



REFINANCE REPORT

October 2018

October 2018 Highlights

- Total refinance volume increased in October 2018 after falling throughout most of the year in response to rising mortgage rates. Mortgage rates increased in October: the average interest rate on a 30-year fixed rate mortgage rose to 4.83 percent from 4.63 percent in September.

In October 2018:

- Borrowers completed 507 refinances through HARP, bringing total refinances from the inception of the program to 3,493,512.
- HARP volume represented 1 percent of total refinance volume.
- Six percent of the loans refinanced through HARP had a loan-to-value ratio greater than 125 percent.

Year to date through October 2018:

- Borrowers with loan-to-value ratios greater than 105 percent accounted for 16 percent of the volume of HARP loans.
- Thirty-four percent of HARP refinances for underwater borrowers were for shorter-term 15- and 20-year mortgages, which build equity faster than traditional 30-year mortgages.
- HARP refinances represented 2 percent of total refinances in Florida, Georgia and Illinois compared to 1 percent of total refinances nationwide over the same period.
- Borrowers who refinanced through HARP had a lower delinquency rate compared to borrowers eligible for HARP who did not refinance through the program.
- Nine states and one territory accounted for over 70 percent of the nation's HARP eligible loans with a refinance incentive as of June 30, 2018.



Overview and Eligibility of the Home Affordable Refinance Program (HARP)

HARP Overview

HARP was established in 2009 to assist homeowners unable to access a refinance due to a decline in their home value. The inception date of the program was April 1, 2009.

The program is designed to provide these borrowers with an opportunity to refinance by permitting the transfer of existing mortgage insurance to their newly refinanced loan, or by allowing those without mortgage insurance on their previous loan to refinance without obtaining new coverage.

HARP enhancements took effect in 2012 to increase access to the program for responsible borrowers. The program was scheduled to expire on December 31, 2013, and was extended to expire on December 31, 2015. On May 8, 2015, HARP was extended again to expire on December 31, 2016. On August 25, 2016, HARP was extended once more to expire on September 30, 2017. On August 17, 2017, HARP was extended once more to expire on December 31, 2018.

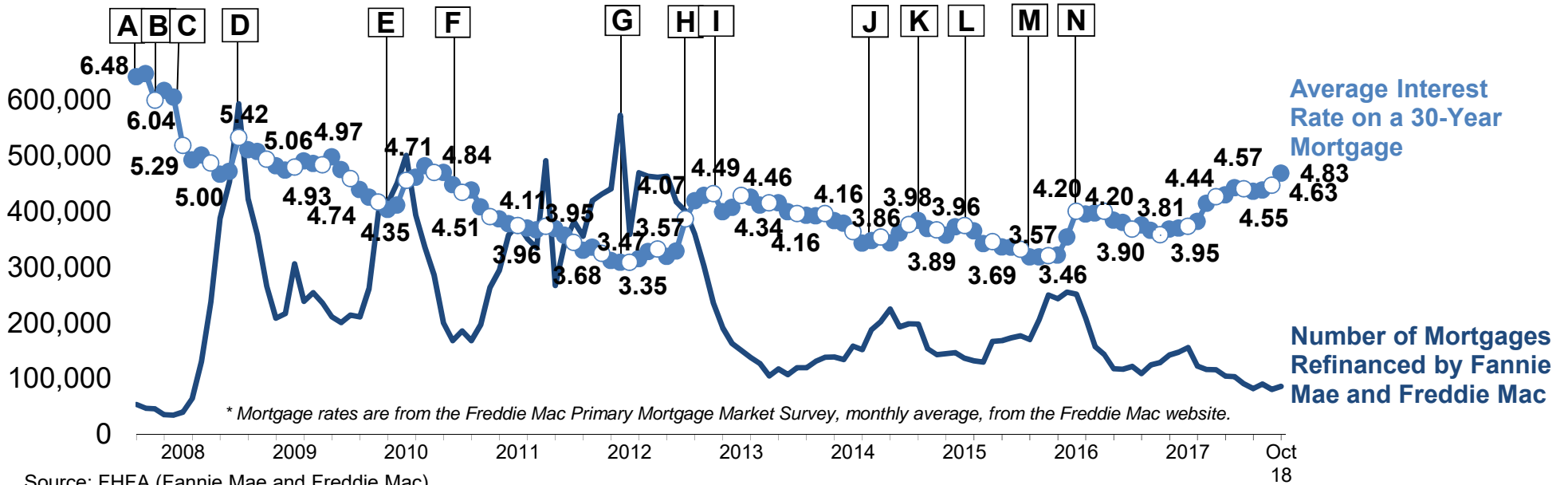
HARP Eligibility

Below are the basic HARP eligibility criteria:

- Loan must be owned or guaranteed by Fannie Mae or Freddie Mac.
- Loan must have been originated on or before May 31, 2009.
- Current loan-to-value ratio -- LTV -- (outstanding mortgage balance/home value) must be greater than 80 percent. There is no LTV ceiling.
- Borrower must be current on their mortgage payments at the time of the refinance.
- Payment history – borrower is allowed one late payment in the past 12 months, as long as it did not occur in the 6 months prior to the refinance.

Total refinance volume increased in October 2018 after falling throughout most of the year in response to rising mortgage rates. Mortgage rates increased in October: the average interest rate on a 30-year fixed rate mortgage rose to 4.83 percent from 4.63 percent in September.

Mortgage Rates vs Refinance Volume



Source: FHFA (Fannie Mae and Freddie Mac)

- A - Highest rate in 2008 for a 30-year mortgage.
- B - GSEs placed into conservatorship on 09/06/08.
- C - Fed announces MBS purchase program on 11/25/08.
- D - Treasury rates sharply rose and reached a 2009 high on a better than expected June unemployment report.
- E - 30-year mortgage rates reached 4.17 percent in early November, marking the lowest level observed since Freddie Mac began tracking rates in 1971.
- F - Treasury rates fell amid ongoing concerns of a growing debt crisis in Europe.
- G - 30-year mortgage rates reached new historic lows in November 2012.
- H - Mortgage rates rose after Federal Reserve Chairman Bernanke stated in late May that the central bank was considering slowing its \$85 billion per month bond buying program known as quantitative easing.
- I - Highest rate for a 30-year mortgage since July 2011.
- J - 30-year mortgage rates reached a monthly average of 3.67 percent in January, the lowest level seen since mid 2013.
- K - 30-year mortgage rates reached a monthly average of 4.05 percent in July 2015, the highest level observed since September 2014, amid expectations of a rate hike by the Federal Reserve.
- L - The Federal Reserve raised the target federal funds rate from a range of 0%-0.25% to a range of 0.25%-0.5% on 12/16/15 in response to a strengthening economy.
- M - Treasury rates fell, amid a global flight to the safety of government debt, in response to uncertainty in the financial markets driven by the U.K. Brexit vote to leave the European Union.
- N - The Federal Reserve raised the target federal funds rate from a range of 0.25%-0.5% to a range of 0.5%-0.75% on 12/14/16 in response to a strengthening economy.



In October 2018, 507 refinances were completed through HARP, bringing total refinances through HARP from the inception¹ of the program to 3,493,512.

Refinances Through October 2018

	October 2018	Year to Date 2018	2017	Inception to Date
Total Refinances				
Fannie Mae	52,612	623,348	1,015,002	16,885,125
Freddie Mac	<u>33,864</u>	<u>371,724</u>	<u>661,011</u>	<u>10,605,605</u>
Total	86,476	995,072	1,676,013	27,490,730
Total HARP				
Fannie Mae	356	6,391	22,485	2,069,486
Freddie Mac	<u>151</u>	<u>3,093</u>	<u>13,870</u>	<u>1,424,026</u>
Total	<u>507</u>	<u>9,484</u>	<u>36,355</u>	<u>3,493,512</u>
HARP LTV >80% -105%				
Fannie Mae	309	5,460	18,559	1,478,175
Freddie Mac	<u>120</u>	<u>2,515</u>	<u>10,882</u>	<u>983,740</u>
Total	429	7,975	29,441	2,461,915
HARP LTV >105% -125%				
Fannie Mae	29	660	2,719	332,560
Freddie Mac	<u>28</u>	<u>383</u>	<u>2,052</u>	<u>263,584</u>
Total	57	1,043	4,771	596,144
HARP LTV >125%				
Fannie Mae	18	271	1,207	258,751
Freddie Mac	<u>3</u>	<u>195</u>	<u>936</u>	<u>176,702</u>
Total	21	466	2,143	435,453
All Other Streamlined Refis				
Fannie Mae	1,534	25,361	69,877	2,554,784
Freddie Mac	<u>591</u>	<u>11,105</u>	<u>40,941</u>	<u>1,491,782</u>
Total	2,125	36,466	110,818	4,046,566

