



REFINANCE REPORT

November 2018

November 2018 Highlights

- Total refinance volume increased in November 2018 after falling throughout most of the year in response to rising mortgage rates. Mortgage rates increased in November: the average interest rate on a 30-year fixed rate mortgage rose to 4.87 percent from 4.83 percent in October.

In November 2018:

- Borrowers completed 449 refinances through HARP, bringing total refinances from the inception of the program to 3,493,961.
- HARP volume represented less than 1 percent of total refinance volume.
- One percent of the loans refinanced through HARP had a loan-to-value ratio greater than 125 percent.

Year to date through November 2018:

- Borrowers with loan-to-value ratios greater than 105 percent accounted for 16 percent of the volume of HARP loans.
- Thirty-three 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 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

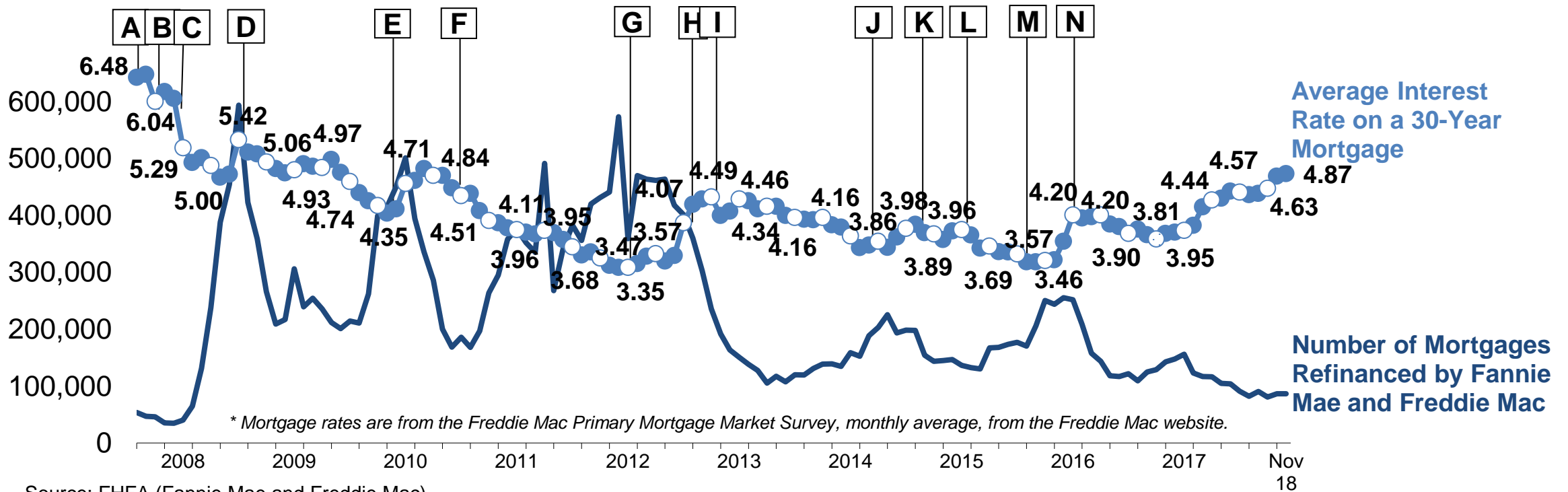
Below are the basic HARP eligibility criteria:

- 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 November 2018 after falling throughout most of the year in response to rising mortgage rates. Mortgage rates increased in November: the average interest rate on a 30-year fixed rate mortgage rose to 4.87 percent from 4.83 percent in October.

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 November 2018, 449 refinances were completed through HARP, bringing total refinances through HARP from the inception¹ of the program to 3,493,961.

Refinances Through November 2018

	November 2018	Year to Date 2018	2017	Inception to Date
Total Refinances				
Fannie Mae	46,173	669,521	1,015,002	16,931,298
Freddie Mac	<u>40,434</u>	<u>412,158</u>	<u>661,011</u>	<u>10,646,039</u>
Total	86,607	1,081,679	1,676,013	27,577,337
Total HARP				
Fannie Mae	321	6,712	22,485	2,069,807
Freddie Mac	<u>128</u>	<u>3,221</u>	<u>13,870</u>	<u>1,424,154</u>
Total	449	9,933	36,355	3,493,961
HARP LTV >80% - 105%				
Fannie Mae	281	5,741	18,559	1,478,456
Freddie Mac	<u>115</u>	<u>2,630</u>	<u>10,882</u>	<u>983,855</u>
Total	396	8,371	29,441	2,462,311
HARP LTV >105% - 125%				
Fannie Mae	34	694	2,719	332,594
Freddie Mac	<u>13</u>	<u>396</u>	<u>2,052</u>	<u>263,597</u>
Total	47	1,090	4,771	596,191
HARP LTV >125%				
Fannie Mae	6	277	1,207	258,757
Freddie Mac	<u>0</u>	<u>195</u>	<u>936</u>	<u>176,702</u>
Total	6	472	2,143	435,459
All Other Streamlined Refis				
Fannie Mae	1,579	26,940	69,877	2,556,363
Freddie Mac	<u>615</u>	<u>11,720</u>	<u>40,941</u>	<u>1,492,397</u>
Total	2,194	38,660	110,818	4,048,760

