumulative Post-Default Event Repurchase %	Ever D180 %	D180 and Pre-D180 Credit Event %	Cumulative Modification %	Ever D120%	Ever D120 and Pre-D120 Credit Event%	Pre-D120 Modification rate
1999	0.1%	0.1%	-0.2%	0.1%	0.1%	0.2%	0.0%	0.3%	0.2%	0.0%
2000	-0.1%	0.1%	0.0%	0.0%	0.0%	0.1%	-0.1%	0.1%	0.1%	0.0%
2001	-0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%
2002	0.2%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2003	-0.1%	0.1%	0.0%	0.0%	0.2%	0.2%	0.0%	0.3%	0.2%	0.0%
2004	0.0%	-0.1%	0.1%	0.0%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%
2005	0.3%	-0.3%	0.0%	0.0%	-0.4%	-0.3%	-0.1%	-0.3%	-0.3%	0.1%
2006	-0.2%	0.2%	0.0%	0.0%	0.3%	0.3%	0.0%	0.2%	0.2%	0.0%
2007	-0.1%	0.2%	-0.1%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
2008	0.8%	-0.5%	-0.3%	-0.1%	-0.6%	-0.6%	-0.1%	-0.6%	-0.6%	0.0%
2009	-0.8%	0.0%	0.8%	0.0%	-0.1%	-0.1%	0.0%	0.0%	-0.1%	0.0%
2010	0.9%	0.0%	-0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2011	1.3%	0.0%	-1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2012	1.3%	0.0%	-1.2%	0.0%	-0.1%	-0.1%	0.0%	-0.1%	-0.1%	0.0%
2013	2.1%	0.0%	-2.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2014	1.3%	0.0%	-1.2%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.0%
2015	0.1%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
2016	0.8%	0.0%	-0.8%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%
2017	0.1%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

			Performance Summary Statistics – Variances (Sample – Full, Cont'd)						
Year	% of Original UPB Prepaid	UPB-Weighted Cumulative Default Event	% of Original UPB Remaining	UPB-Weighted Cumulative Post-Default Event Repurchase	% of Original UPB D180 and Pre D180 Credit Event	UPB-Weighted Cumulative Modification	UPB weighted Ever D120%	UPB Weighted Ever D120 and Pre-D120 Credit Event%	UPB Weighted Pre-D120 Modification rate
1999	0.7%	0.0%	-0.1%	0.0%	0.2%	0.3%	0.0%	0.1%	0.2%
2000	-0.2%	0.1%	0.0%	0.0%	0.1%	0.1%	0.0%	0.1%	0.1%
2001	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
2002	0.4%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.1%
2003	0.4%	0.1%	0.0%	-0.1%	0.3%	0.3%	0.0%	0.2%	0.2%
2004	0.0%	-0.1%	0.1%	0.1%	0.2%	0.1%	0.0%	0.1%	0.0%
2005	0.1%	-0.2%	0.2%	0.0%	0.0%	-0.1%	0.1%	-0.2%	-0.2%
2006	-0.1%	0.1%	0.1%	-0.1%	0.3%	0.3%	0.0%	0.3%	0.3%
2007	0.1%	0.2%	0.0%	0.0%	0.3%	0.3%	0.1%	0.1%	0.2%
2008	1.2%	-0.5%	-0.3%	-0.1%	-0.7%	-0.7%	-0.1%	-0.7%	-0.7%
2009	-0.6%	0.0%	0.5%	0.0%	-0.1%	0.0%	0.0%	-0.1%	-0.1%
2010	0.8%	0.0%	-0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2011	1.2%	0.0%	-0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2012	1.6%	-0.1%	-1.6%	0.0%	-0.1%	-0.1%	0.0%	0.0%	0.0%
2013	2.6%	0.0%	-1.8%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%
2014	1.4%	-0.1%	-1.4%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%
2015	0.1%	0.0%	-0.1%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%
2016	0.9%	0.0%	-1.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%
2017	0.1%	0.0%	-0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

HARP (Table#1) Dataset – Performance Summary Statistics[1]