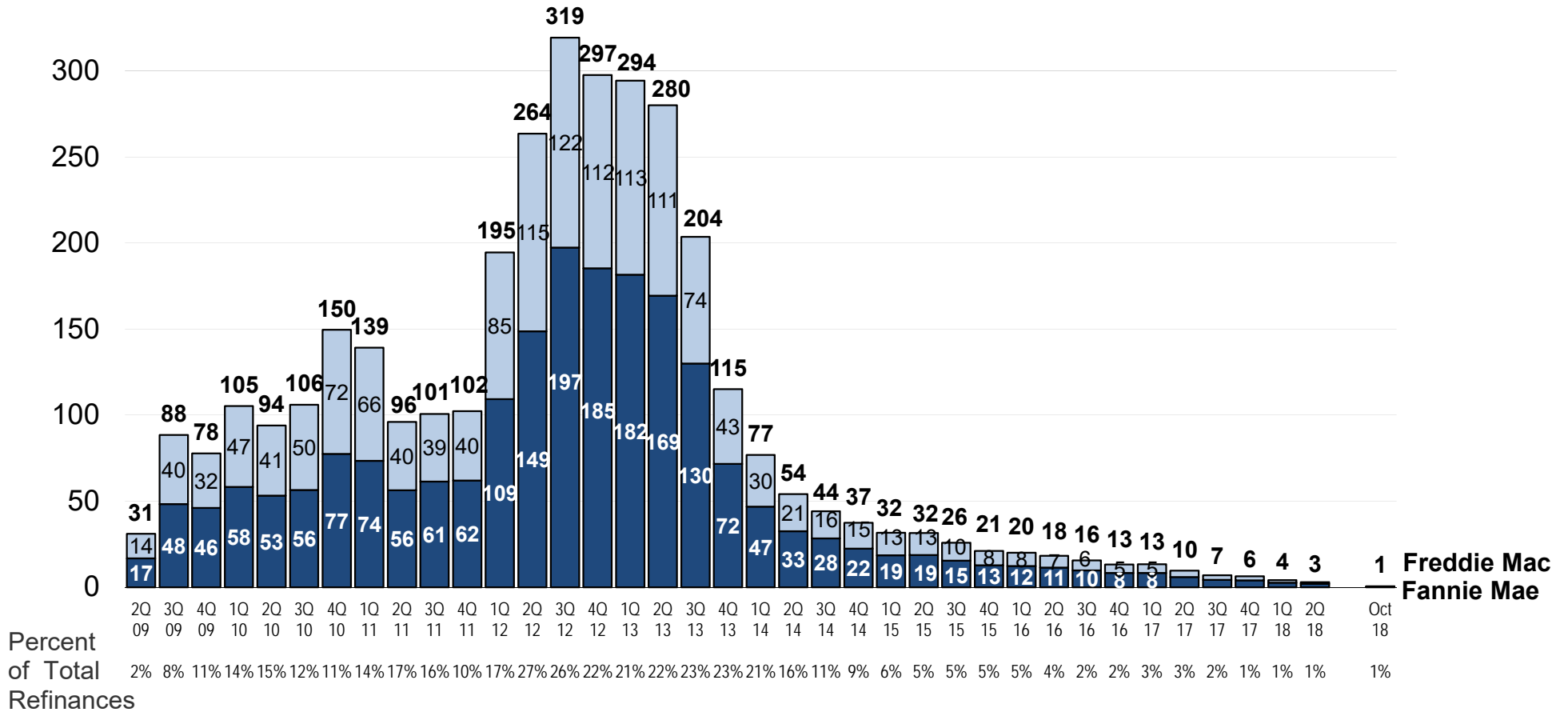


¹ Inception - April 1, 2009
Source: FHFA (Fannie Mae and Freddie Mac)

In October 2018, 507 loans were refinanced through HARP, representing 1 percent of total refinance volume during the month.

HARP Refinance, Quarterly Volume

(Number of loans in thousands)



Source: FHFA (Fannie Mae and Freddie Mac)



From inception¹ through October 2018, 2,918,343 loans refinanced through HARP were for primary residences, 110,848 were for second homes and 464,321 were for investment properties.

HARP Loans by Property Type Inception through October 2018

	Total	Primary Residence	Second Home	Investment Property
Total HARP				
Fannie Mae	2,069,486	1,706,286	62,319	300,881
Freddie Mac	1,424,026	1,212,057	48,529	163,440
Total	3,493,512	2,918,343	110,848	464,321
HARP LTV >80% -105%				
Fannie Mae	1,478,175	1,243,654	45,374	189,147
Freddie Mac	983,740	855,556	31,722	96,462
Total	2,461,915	2,099,210	77,096	285,609
HARP LTV >105% -125%				
Fannie Mae	332,560	267,144	8,917	56,499
Freddie Mac	263,584	218,790	9,153	35,641
Total	596,144	485,934	18,070	92,140
HARP LTV >125%				
Fannie Mae	258,751	195,488	8,028	55,235
Freddie Mac	176,702	137,711	7,654	31,337
Total	435,453	333,199	15,682	86,572

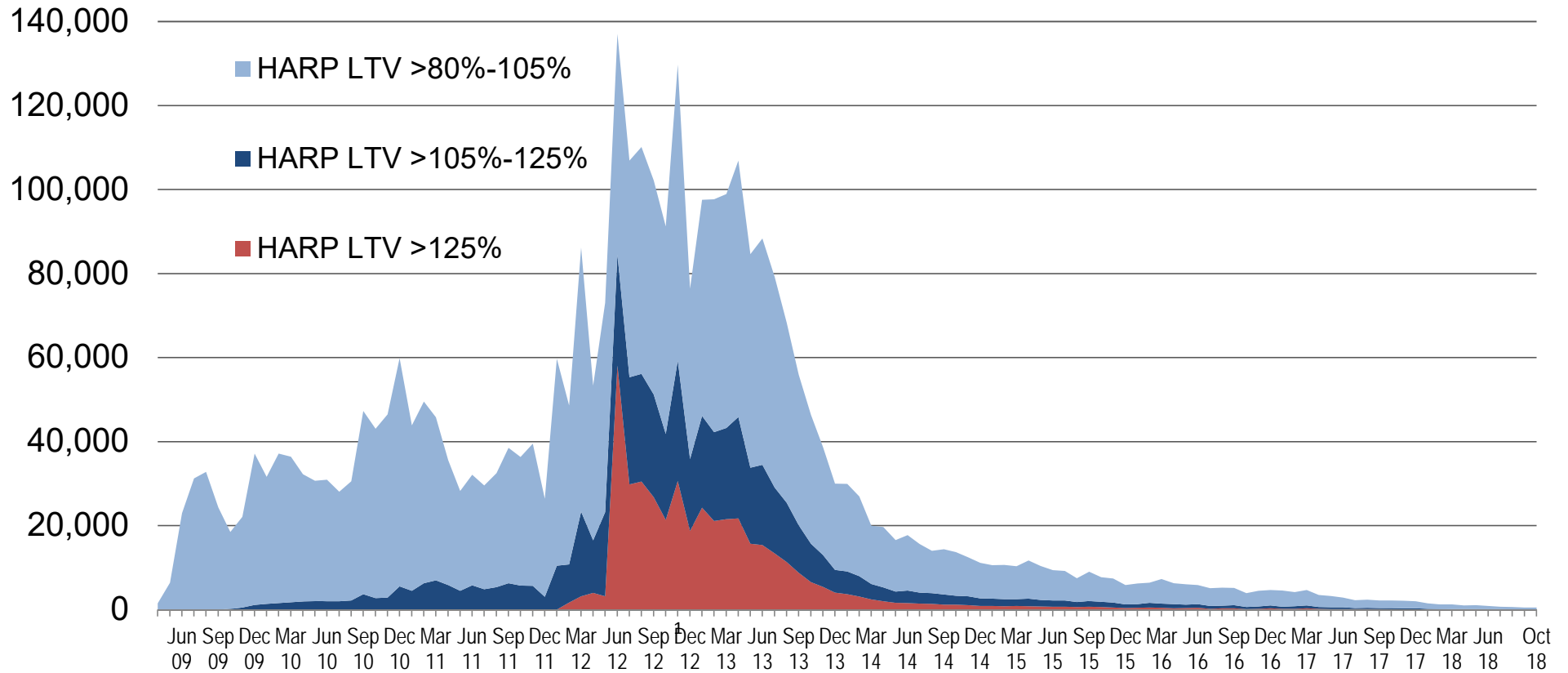
Source: FHFA (Fannie Mae and Freddie Mac)

¹Inception - April 1, 2009



In October 2018, 4 percent of the loans refinanced through HARP had a loan-to-value ratio greater than 125 percent.