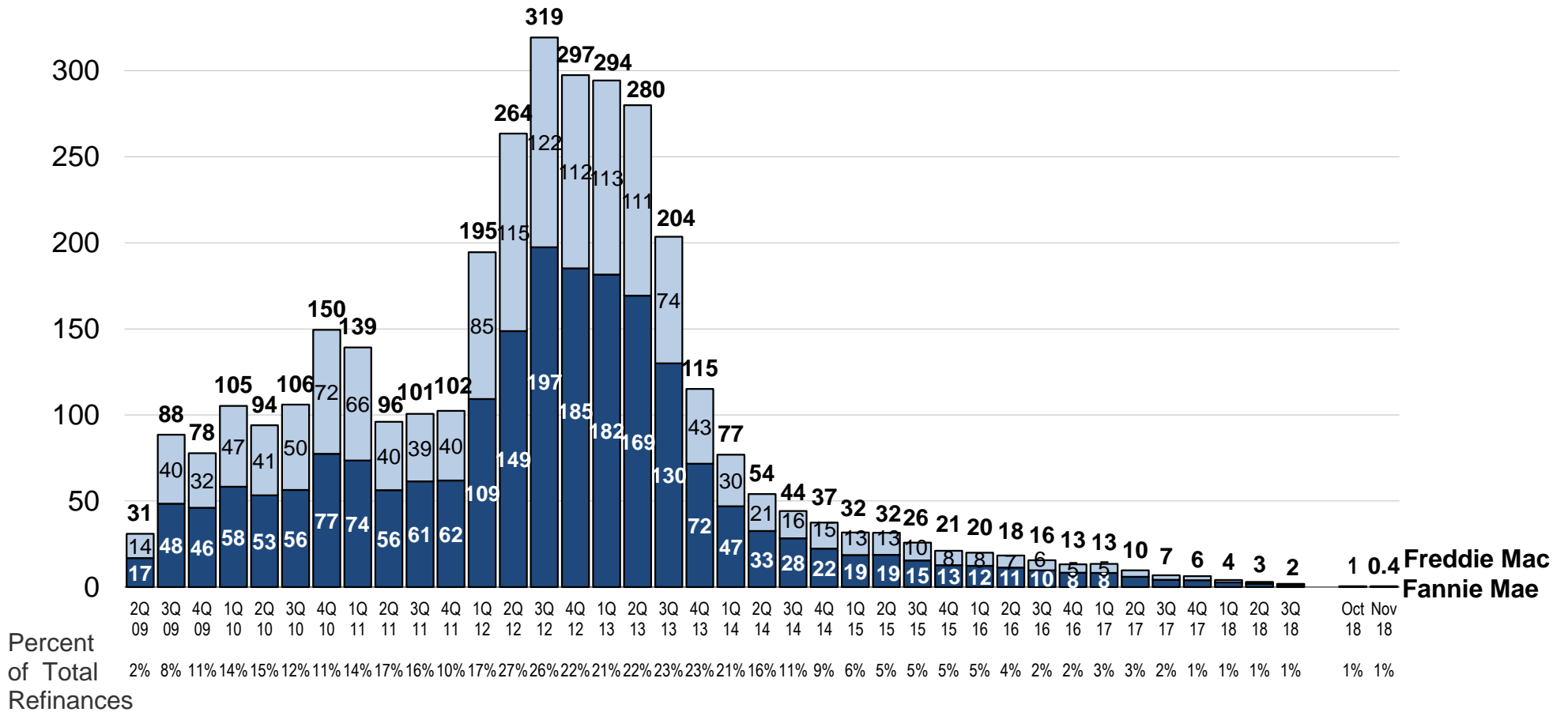
¹ Inception - April 1, 2009

Source: FHFA (Fannie Mae and Freddie Mac)



In November 2018, 507 loans were refinanced through HARP, representing less than 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 November 2018, 2,918,652 loans refinanced through HARP were for primary residences, 110,870 were for second homes and 464,439 were for investment properties.

HARP Loans by Property Type Inception through November 2018

	Total	Primary Residence	Second Home	Investment Property
Total HARP				
Fannie Mae	2,069,807	1,706,510	62,330	300,967
Freddie Mac	1,424,154	1,212,142	48,540	163,472
Total	3,493,961	2,918,652	110,870	464,439
HARP LTV >80% -105%				
Fannie Mae	1,478,456	1,243,858	45,385	189,213
Freddie Mac	983,855	855,632	31,732	96,491
Total	2,462,311	2,099,490	77,117	285,704
HARP LTV >105% -125%				
Fannie Mae	332,594	267,163	8,917	56,514
Freddie Mac	263,597	218,799	9,154	35,644
Total	596,191	485,962	18,071	92,158
HARP LTV >125%				
Fannie Mae	258,757	195,489	8,028	55,240
Freddie Mac	176,702	137,711	7,654	31,337
Total	435,459	333,200	15,682	86,577