Year	Loan Count	Loan count weighted Credit Score	Loan count weighted Loan to Value %	Loan count weighted Interest Rate %	Loan count weighted -Original Unpaid Principal Balance	Prepay %[2]	Cumulative Default Event% %[3]	Remaining %[4]	Cumulative Post-Default Event Repurchase %[5]	EverD120 and Pre-D120 Modification Rate[6]	Ever D120 %[7]	Ever D180 %[8]	D180 and Pre-D180 Credit Event %[9]	Cumulative Modification %[10]
2009	71,512	738	91.9	5.2	225,412	68.3%	5.3%	26.4%	0.2%	7.6%	8.4%	6.8%	7.6%	3.4%
2010	156,723	745	92.9	5.0	224,091	62.3%	3.6%	34.1%	0.1%	5.3%	6.0%	4.8%	5.3%	2.5%
2011	136,565	743	96.2	4.8	206,103	53.9%	2.6%	43.5%	0.0%	4.1%	4.7%	3.7%	4.1%	2.0%
2012	342,311	740	111.4	4.1	194,702	36.7%	1.9%	61.5%	0.0%	2.9%	3.4%	2.5%	2.9%	1.3%
2013	228,042	727	106.7	4.1	178,600	28.0%	1.6%	70.4%	0.0%	2.7%	3.3%	2.5%	2.7%	1.3%
2014	51,028	711	100.7	4.6	166,310	23.0%	1.5%	75.6%	0.0%	2.9%	3.7%	2.7%	2.9%	1.7%
2015	28,573	710	98.8	4.2	162,847	14.2%	0.7%	85.1%	0.0%	1.7%	2.3%	1.6%	1.7%	1.5%
2016	14,547	706	97.1	4.0	161,773	7.4%	0.2%	92.4%	0.0%	1.1%	1.8%	1.1%	1.1%	1.2%
2017	5,655	701	96.7	4.3	150,376	2.3%	0.1%	97.6%	0.0%	0.4%	0.8%	0.4%	0.4%	0.5%
Total	**1,034,956**	**735**	**103.1**	**4.4**	**185,579**	**41.2%**	**2.3%**	**56.5%**	**0.0%**	**4.4%**	**4.2%**	**3.3%**	**3.6%**	**1.8%**

[1] Reflects monthly performance data through June 30, 2018

[2] Count of loans that prepaid in full or were repurchased prior to default (Zero Balance Code = 01 or 06) divided by Loan Count; partial prepayments (curtailments) are excluded from the calculation

[3] Count of loans that were terminated in the dataset due to a non-prepayment default event (Zero Balance Code = 02, 03, 09, or 15) divided by Loan Count.

[4] Count of active loans, divided by Loan Count.

[5] Count of loans that were terminated in the dataset due to a non-prepayment default event and subsequently repurchased (Zero Balance Code = 02, 03, 09, or 15 AND repurchase flag = 'Y'), divided by Loan Count

[6] Count of loans that reached a delinquency status of D120, including at REO Acquisition or were modified prior to delinquency status of D120 divided by loan count.

[7] Count of loans that reached a delinquency status of D120, including at REO Acquisition, divided by loan count.

[8] Count of loans that reached a delinquency status of D180, including at REO Acquisition, divided by Loan Count

[9] Count of loans that reached a delinquency status of D180, including at REO Acquisition, and loans that were terminated in the dataset due to a non-prepayment credit event (Zero Balance Code = 02, 03, 09, or 15) divided by Loan Count

[10] Count of loans that were modified divided by Loan Count. Repeat mods on a loan are not part of the calculation

HARP (Table#2) Dataset – Performance Summary Statistics[1]

Year	Loan Count	UPB weighted Credit Score	UPB Weighted Loan to Value	UPB weighted Interest Rate	UPB weighted Cumulative Loss %[2]	UPB weighted Prepay%[3]	UPB weighted Cumulative Default Event%[4]	UPB weighted Remaining %[5]	UPB weighted Cumulative Post-Default Event Repurchase %[6]	UPB weighted Ever D120 %[7]	UPB weighted EverD120 and Pre-D120 Modification Rate[8]	UPB weighted Ever D180 %[9]	UPB weighted D180 and Pre-D180 Credit Event %[10]	UPB weighted Cumulative Modification %[11]
2009	71,512	739	92.1	5.2	1.6%	63.9%	4.9%	19.2%	0.2%	8.3%	8.0%	6.5%	7.2%	3.4%
2010	156,723	745	93.1	5.0	1.1%	58.3%	3.4%	25.2%	0.1%	5.9%	5.7%	4.6%	5.1%	2.5%
2011	136,565	743	96.5	4.8	0.7%	50.9%	2.4%	32.7%	0.0%	4.6%	4.4%	3.5%	3.9%	2.1%
2012	342,311	740	111.6	4.1	0.5%	34.4%	1.7%	49.2%	0.0%	3.2%	3.1%	2.3%	2.6%	1.3%
2013	228,042	726	106.5	4.1	0.4%	26.6%	1.4%	58.9%	0.0%	3.1%	3.0%	2.3%	2.5%	1.3%
2014	51,028	709	100.2	4.6	0.4%	23.1%	1.3%	65.3%	0.0%	3.5%	3.4%	2.5%	2.7%	1.8%
2015	28,573	709	98.0	4.2	0.2%	14.1%	0.6%	76.7%	0.0%	2.2%	2.2%	1.5%	1.6%	1.5%
2016	14,547	704	96.3	4.0	0.0%	7.4%	0.2%	86.5%	0.0%	1.7%	1.7%	1.0%	1.1%	1.2%
2017	5,655	699	95.6	4.3	0.0%	2.3%	0.0%	94.5%	0.0%	0.8%	0.8%	0.4%	0.4%	0.5%
Total	**1,034,956**	**736**	**102.7**	**4.4**	**0.7%**	**40.2%**	**2.2%**	**44.3%**	**0.0%**	**4.2%**	**4.1%**	**3.1%**	**3.5%**	**1.8%**