Monthly HARP Volume by Loan-to-Value Ratio



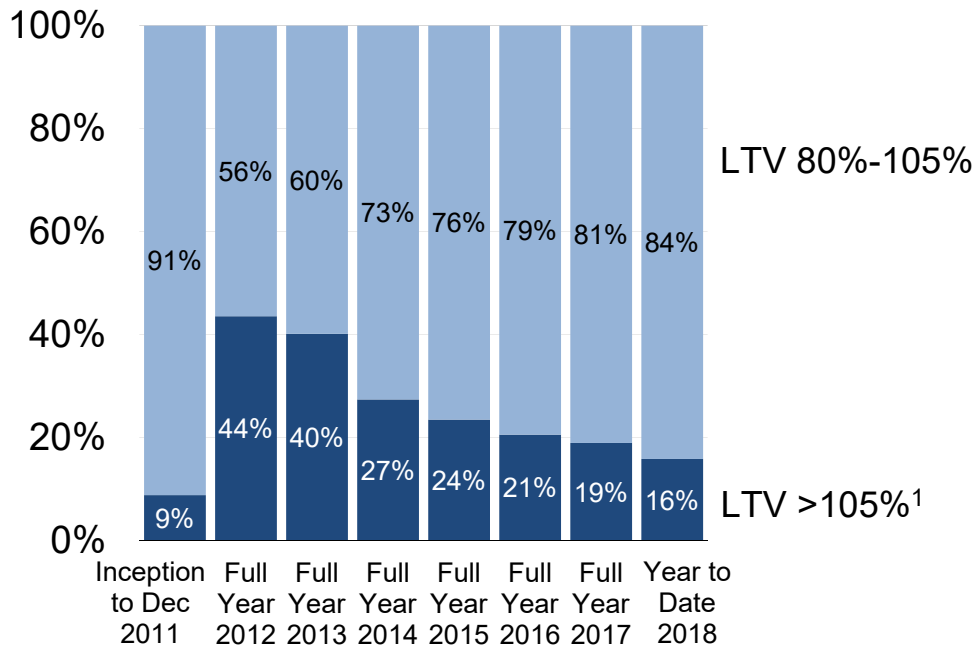
¹ The number of completed HARP refinances reported for deeply underwater borrowers increased sharply in June 2012 as further enhancements to HARP went into effect. Starting June 1, 2012, lenders became able to deliver loans with loan-to-value ratios greater than 125 percent refinanced through HARP to the Enterprises to be securitized.

Source: FHFA (Fannie Mae and Freddie Mac)



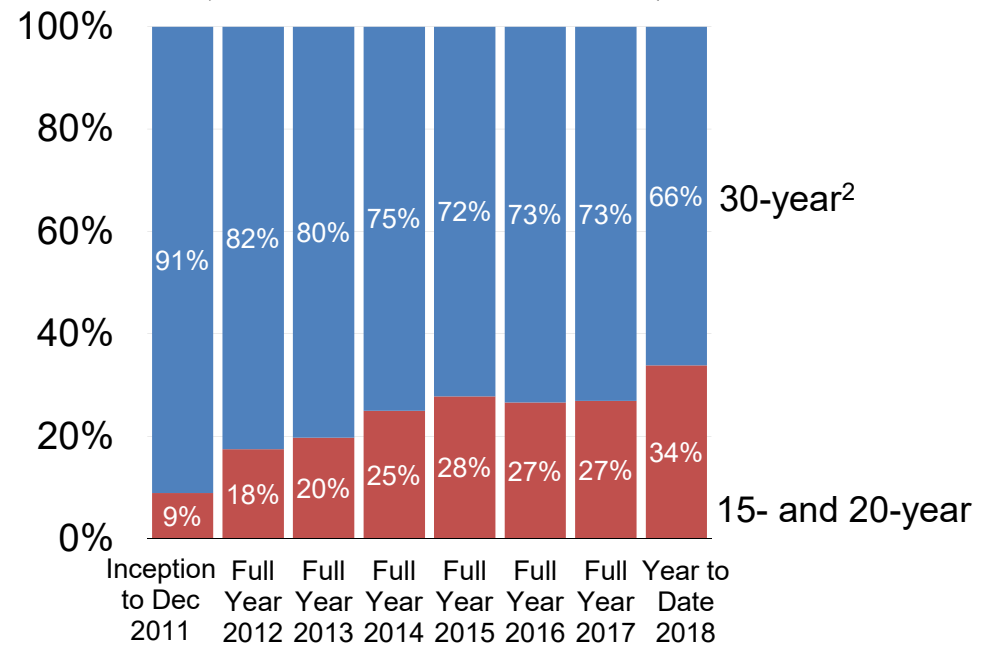
Year to date through October 2018, borrowers with loan-to-value ratios greater than 105 percent accounted for 16 percent of the volume of HARP loans. Refinancing to shorter term mortgages accounted for 34 percent of HARP refinances for underwater borrowers (LTV greater than 105 percent). Shorter term 15- and 20-year mortgages build equity faster than traditional 30-year mortgages.

Percentage of HARP Refinances by Loan-to-Value Ratio



¹ Includes HARP LTV >105%-125% and HARP LTV >125%.
Source: FHFA (Fannie Mae and Freddie Mac)

Mortgage Term of HARP Refinances of Underwater Borrowers (LTV Greater than 105%)



² Includes 25-year and 40-year mortgages.
Source: FHFA (Fannie Mae and Freddie Mac)



Borrowers who refinanced through HARP had a lower delinquency rate compared to borrowers eligible for HARP who did not refinance through the program.

Ever 90 Days Delinquency Rate¹: Fannie Mae and Freddie Mac

Refinance or Eligibility Month	Category	>80-105%	>105-125%	>125%	Total
June 2009	Loans Refinanced through HARP ²	8.3%			8.3%
	Loans Eligible for HARP ³	14.6%			14.6%
June 2010	Loans Refinanced through HARP	9.7%	19.0%		10.3%
	Loans Eligible for HARP	10.7%	19.0%		12.2%
June 2011	Loans Refinanced through HARP	6.5%	11.6%		7.5%
	Loans Eligible for HARP	7.5%	12.2%		8.6%
June 2012	Loans Refinanced through HARP	3.3%	4.8%	8.2%	5.6%
	Loans Eligible for HARP	6.1%	8.8%	13.1%	8.0%
June 2013	Loans Refinanced through HARP	3.1%	5.0%	7.4%	4.3%
	Loans Eligible for HARP	6.7%	10.2%	14.3%	8.4%
June 2014	Loans Refinanced through HARP	4.9%	7.0%	9.3%	5.6%
	Loans Eligible for HARP	6.7%	10.6%	14.2%	8.1%
June 2015	Loans Refinanced through HARP	3.2%	5.2%	7.0%	3.8%
	Loans Eligible for HARP	6.1%	9.5%	12.9%	7.2%
June 2016	Loans Refinanced through HARP	2.7%	3.7%	4.9%	3.1%
	Loans Eligible for HARP	4.8%	7.3%	10.0%	5.5%
June 2017	Loans Refinanced through HARP	2.1%	2.2%	3.0%	2.4%
	Loans Eligible for HARP	2.9%	4.3%	6.1%	3.2%

Source: FHFA (Fannie Mae and Freddie Mac)

Notes

1. This measures the cumulative percentage of loans that have become 90 or more days delinquent in any of the months after June 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016 or 2017 (the refinance or eligibility date) through June 2018 for loans refinanced through HARP or eligible for HARP.

2. This measures the ever 90+ day delinquency percentage for loans refinanced through HARP during the month of June 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016 or 2017.

3. This measures the ever 90+ day delinquency percentage for loans that were eligible for refinancing through HARP but were not refinanced through the program as of the end of the reporting month of June 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016 or 2017. LTVs as of the eligibility date for loans are estimated using internal Fannie Mae and Freddie Mac house price indices at a zip code level. This measure may be understated because some loans may have later been paid off or refinanced through HARP.