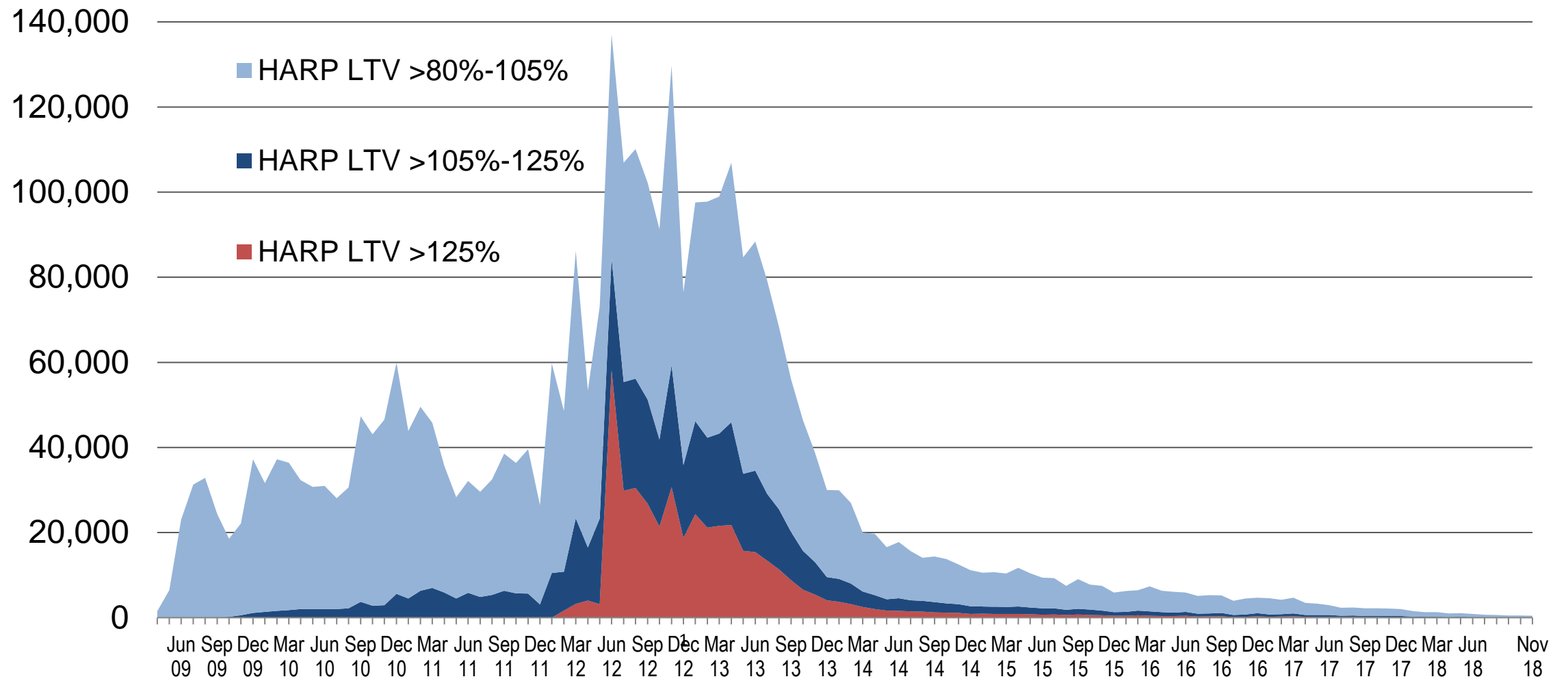
Source: FHFA (Fannie Mae and Freddie Mac)

¹Inception - April 1, 2009



In November 2018, 1 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



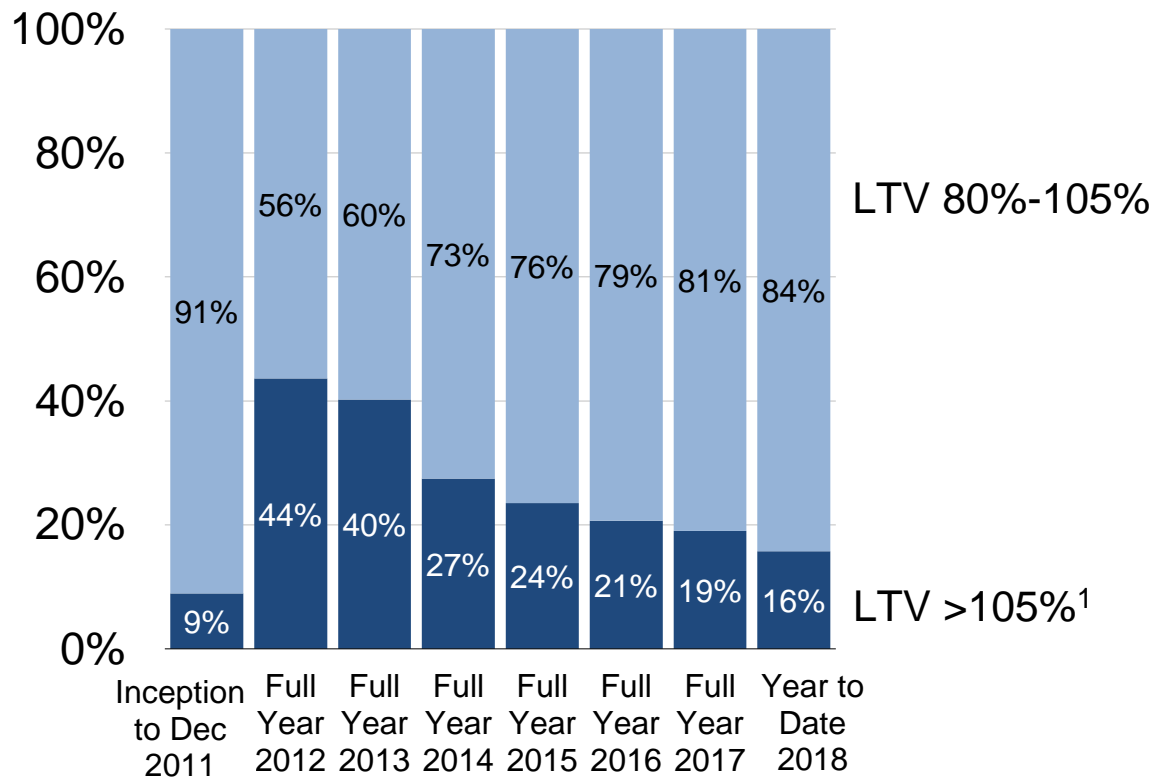
¹ The number of completed HARP refinances reported for deeply underwater borrowers increased sharply in June 2012 as further enhancements to HARP went into effect. Starting June 1, 2012, lenders became able to deliver loans with loan-to-value ratios greater than 125 percent refinanced through HARP to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