[1] Reflects monthly performance data through June 30, 2018

[2] Sum of actual loss columns for loans with a non-prepayment credit event (zero balance code = 02, 03, 09, or 15) divided by Total Loan Original UPB (OUPB).

[3] UPB of loans that prepaid in full or were repurchased prior to default (Zero Balance Code = 01 or 06) divided by Total Loan OUPB; partial prepayments (curtailments) are excluded from the calculation

[4] UPB of loans that were terminated in the dataset due to a non-prepayment default event (Zero Balance Code = 02, 03, 09, or 15) divided by Total Loan OUPB.

[5] UPB of active loans, divided by Total Loan OUPB

[6] UPB of loans that were terminated in the dataset due to a non-prepayment default event and subsequently repurchased (Zero Balance Code = 02, 03, 09, or 15 AND repurchase flag = 'Y'), divided by Total Loan OUPB

[7] UPB of loans that reached a delinquency status of D120, including at REO Acquisition, divided by Total Loan OUPB.

[8] UPB of loans that reached a delinquency status of D120, including at REO Acquisition or were modified prior to delinquency status of D120 divided by OUPB. Repeat modifications s on a loan are not part of the calculation

[9] UPB of loans that reached a delinquency status of D180, including at REO Acquisition, divided by Total Loan OUPB

[10] UPB of loans that reached a delinquency status of D180, including at REO Acquisition, and loans that were terminated in the dataset due to a non-prepayment credit event (Zero Balance Code = 02, 03, 09, or 15) divided by Total Loan OUPB

[11] UPB of loans that were modified divided by Total Loan OUPB. Repeat mods on a loan are not part of the calculation

Additional Information

- For additional information, please visit our Web site at Freddiemac.com in the Research Additional Datasets area:
  http://www.freddiemac.com/research/datasets/sf_loanlevel_dataset.html

- For support with technical issues related to downloading the Single Family Loan-Level Dataset files, please send an email to **Support@eMBS.com**

- For support with data questions related to the Single Family Loan-Level Dataset, please send an email to **SF_Loan_Level_Data_Inquiry@FreddieMac.com**

Appendix A: Loan Exclusion Criteria

▪ The following types of mortgages were excluded from the Single Family Loan-Level Dataset:

1. Adjustable Rate Mortgages (ARMs), Initial Interest, balloons, and any mortgages with step rates

2. Government-insured mortgages, including Federal Housing Administration/Veterans Affairs (FHA/VA), Guaranteed Rural Housing (GRH), and HUD-Guaranteed Section 184 Native American mortgages

3. Home Possible®/Home Possible Neighborhood Solution® Mortgages and other affordable mortgages (including lender branded affordable loan products)

4. Mortgages delivered to Freddie Mac under alternate agreements

5. Mortgages for which the documentation is not verified or not waived

6. Mortgages associated with Mortgage Revenue Bonds purchased by Freddie Mac

7. Mortgages delivered to Freddie Mac with credit enhancements other than primary mortgage insurance, with the exception of certain lender-negotiated credit enhancements

8. Mortgages with original loan terms of 420 months or more, and 300 months or less if originated prior to 1/1/2005. If loan was originated on/after 1/1/2005, this exclusion does not apply.

Appendix B: Loan Termination Events

- Loan performance information in the Single Family Loan-Level Dataset includes monthly loan balance, delinquency status and certain workout information up to and including the earliest of the following termination events:

    1. Prepaid or Matured (Voluntary Payoff)

    2. Third Party Sale

    3. Short Sale or Charge Off

    4. Repurchase prior to Property Disposition

    5. REO Disposition

    6. Note Sale