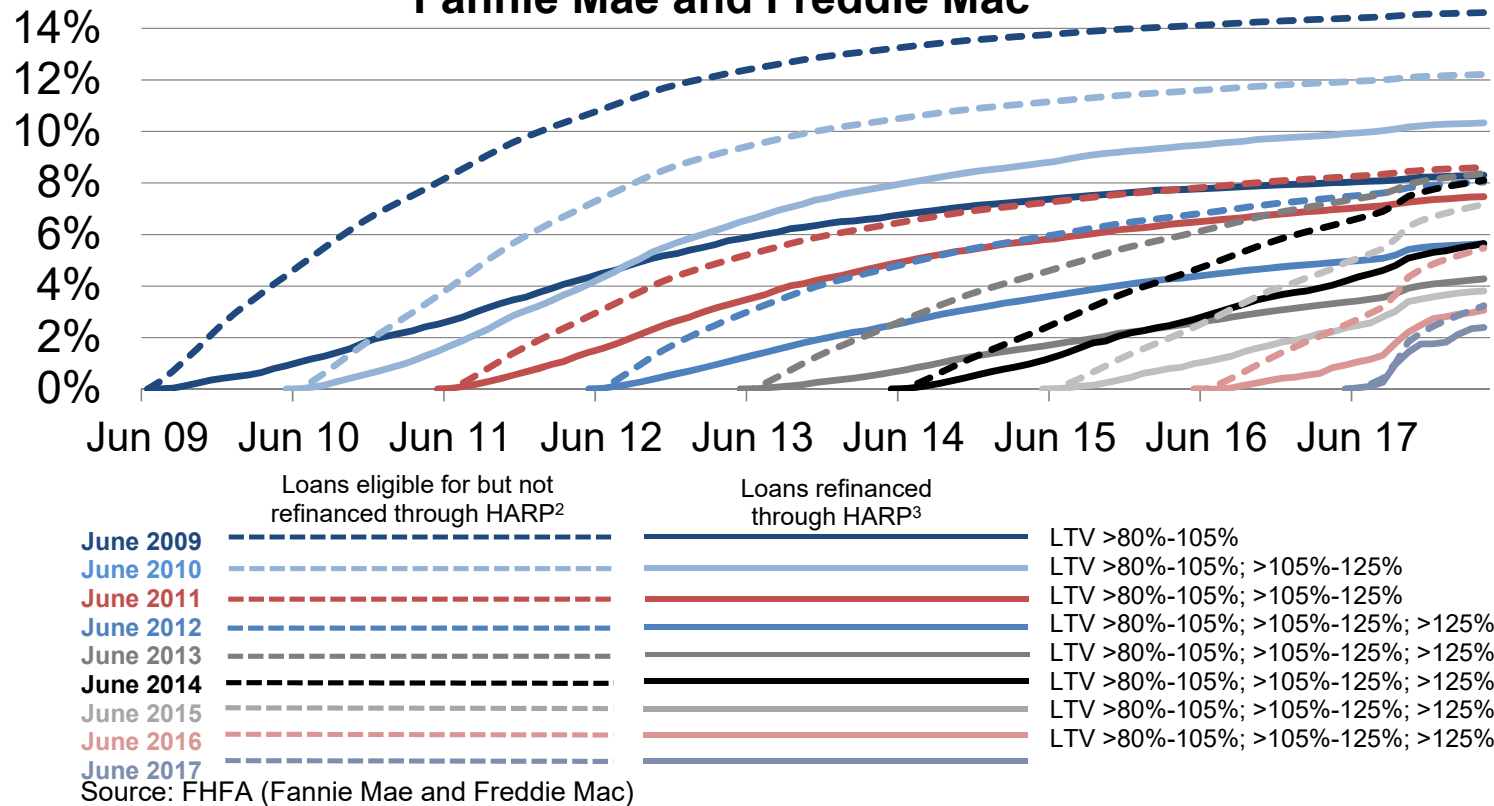
Fannie Mae defines a HARP eligible loan as being current on payments for the last 6 months with at most a single missed payment in the last 12 months for both HARP 1 and HARP 2 eligibility; Freddie Mac defines a HARP eligible loan as being current on payments for the last 12 months for HARP 1 (2009-2011) eligibility, or current on payments for the last 6 months with at most a single missed payment in the last 12 months for HARP 2 (2012 onward) eligibility.

Other eligibility rules specific to Fannie Mae and Freddie Mac may also apply.



Borrowers who refinanced through HARP had a lower delinquency rate compared to borrowers eligible for HARP who did not refinance through the program.

Ever 90+ Days Delinquency Rate¹ Fannie Mae and Freddie Mac



Notes

1. This measures the cumulative percentage of loans that have become 90 or more days delinquent in any of the months after June 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016 or 2017 (the refinance or eligibility date) through June 2018 for loans refinanced through HARP or eligible for HARP.

2. This measures the ever 90+ day delinquency percentage for loans that were eligible for refinancing through HARP but were not refinanced through the program as of the end of the reporting month of June 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016 or 2017. LTVs as of the eligibility date for loans are estimated using internal Fannie Mae and Freddie Mac house price indices at a zip code level. This measure may be understated because some loans may have later been paid off or refinanced through HARP.

3. This measures the ever 90+ day delinquency percentage for loans refinanced through HARP during the month of June 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016 or 2017.

Fannie Mae defines a HARP eligible loan as being current on payments for the last 6 months with at most a single missed payment in the last 12 months for both HARP 1 and HARP 2 eligibility; Freddie Mac defines a HARP eligible loan as being current on payments for the last 12 months for HARP 1 (2009 to 2011) eligibility, or current on payments for the last 6 months with at most a single missed payment in the last 12 months for HARP 2 (2012 onward) eligibility.

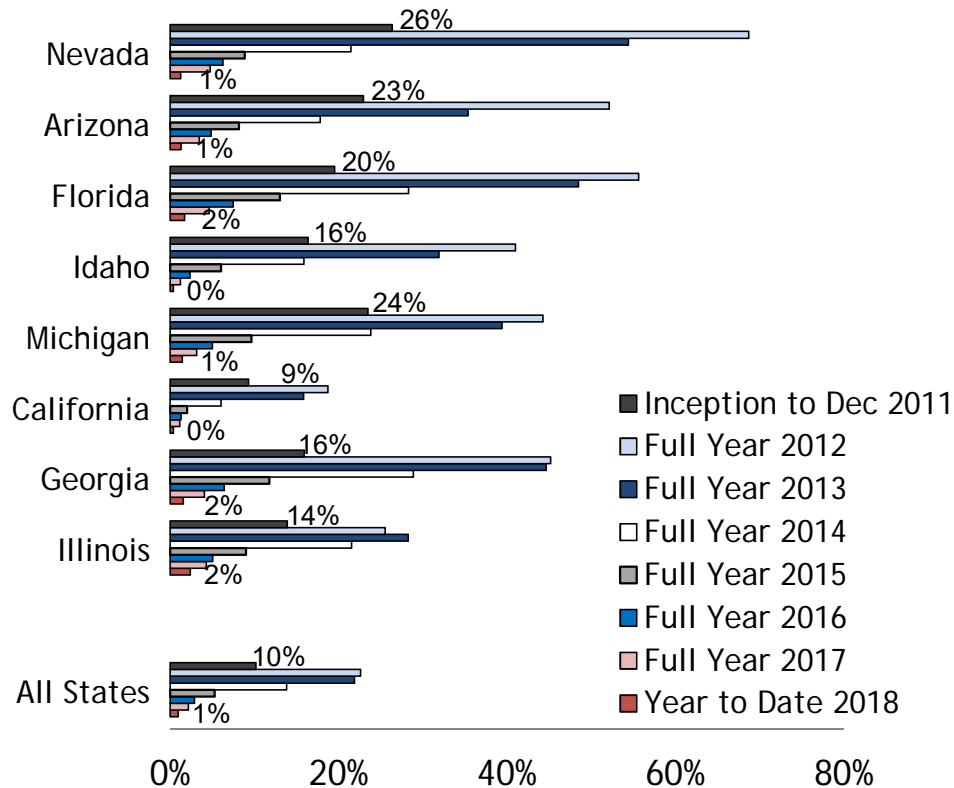
Other eligibility rules specific to Fannie Mae and Freddie Mac may also apply.



Year to date through October 2018, HARP refinances represented 2 percent of total refinances in Florida, Georgia and Illinois compared to 1 percent of total refinances nationwide over the same period.

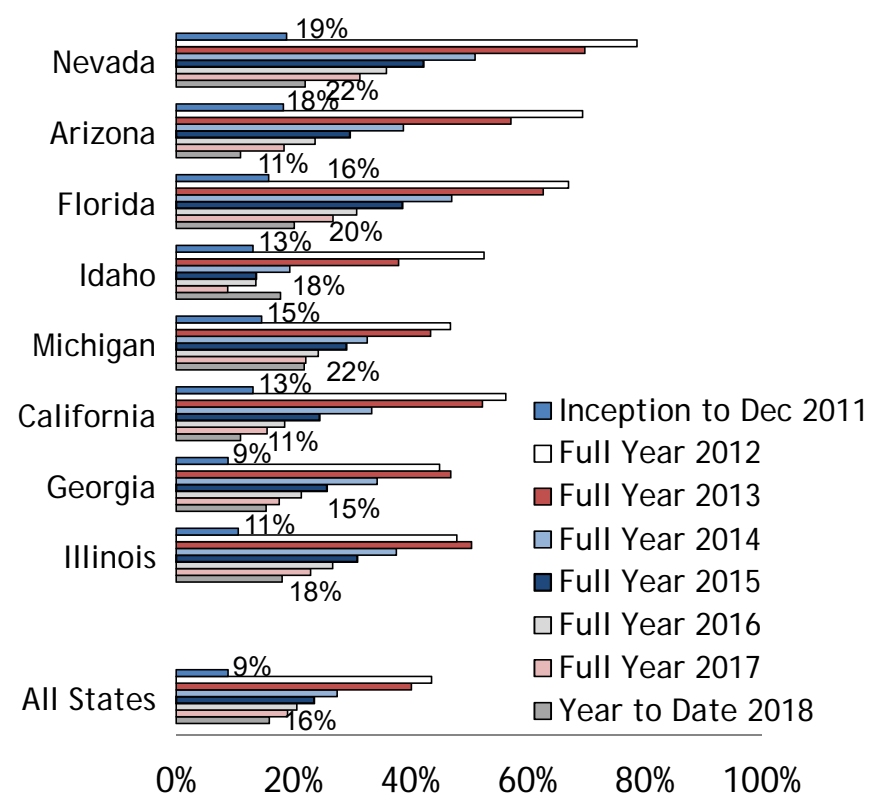
Underwater borrowers accounted for a large portion of HARP refinances in a number of states. Year to date through September 2018, underwater borrowers represented 20 percent or more of HARP volume in Nevada, Florida and Michigan.