Source: FHFA (Fannie Mae and Freddie Mac)



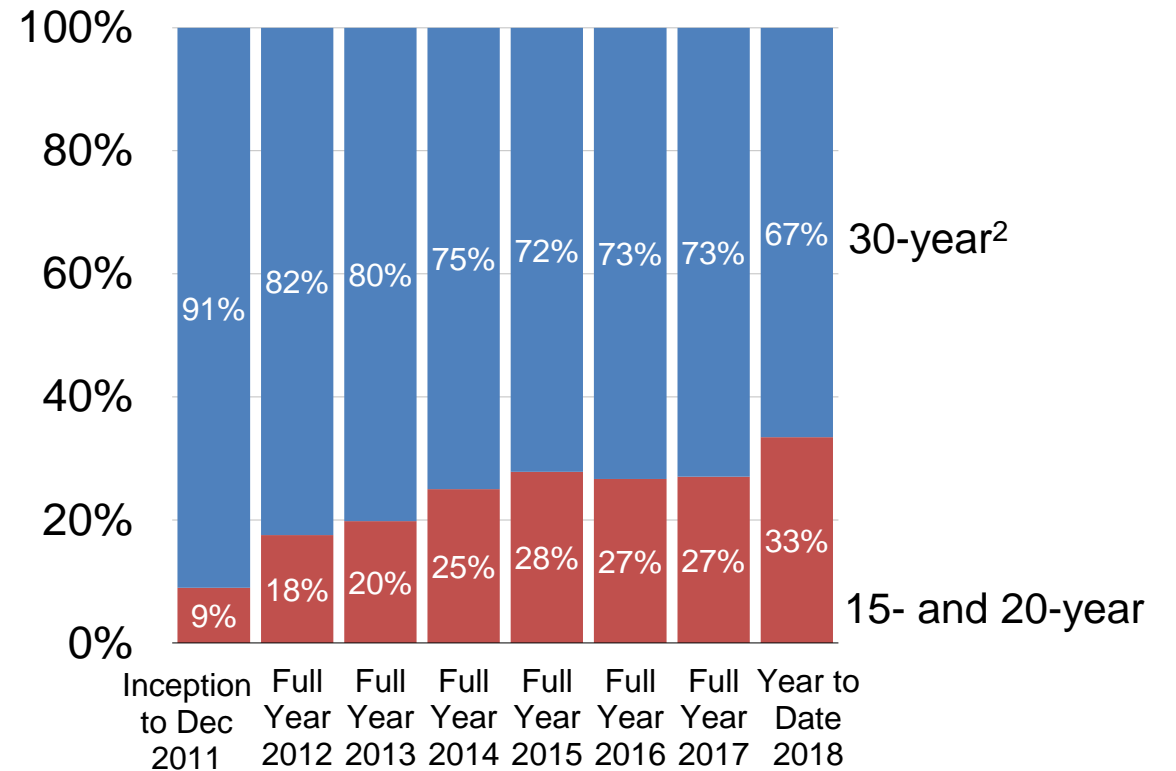
Year to date through November 2018, borrowers with loan-to-value ratios greater than 105 percent accounted for 16 percent of the volume of HARP loans. Refinancing to shorter term mortgages accounted for 33 percent of HARP refinances for underwater borrowers (LTV greater than 105 percent). Shorter term 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.