Total HARP as a Percentage of Total Refinances



Source: FHFA (Fannie Mae and Freddie Mac)

HARP LTV >105% as a Percentage of Total HARP

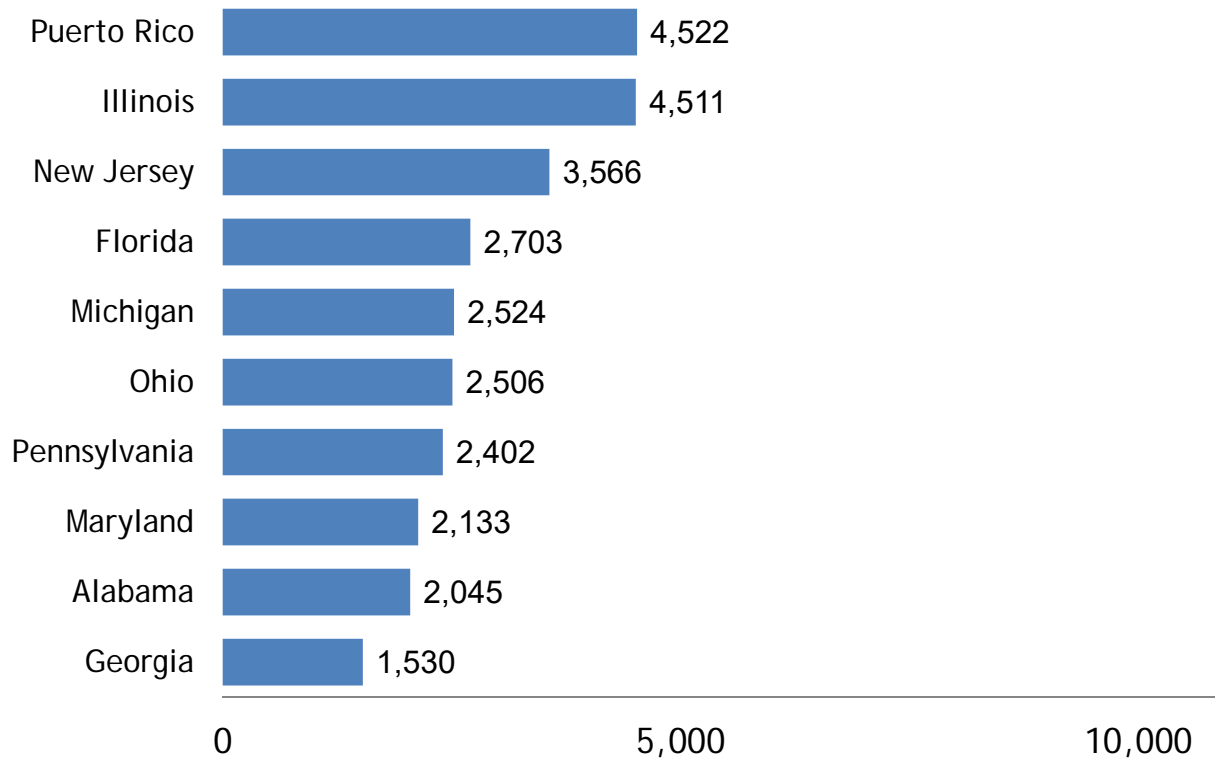


Source: FHFA (Fannie Mae and Freddie Mac)



Nine states and one territory accounted for over 70 percent of the Nation's HARP eligible loans with a refinance incentive. The national total of HARP eligible loans with a refinance incentive was 38,818 as of June 30, 2018. Additional information can be found in an interactive map at www.HARP.gov.

HARP Eligible Loans with a Refinance Incentive*
Top Ten States and Territories
 as of June 30, 2018



Source: FHFA (Fannie Mae and Freddie Mac)

* FHFA uses the following criteria to identify HARP eligible loans: Conventional loans originated before 6/1/2009; unpaid principal balance greater than 80 percent of current property value; and meet the payment history requirement of no delinquencies in the prior six months and at most one delinquency in the prior 12 months. To estimate the HARP-eligible with a refinance incentive population, FHFA applies the following filters to the HARP-eligible loans: Remaining balance greater than \$50,000; remaining term greater than ten years, and note rate 150 basis points (1.5%) above the market rate.



Appendix: Data Tables**Fannie Mae and Freddie Mac - Monthly Refinance Volume (# of loans)**

	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18
Total Refinances													
Fannie Mae	83,949	85,174	91,576	81,220	77,403	73,003	60,757	61,628	56,441	52,177	58,237	49,870	52,612
Freddie Mac	58,738	62,525	64,334	41,950	39,237	43,188	44,105	42,117	34,412	29,805	32,269	30,777	33,864
Total	142,687	147,699	155,910	123,170	116,640	116,191	104,862	103,745	90,853	81,982	90,506	80,647	86,476
Total HARP													
Fannie Mae	1,366	1,393	1,231	1,031	814	889	695	734	584	465	456	367	356
Freddie Mac	818	730	771	526	478	401	322	343	295	231	195	151	151
Total	2,184	2,123	2,002	1,557	1,292	1,290	1,017	1,077	879	696	651	518	507
HARP LTV >80% -105%													
Fannie Mae	1,158	1,162	1,045	863	730	729	602	626	509	392	394	306	309
Freddie Mac	639	584	588	453	384	330	270	267	236	169	154	132	120
Total	1,797	1,746	1,633	1,316	1,114	1,059	872	893	745	561	548	438	429
HARP LTV >105% -125%													
Fannie Mae	137	173	139	109	73	108	76	67	59	53	45	41	29
Freddie Mac	101	104	121	42	69	48	37	49	45	28	28	9	28
Total	238	277	260	151	142	156	113	116	104	81	73	50	57
HARP LTV >125%													
Fannie Mae	71	58	47	59	11	52	17	41	16	20	17	20	18
Freddie Mac	78	42	62	31	25	23	15	27	14	34	13	10	3
Total	149	100	109	90	36	75	32	68	30	54	30	30	21
All Other Streamlined Refis													
Fannie Mae	4,679	4,618	4,721	3,629	3,574	3,160	2,787	3,044	2,189	1,854	1,868	1,722	1,534
Freddie Mac	2,459	2,491	2,808	1,884	1,682	1,462	1,285	1,269	906	740	676	610	591
Total	7,138	7,109	7,529	5,513	5,256	4,622	4,072	4,313	3,095	2,594	2,544	2,332	2,125

Notes:

Initially HARP Refinance Loans were defined as Fannie Mae to Fannie Mae and Freddie Mac to Freddie Mac first-lien refinance loans with limited and no cash out that have loan-to-value ratios over 80 percent up to 125 percent.

HARP Enhancements: On October 24, 2011, FHFA, Fannie Mae and Freddie Mac announced HARP changes to reach more borrowers. Effective December 1, 2011, existing Enterprise borrowers who are current on their mortgage payments can refinance and reduce their monthly mortgage payments at loan-to-value ratios above 80 percent without any maximum loan-to-value limit.

Starting with the November 2012 Refinance Report, the definition of HARP for Fannie Mae has been expanded to include second home and investment property refinances with LTVs greater than 80 percent, which is consistent with the definition of HARP for Freddie Mac since the inception of the program.

All Other Streamlined Refis are streamlined refinances that do not qualify as HARP refinances. Fannie Mae implements streamlined refinances through the Refi Plus product for manual underwriting and DU Refi Plus product for loans underwritten through Desktop Underwriter. The product is available for refinances of existing Fannie Mae loans only. Freddie Mac implements streamlined refinances through the Relief Refinance Mortgage product. Loans may be originated by any Freddie Mac approved servicer.