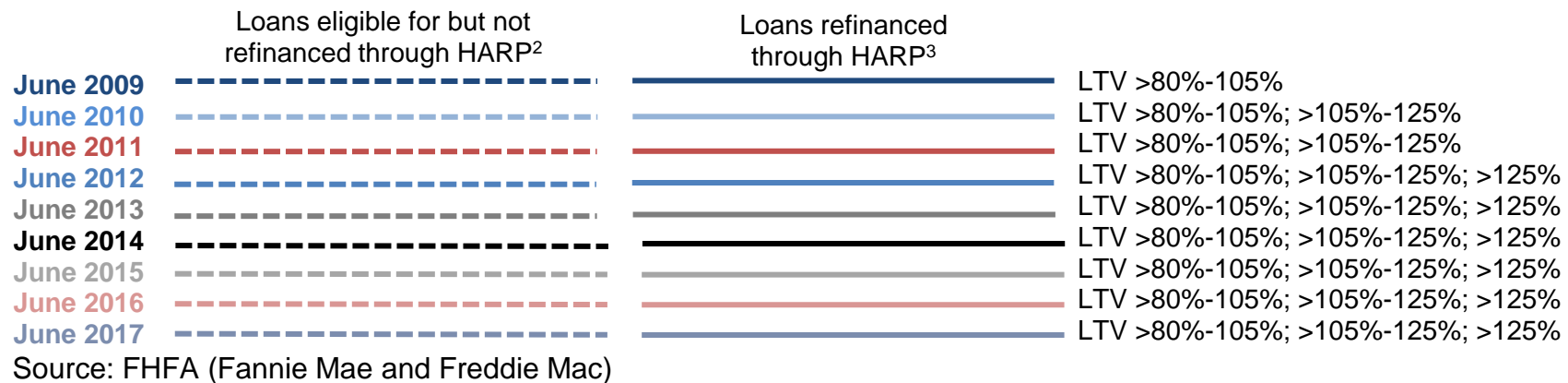
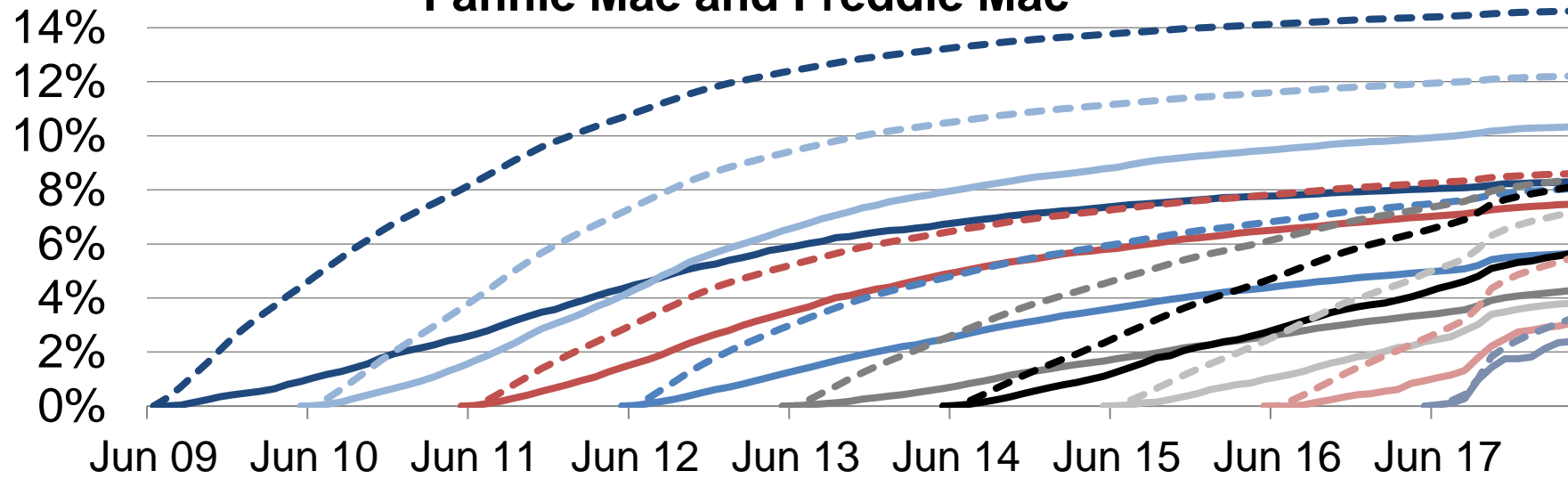
Fannie Mae defines a HARP eligible loan as being current on payments for the last 6 months with at most a single missed payment in the last 12 months for both HARP 1 and HARP 2 eligibility; Freddie Mac defines a HARP eligible loan as being current on payments for the last 12 months for HARP 1 (2009-2011)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