Appendix: Data Tables

Fannie Mae - Loan Count by LTV and Product (Mortgage Term)

	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18
Total Refinances													
FRM 30 (incl FRM 25 & 40)	50,397	52,083	57,249	53,665	51,460	46,450	37,342	41,023	38,482	37,202	41,634	36,096	37,746
FRM 20	8,962	8,955	10,198	8,232	8,472	9,130	6,268	5,928	4,721	4,361	4,898	3,849	4,045
FRM 15	22,977	22,602	22,675	17,806	16,203	16,550	15,760	13,157	12,170	9,767	10,649	9,021	10,153
HARP >80-105 LTV													
FRM 30 (incl FRM 25 & 40)	735	678	619	522	443	428	316	356	304	214	261	190	187
FRM 20	187	209	198	153	130	156	153	119	92	88	57	38	66
FRM 15	222	257	218	178	150	141	120	128	103	81	70	74	52
HARP >105-125 LTV													
FRM 30 (incl FRM 25 & 40)	111	109	98	65	46	61	57	52	36	29	29	27	19
FRM 20	13	23	27	14	20	15	14	13	7	10	8	8	2
FRM 15	13	41	14	30	7	32	5	2	16	14	8	6	8
HARP > 125 LTV													
FRM 30 (incl FRM 25 & 40)	50	49	31	47	4	37	9	33	3	11	11	12	-
FRM 20	7	1	10	6	2	9	4	4	1	4	1	5	12
FRM 15	14	8	6	6	5	6	4	4	12	5	5	3	6
All Other Streamlined Refis													
FRM 30 (incl FRM 25 & 40)	2,053	1,930	1,972	1,543	1,526	1,314	1,120	1,402	1,022	799	869	793	816
FRM 20	789	763	943	673	697	678	502	515	312	363	308	245	239
FRM 15	1,774	1,871	1,782	1,379	1,322	1,145	1,112	1,068	803	656	654	653	463



Appendix: Data Tables

Freddie Mac - Loan Count by LTV and Product (Mortgage Term)

	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18
Total Refinances													
FRM 30 (incl FRM 25 & 40)	38,474	40,530	41,806	26,612	24,440	28,728	30,211	28,902	23,783	20,636	22,975	21,365	24,627
FRM 20	3,729	3,581	3,893	3,238	2,680	2,767	3,077	3,243	2,982	2,205	2,309	2,022	2,003
FRM 15	15,449	17,128	17,692	11,414	11,662	11,160	10,048	9,354	7,240	6,588	6,664	6,972	6,807
HARP >80-105 LTV													
FRM 30 (incl FRM 25 & 40)	399	360	341	296	223	190	169	173	157	116	106	94	80
FRM 20	116	82	128	77	65	61	42	40	36	23	24	12	18
FRM 15	121	139	110	79	96	77	59	54	41	29	23	26	22
HARP >105-125 LTV													
FRM 30 (incl FRM 25 & 40)	65	73	75	36	52	24	28	44	35	16	23	7	19
FRM 20	9	6	15	-	6	4	5	3	4	4	5	2	6
FRM 15	27	25	31	6	11	20	4	2	6	8	-	-	3
HARP > 125 LTV													
FRM 30 (incl FRM 25 & 40)	46	36	38	21	17	19	7	18	7	21	6	7	2
FRM 20	9	1	11	6	6	2	5	-	5	2	3	1	1
FRM 15	23	5	13	4	2	2	3	9	2	11	4	2	-
All Other Streamlined Refis													
FRM 30 (incl FRM 25 & 40)	1,048	1,064	1,157	823	649	649	581	560	469	377	382	334	319
FRM 20	439	255	565	362	294	229	227	191	127	115	81	78	69
FRM 15	962	1,168	1,075	688	733	581	473	514	307	244	211	196	201



Appendix: State Level Data Enterprises Refinance Activity by State - October 31, 2018

State	October 2018						Year-to-Date 2018						Inception to Date ¹					
	Total Refinances	Other Streamlined Refis	HARP LTV >80% -105%	HARP LTV >105% - 125%	HARP LTV >125%	Total HARP	Total Refinances	Other Streamlined Refis	HARP LTV >80% -105%	HARP LTV >105% - 125%	HARP LTV >125%	Total HARP	Total Refinances	Other Streamlined Refis	HARP LTV >80% - 105%	HARP LTV >105% - 125%	HARP LTV >125%	Total HARP
AK	171	3	1	-	-	1	1,891	56	3	-	-	3	60,865	9,968	2,250	32	11	2,293
AL	932	30	9	-	-	9	10,213	524	189	13	3	205	278,661	47,728	26,890	4,088	902	31,880
AR	558	11	2	-	-	2	6,179	258	27	1	1	29	158,014	29,078	12,074	1,705	324	14,103
AZ	3,034	71	16	3	1	20	33,992	1,096	396	34	15	445	679,596	90,295	84,111	38,809	43,973	166,893
CA	14,003	291	34	-	-	34	172,537	4,125	590	58	15	663	4,819,808	544,969	274,297	89,129	88,270	451,696
CO	3,190	34	-	1	-	1	37,587	674	33	2	-	35	814,127	123,744	53,126	4,897	1,100	59,123
CT	555	14	10	4	1	15	6,947	373	163	41	13	217	311,405	47,543	31,100	6,344	2,234	39,678
DC	170	7	1	-	-	1	2,054	94	6	-	2	8	72,018	9,145	3,082	351	178	3,611
DE	265	15	2	1	1	4	3,087	168	67	10	4	81	95,137	14,571	12,053	2,337	468	14,858
FL	5,340	154	54	6	4	64	58,245	2,329	790	146	54	990	1,149,052	202,093	155,182	73,054	100,321	328,557
GA	2,618	93	20	3	1	24	29,881	1,637	390	49	22	461	720,561	111,829	112,668	34,744	26,945	174,357
HI	268	12	-	-	-	-	3,640	173	10	-	-	10	115,905	14,672	7,504	1,300	588	9,392
IA	653	16	2	-	-	2	7,630	266	39	1	-	40	283,309	41,632	12,323	792	70	13,185
ID	710	10	3	-	-	3	7,585	195	23	5	-	28	157,239	21,973	19,801	6,738	3,536	30,075
IL	3,019	122	40	6	2	48	36,050	1,680	710	110	47	867	1,387,713	180,589	154,174	43,995	31,508	229,677
IN	1,665	46	11	-	1	12	17,440	855	129	8	2	139	513,428	80,691	43,693	4,318	711	48,722
KS	520	10	4	-	-	4	6,017	272	30	-	1	31	195,350	31,634	12,186	876	182	13,244
KY	858	14	4	-	-	4	9,736	366	38	3	-	41	283,716	40,276	14,638	833	122	15,593
LA	937	22	3	-	-	3	10,760	497	76	2	3	81	248,540	42,903	13,501	1,146	243	14,890
MA	2,414	50	6	-	-	6	22,466	964	97	10	1	108	830,247	76,409	54,352	8,591	2,254	65,197
MD	1,413	58	28	-	-	28	17,936	930	441	75	44	560	654,019	98,151	72,948	19,220	10,273	102,441
ME	292	8	2	-	-	2	3,099	121	27	1	-	28	99,556	14,696	8,916	1,031	154	10,101
MI	3,311	112	14	10	3	27	36,273	1,834	414	60	56	530	905,998	131,284	150,103	47,363	32,864	230,330
MN	1,808	53	7	-	-	7	20,791	771	123	11	1	135	654,584	100,708	90,231	19,639	6,674	116,544
MO	1,551	47	3	-	-	3	18,550	789	121	19	7	147	571,049	84,077	49,559	8,034	2,239	59,832
MS	463	15	4	-	-	4	4,823	224	65	7	1	73	119,101	21,353	10,491	1,422	411	12,324
MT	345	6	-	-	-	-	3,963	96	4	-	-	4	110,261	16,414	5,742	594	137	6,473
NC	2,005	55	10	2	-	12	26,008	1,381	212	14	3	229	781,985	150,249	77,431	9,985	1,632	89,048
ND	156	2	-	-	-	-	2,168	13	-	-	-	-	51,513	5,562	545	11	3	559
NE	469	7	1	-	-	1	5,239	135	5	-	-	5	168,544	28,064	7,852	303	26	8,181
NH	441	13	-	-	-	-	4,691	215	31	3	-	34	148,740	19,138	18,408	3,373	863	22,644
NJ	1,929	58	18	3	1	22	23,770	934	391	70	42	503	814,218	131,680	81,940	17,484	6,863	106,287
NM	365	22	4	-	-	4	4,687	290	61	2	1	64	142,534	25,495	16,429	2,413	268	19,110
NV	1,493	35	8	1	-	9	16,122	471	159	37	8	204	228,364	25,430	26,425	13,552	27,830	67,807
NY	2,605	67	12	2	-	14	29,612	1,340	223	32	10	265	964,089	193,070	64,794	8,696	2,435	75,925
OH	2,399	94	22	6	3	31	26,364	1,487	447	65	42	554	816,295	126,958	108,049	20,556	6,724	135,329
OK	644	8	-	-	-	-	7,120	268	34	1	1	36	181,780	28,185	8,954	334	73	9,361
OR	1,766	30	1	1	-	2	20,542	519	39	3	1	43	491,090	82,636	56,083	12,669	4,849	73,601
PA	2,098	69	26	2	-	28	25,030	1,326	326	34	19	379	847,087	150,047	67,312	8,497	2,262	78,071
RI	289	9	2	1	-	3	3,167	109	33	7	-	40	90,499	9,443	9,915	3,231	1,783	14,929
SC	1,000	24	9	1	-	10	12,772	644	141	12	11	164	328,820	51,337	35,041	6,786	2,934	44,761
SD	174	-	-	-	-	-	2,237	40	2	-	-	2	70,504	11,346	1,590	38	11	1,639
TN	1,685	35	2	-	-	2	18,448	633	83	8	3	94	410,060	66,249	33,100	4,336	906	38,342
TX	7,111	125	2	-	-	2	74,137	2,184	68	-	1	69	1,459,609	265,230	72,852	4,640	562	78,054
UT	1,659	11	1	-	-	1	17,364	266	23	2	-	25	367,311	42,311	34,803	6,696	1,541	43,040
VA	1,828	51	14	1	-	15	23,236	1,096	374	36	7	417	868,929	134,567	82,371	16,282	4,403	103,056
VT	183	4	1	-	-	1	1,773	87	22	1	-	23	67,431	7,616	2,829	206	26	3,061
WA	3,141	52	3	-	-	3	37,412	966	74	1	-	75	929,086	143,288	100,526	24,048	9,499	134,073
WI	1,481	22	9	1	2	12	17,878	519	129	20	11	160	785,060	99,578	56,032	7,935	2,348	66,315
WV	255	4	3	-	-	3	2,814	109	39	-	1	40	70,731	10,256	4,932	1,278	517	6,727
WY	138	4	-	-	-	-	1,954	49	7	-	-	7	55,056	8,371	2,626	263	80	2,969
Other ²	99	-	1	2	1	4	1,155	18	51	29	13	93	62,136	2,035	4,081	1,150	323	5,554
Total	86,476	2,125	429	57	21	507	995,072	36,466	7,975	1,043	466	9,484	27,490,730	4,046,566	2,461,915	596,144	435,453	3,493,512



¹ Inception to Date - Since April 1, 2009, the inception of HARP.

² Consists of Guam, Puerto Rico, Virgin Islands and other loans for which data are not available.

Appendix: State Level Data Fannie Mae Refinance Activity by State - October 31, 2018

State	October 2018						Year-to-Date 2018						Inception to Date ¹					
	Total Refinances	Other Streamlined Refis	HARP LTV >80% -105%	HARP LTV >105% -125%	HARP LTV >125%	Total HARP	Total Refinances	Other Streamlined Refis	HARP LTV >80% -105%	HARP LTV >105% -125%	HARP LTV >125%	Total HARP	Total Refinances	Other Streamlined Refis	HARP LTV >80% -105%	HARP LTV >105% -125%	HARP LTV >125%	Total HARP
AK	92	3	-	-	-	-	1,094	29	1	-	-	1	35,859	5,571	1,314	21	9	1,344
AL	558	21	7	-	-	7	6,415	375	134	7	1	142	188,435	32,783	17,760	2,589	566	20,915
AR	286	9	2	-	-	2	3,588	190	24	-	-	24	99,370	20,167	7,622	962	204	8,788
AZ	1,858	46	13	3	1	17	21,609	739	242	21	7	270	417,498	55,230	51,134	21,511	27,487	100,132
CA	8,982	206	26	-	-	26	113,626	2,766	409	33	10	452	3,099,462	360,335	174,583	50,191	52,100	276,874
CO	1,965	26	-	-	-	-	24,194	462	17	-	-	17	518,453	79,961	32,609	2,947	666	36,222
CT	296	10	9	3	1	13	4,233	282	108	26	8	142	191,643	31,746	19,794	3,825	1,424	25,043
DC	122	6	-	-	-	-	1,419	67	3	-	1	4	46,981	6,413	1,974	213	95	2,282
DE	156	12	1	-	1	2	1,922	117	51	4	3	58	58,564	9,483	7,411	1,442	330	9,183
FL	3,394	124	39	3	4	46	36,432	1,705	569	90	35	694	708,745	127,047	96,708	42,115	61,569	200,392
GA	1,496	76	11	1	1	13	17,917	1,132	254	29	7	290	436,809	71,814	69,480	18,997	15,046	103,523
HI	185	10	-	-	-	-	2,431	122	9	-	-	9	77,627	10,747	4,814	748	382	5,944
IA	418	14	1	-	-	1	4,903	203	24	-	-	24	178,253	23,986	6,771	463	50	7,284
ID	448	9	1	-	-	1	4,810	137	15	4	-	19	96,507	12,993	11,725	3,720	2,205	17,650
IL	1,746	78	28	4	2	34	21,322	1,120	491	74	29	594	799,692	113,774	89,510	22,398	16,452	128,360
IN	853	35	8	-	-	8	9,396	624	93	6	1	100	265,552	47,276	23,373	2,346	401	26,120
KS	293	6	3	-	-	3	3,483	192	23	-	1	24	105,250	18,965	7,279	536	124	7,939
KY	433	7	2	-	-	2	4,929	229	20	2	-	22	133,000	22,048	7,196	391	68	7,655
LA	565	18	2	-	-	2	6,664	372	53	2	1	56	167,903	30,207	8,256	581	139	8,976
MA	1,561	37	3	-	-	3	13,987	657	58	6	1	65	503,904	56,318	33,591	4,707	1,352	39,650
MD	839	45	18	-	-	18	11,167	626	295	45	24	364	394,286	58,989	44,304	11,104	6,478	61,886
ME	163	6	2	-	-	2	1,742	90	19	1	-	20	53,616	9,616	5,431	678	97	6,206
MI	1,912	81	10	4	3	17	22,010	1,290	298	38	32	368	531,511	78,157	89,330	25,141	18,251	132,722
MN	1,055	29	5	-	-	5	12,870	484	81	9	1	91	359,845	48,096	45,379	9,431	3,729	58,539
MO	908	35	3	-	-	3	11,292	548	71	10	1	82	331,664	54,082	28,459	4,437	1,168	34,064
MS	298	12	4	-	-	4	3,138	174	52	6	-	58	87,663	16,387	7,219	939	301	8,459
MT	210	5	-	-	-	-	2,498	71	3	-	-	3	71,091	10,432	3,596	350	104	4,050
NC	1,100	33	8	2	-	10	14,991	921	126	8	-	134	444,463	89,890	43,737	5,386	896	50,019
ND	87	1	-	-	-	-	1,086	8	-	-	-	-	3,006	3,006	319	8	1	328
NE	299	5	1	-	-	1	3,469	102	5	-	-	5	110,910	16,974	5,034	220	18	5,272
NH	250	9	-	-	-	-	2,784	154	22	2	-	24	86,176	12,644	10,947	1,868	530	13,345
NJ	1,203	40	11	-	1	12	15,377	677	266	45	27	338	517,042	83,814	51,981	10,171	4,244	66,396
NM	228	16	2	-	-	2	3,024	200	38	2	-	40	92,240	17,143	9,957	1,492	177	11,626
NV	980	27	4	-	-	4	10,680	345	107	26	5	138	142,565	15,931	16,842	8,010	16,692	41,544
NY	1,707	56	10	-	-	10	19,168	923	154	20	5	179	605,545	120,026	39,049	5,070	1,537	45,656
OH	1,224	67	15	5	2	22	14,713	1,034	331	38	25	394	427,270	76,030	59,628	10,760	3,667	74,055
OK	372	6	-	-	-	-	4,354	195	20	1	-	22	119,310	18,825	4,929	187	47	5,163
OR	1,081	24	1	-	-	1	13,003	325	31	1	-	32	292,078	48,847	32,609	7,153	3,000	42,762
PA	1,286	47	22	-	-	22	15,624	954	222	22	13	257	527,766	91,576	39,967	5,119	1,424	46,510
RI	164	6	2	-	-	2	1,879	81	25	6	-	31	54,518	6,382	6,312	1,843	1,116	9,271
SC	594	15	7	1	-	8	7,812	464	98	10	5	113	202,129	34,287	20,996	3,962	1,773	26,731
SD	108	-	-	-	-	-	1,406	29	-	-	-	-	50,849	6,340	934	27	9	970
TN	928	27	2	-	-	2	10,969	443	63	6	1	70	257,031	43,955	20,561	2,750	648	23,959
TX	4,699	84	2	-	-	2	49,494	1,596	50	-	1	51	984,253	172,028	47,879	3,241	369	51,489
UT	981	7	-	-	-	-	10,580	165	14	-	-	14	215,637	26,501	19,769	3,569	911	24,249
VA	1,086	36	10	-	-	10	14,149	751	241	25	6	272	529,866	84,905	50,695	9,991	2,920	63,206
VT	91	3	1	-	-	1	890	65	17	-	-	17	33,518	4,572	1,490	111	13	1,614
WA	1,871	34	2	-	-	2	24,005	635	57	1	-	58	577,402	92,697	60,702	13,609	6,025	80,336
WI	860	18	7	1	1	9	10,883	379	95	12	6	113	494,530	62,844	29,726	4,059	1,352	35,137
WV	150	3	3	-	-	3	1,632	75	21	-	1	22	41,061	6,204	2,836	607	287	3,730
WY	84	4	-	-	-	-	1,288	28	6	-	-	6	38,517	5,680	1,807	164	56	2,027
Other ²	87	-	1	2	1	4	997	9	34	22	12	68	50,573	1,060	2,847	800	242	3,889
Total	52,612	1,534	309	29	18	356	623,348	25,361	5,460	660	271	6,391	16,885,125	2,554,784	1,478,175	332,560	258,751	2,069,486



¹ Inception to Date - Since April 1, 2009, the inception of HARP.