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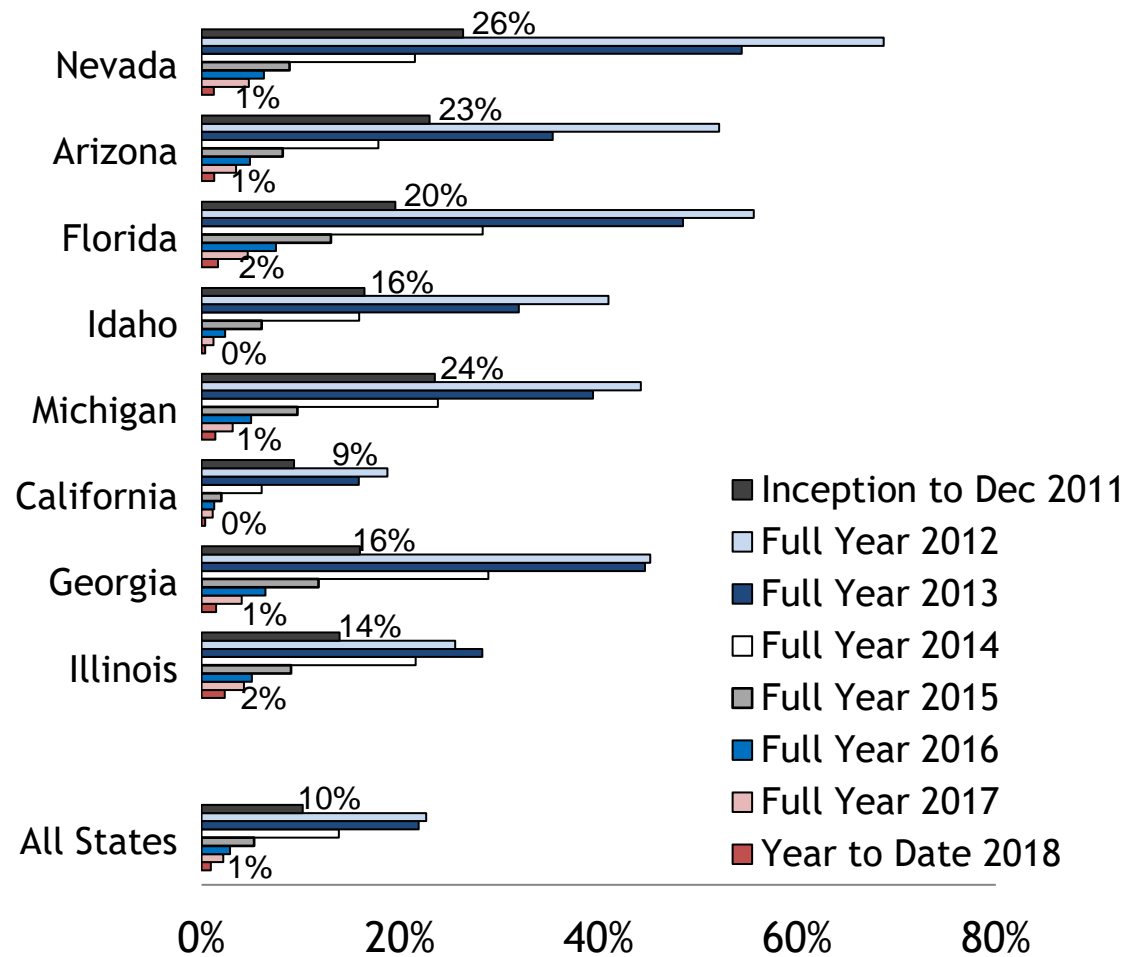
Other eligibility rules specific to Fannie Mae and Freddie Mac may also apply.



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

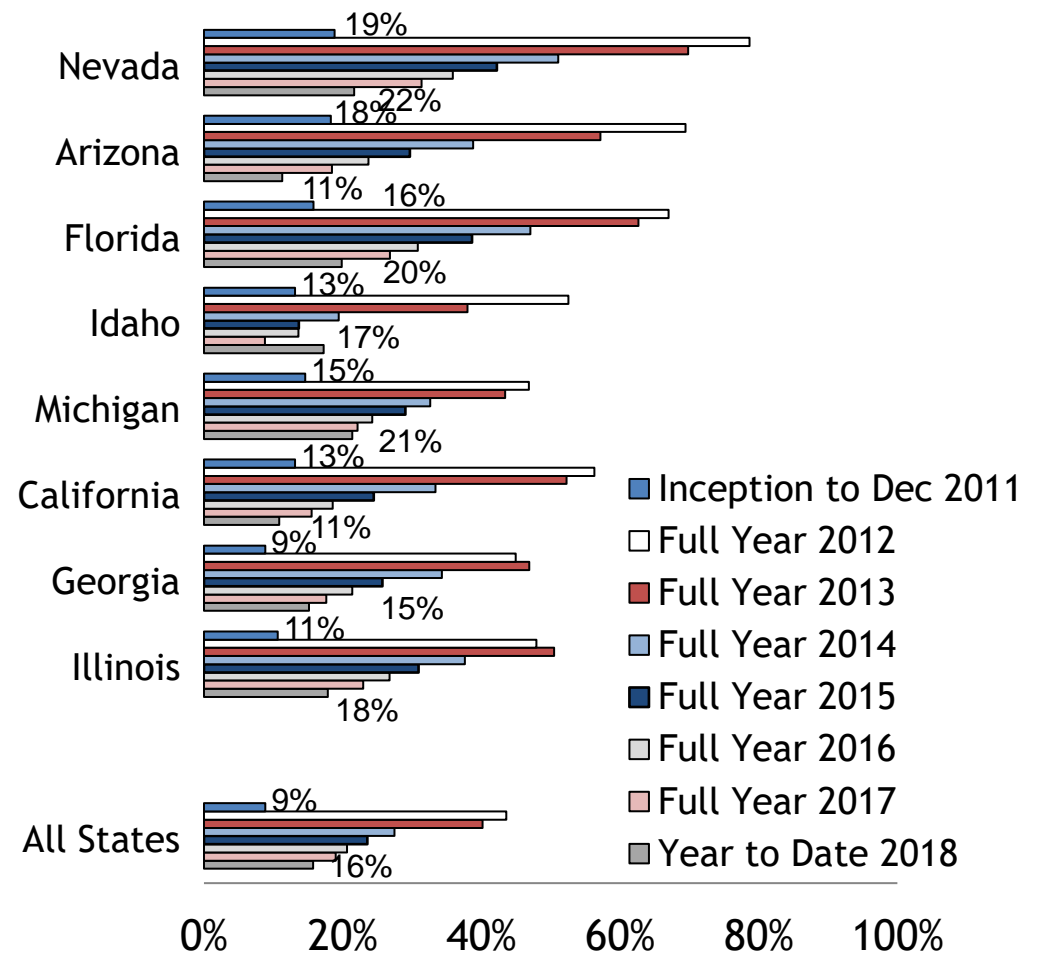
Underwater borrowers accounted for a large portion of HARP refinances in a number of states. Year to date through November 2018, underwater borrowers represented 20 percent or more of HARP volume in Nevada, Florida and Michigan.