² Consists of Guam, Puerto Rico, Virgin Islands and other loans for which data are not available.

Appendix: State Level Data Freddie Mac Refinance Activity by State - October 31, 2018

State	October 2018							Year-to-Date 2018						Inception to Date ¹				
	Total Refinances	Other Streamlined Refis	HARP LTV >80% -105%	HARP LTV >105% - 125%	HARP LTV >125%	Total HARP	Total Refinances	Other Streamlined Refis	HARP LTV >80% -105%	HARP LTV >105% - 125%	HARP LTV >125%	Total HARP	Total Refinances	Other Streamlined Refis	HARP LTV >80% -105%	HARP LTV >105% - 125%	HARP LTV >125%	Total HARP
AK	79	-	1	-	-	1	797	27	2	-	-	2	25,006	4,397	936	11	2	949
AL	374	9	2	-	-	2	3,798	149	55	6	2	63	90,226	14,945	9,130	1,499	336	10,965
AR	272	2	-	-	-	-	2,591	68	3	1	1	5	58,644	8,911	4,452	743	120	5,315
AZ	1,176	25	3	-	-	3	12,383	357	154	13	8	175	262,098	35,065	32,977	17,298	16,486	66,761
CA	5,021	85	8	-	-	8	58,911	1,359	181	25	5	211	1,720,346	184,634	99,714	38,938	36,170	174,822
CO	1,225	8	-	1	-	1	13,393	212	16	2	-	18	295,674	43,783	20,517	1,950	434	22,901
CT	259	4	1	1	-	2	2,714	91	55	15	5	75	119,762	15,797	11,306	2,519	810	14,635
DC	48	1	1	-	-	1	635	27	3	-	-	4	25,037	2,732	1,108	138	83	1,329
DE	109	3	1	1	-	2	1,165	51	16	6	1	23	36,573	5,088	4,642	895	138	5,675
FL	1,946	30	15	3	-	18	21,813	624	221	56	19	296	440,307	75,046	58,474	30,939	38,752	128,165
GA	1,122	17	9	2	-	11	11,964	505	136	20	15	171	283,752	40,015	43,188	15,747	11,899	70,834
HI	83	2	-	-	-	-	1,209	51	1	-	-	1	38,278	3,925	2,690	552	206	3,448
IA	235	2	1	-	-	1	2,727	63	15	1	-	16	105,056	17,646	5,552	329	20	5,901
ID	262	1	2	-	-	2	2,775	58	8	1	-	9	60,732	8,980	8,076	3,018	1,331	12,425
IL	1,273	44	12	2	-	14	14,728	560	219	36	18	273	588,021	66,815	64,664	21,597	15,056	101,317
IN	812	11	3	-	1	4	8,044	231	36	2	-	39	247,876	33,415	20,320	1,972	310	22,602
KS	227	4	1	-	-	1	2,534	80	7	-	-	7	90,100	12,669	4,907	340	58	5,305
KY	425	7	2	-	-	2	4,807	137	18	1	-	19	150,716	18,228	7,442	442	54	7,938
LA	372	4	1	-	-	1	4,096	125	23	-	2	25	80,637	12,696	5,245	565	104	5,914
MA	853	13	3	-	-	3	8,479	307	39	4	-	43	326,343	20,091	20,761	3,884	902	25,547
MD	574	13	10	-	-	10	6,769	304	146	30	20	196	259,733	39,162	28,644	8,116	3,795	40,555
ME	129	2	-	-	-	-	1,357	31	8	-	-	8	45,940	5,080	3,485	353	57	3,895
MI	1,399	31	4	6	-	10	14,263	544	116	22	24	162	374,487	53,127	60,773	22,222	14,613	97,608
MN	753	24	2	-	-	2	7,921	287	42	2	-	44	294,739	52,612	44,852	10,208	2,945	58,005
MO	643	12	-	-	-	-	7,258	241	50	9	6	65	239,385	29,995	21,100	3,597	1,071	25,768
MS	165	3	-	-	-	-	1,685	50	13	1	1	15	31,438	4,966	3,272	483	110	3,865
MT	135	1	-	-	-	-	1,465	25	1	-	-	1	39,170	5,982	2,146	244	33	2,423
NC	905	22	2	-	-	2	11,017	460	86	6	3	95	337,522	60,359	33,694	4,599	736	39,029
ND	69	1	-	-	-	-	1,082	5	-	-	-	-	20,820	2,556	226	3	2	231
NE	170	2	-	-	-	-	1,770	33	-	-	-	-	57,634	11,090	2,818	83	8	2,909
NH	191	4	-	-	-	-	1,907	61	9	1	-	10	62,564	6,494	7,461	1,505	333	9,299
NJ	726	18	7	3	-	10	8,393	257	125	25	15	165	297,176	47,866	29,959	7,313	2,619	39,891
NM	137	6	2	-	-	2	1,663	90	23	-	1	24	50,294	8,352	6,472	921	91	7,484
NV	513	8	4	1	-	5	5,442	126	52	11	3	66	85,799	9,499	9,583	5,542	11,138	26,263
NY	898	11	2	2	-	4	10,444	417	69	12	5	86	358,544	73,044	25,745	3,626	898	30,269
OH	1,175	27	7	1	1	9	11,651	453	116	27	17	160	389,025	50,928	48,421	9,796	3,057	61,274
OK	272	2	-	-	-	-	2,766	73	14	-	-	14	62,470	9,360	4,025	147	26	4,198
OR	685	6	-	1	-	1	7,539	194	8	2	1	11	199,012	33,789	23,474	5,516	1,849	30,839
PA	812	22	4	2	-	6	9,406	372	104	12	6	122	319,321	58,471	27,345	3,378	838	31,561
RI	125	3	-	1	-	1	1,288	28	8	1	-	9	35,981	3,061	3,603	1,388	667	5,658
SC	406	9	2	-	-	2	4,960	180	43	2	6	51	126,691	17,050	14,045	2,824	1,161	18,030
SD	66	-	-	-	-	-	831	11	2	-	-	2	19,655	5,006	656	11	2	669
TN	757	8	-	-	-	-	7,479	190	20	2	2	24	153,029	22,294	12,539	1,586	258	14,383
TX	2,412	41	-	-	-	-	24,643	588	18	-	-	18	475,356	93,202	24,973	1,399	193	26,565
UT	678	4	1	-	-	1	6,784	101	9	2	-	11	151,674	15,810	15,034	3,127	630	18,791
VA	742	15	4	1	-	5	9,087	345	133	11	1	145	339,063	49,662	31,676	6,691	1,483	39,850
VT	92	1	-	-	-	-	883	22	5	1	-	6	33,913	3,044	1,339	95	13	1,447
WA	1,270	18	1	-	-	1	13,407	331	17	-	-	17	351,684	50,591	39,824	10,439	3,474	53,737
WI	621	4	2	-	1	3	6,995	140	34	8	5	47	290,530	36,734	26,306	3,876	996	31,178
WV	105	1	-	-	-	-	1,182	34	18	-	-	18	29,670	4,052	2,096	671	230	2,997
WY	54	-	-	-	-	-	666	21	1	-	-	1	16,539	2,691	819	99	24	942
Other ²	12	-	-	-	-	-	158	9	17	7	1	25	11,563	975	1,234	350	81	1,665
Total	33,864	591	120	28	3	151	371,724	11,105	2,515	383	195	3,093	10,605,605	1,491,782	983,740	263,584	176,702	1,424,026



¹ Inception to Date - Since April 1, 2009, the inception of HARP.

² Consists of Guam, Puerto Rico, Virgin Islands and other loans for which data are not available.