Total HARP as a Percentage of Total Refinances



Source: FHFA (Fannie Mae and Freddie Mac)

HARP LTV >105% as a Percentage of Total HARP

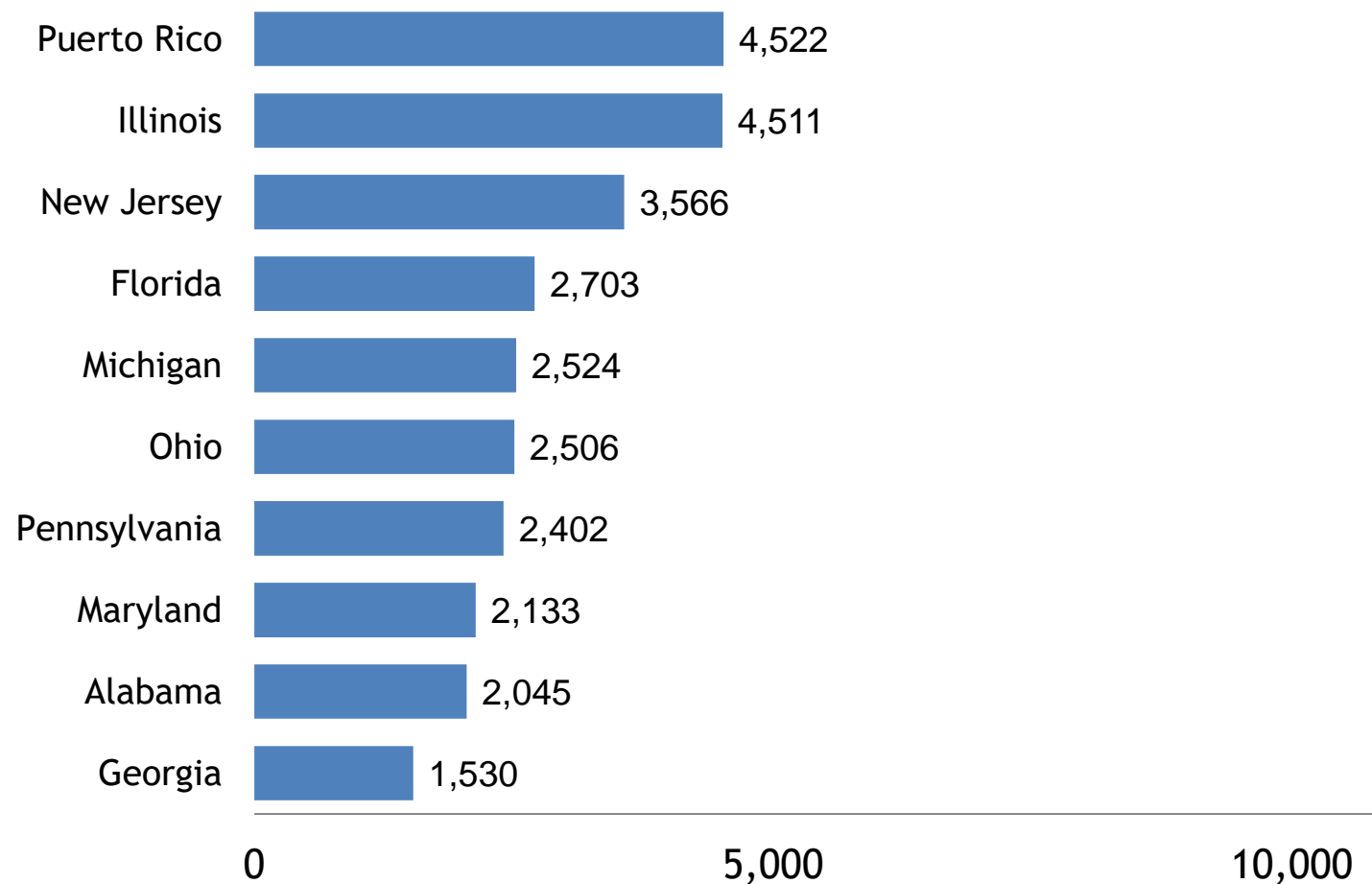


Source: FHFA (Fannie Mae and Freddie Mac)



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)

	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18
Total Refinances													
Fannie Mae	85,174	91,576	81,220	77,403	73,003	60,757	61,628	56,441	52,177	58,237	49,870	52,612	46,173
Freddie Mac	62,525	64,334	41,950	39,237	43,188	44,105	42,117	34,412	29,805	32,269	30,777	33,864	40,434
Total	147,699	155,910	123,170	116,640	116,191	104,862	103,745	90,853	81,982	90,506	80,647	86,476	86,607
Total HARP													
Fannie Mae	1,393	1,231	1,031	814	889	695	734	584	465	456	367	356	321
Freddie Mac	730	771	526	478	401	322	343	295	231	195	151	151	128
Total	2,123	2,002	1,557	1,292	1,290	1,017	1,077	879	696	651	518	507	449
HARP LTV >80% -105%													
Fannie Mae	1,162	1,045	863	730	729	602	626	509	392	394	306	309	281
Freddie Mac	584	588	453	384	330	270	267	236	169	154	132	120	115
Total	1,746	1,633	1,316	1,114	1,059	872	893	745	561	548	438	429	396
HARP LTV >105% -125%													
Fannie Mae	173	139	109	73	108	76	67	59	53	45	41	29	34
Freddie Mac	104	121	42	69	48	37	49	45	28	28	9	28	13
Total	277	260	151	142	156	113	116	104	81	73	50	57	47
HARP LTV >125%													
Fannie Mae	58	47	59	11	52	17	41	16	20	17	20	18	6
Freddie Mac	42	62	31	25	23	15	27	14	34	13	10	3	-
Total	100	109	90	36	75	32	68	30	54	30	30	21	6
All Other Streamlined Refis													
Fannie Mae	4,618	4,721	3,629	3,574	3,160	2,787	3,044	2,189	1,854	1,868	1,722	1,534	1,579
Freddie Mac	2,491	2,808	1,884	1,682	1,462	1,285	1,269	906	740	676	610	591	615
Total	7,109	7,529	5,513	5,256	4,622	4,072	4,313	3,095	2,594	2,544	2,332	2,125	2,194

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)

	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18
Total Refinances													
FRM 30 (incl FRM 25 & 40)	52,083	57,249	53,665	51,460	46,450	37,342	41,023	38,482	37,202	41,634	36,096	37,746	33,373
FRM 20	8,955	10,198	8,232	8,472	9,130	6,268	5,928	4,721	4,361	4,898	3,849	4,045	3,427
FRM 15	22,602	22,675	17,806	16,203	16,550	15,760	13,157	12,170	9,767	10,649	9,021	10,153	8,836
HARP >80-105 LTV													
FRM 30 (incl FRM 25 & 40)	678	619	522	443	428	316	356	304	214	261	190	187	163
FRM 20	209	198	153	130	156	153	119	92	88	57	38	66	54
FRM 15	257	218	178	150	141	120	128	103	81	70	74	52	62
HARP >105-125 LTV													
FRM 30 (incl FRM 25 & 40)	109	98	65	46	61	57	52	36	29	29	27	19	28
FRM 20	23	27	14	20	15	14	13	7	10	8	8	2	4
FRM 15	41	14	30	7	32	5	2	16	14	8	6	8	2
HARP > 125 LTV													
FRM 30 (incl FRM 25 & 40)	49	31	47	4	37	9	33	3	11	11	12	-	5
FRM 20	1	10	6	2	9	4	4	1	4	1	5	12	1
FRM 15	8	6	6	5	6	4	4	12	5	5	3	6	-
All Other Streamlined Refis													
FRM 30 (incl FRM 25 & 40)	1,930	1,972	1,543	1,526	1,314	1,120	1,402	1,022	799	869	793	816	699
FRM 20	763	943	673	697	678	502	515	312	363	308	245	239	276
FRM 15	1,871	1,782	1,379	1,322	1,145	1,112	1,068	803	656	654	653	463	593



Appendix: Data Tables

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

	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18
Total Refinances													
FRM 30 (incl FRM 25 & 40)	40,530	41,806	26,612	24,440	28,728	30,211	28,902	23,783	20,636	22,975	21,365	24,627	31,140
FRM 20	3,581	3,893	3,238	2,680	2,767	3,077	3,243	2,982	2,205	2,309	2,022	2,003	2,430
FRM 15	17,128	17,692	11,414	11,662	11,160	10,048	9,354	7,240	6,588	6,664	6,972	6,807	6,532
HARP >80-105 LTV													
FRM 30 (incl FRM 25 & 40)	360	341	296	223	190	169	173	157	116	106	94	80	75
FRM 20	82	128	77	65	61	42	40	36	23	24	12	18	15
FRM 15	139	110	79	96	77	59	54	41	29	23	26	22	25
HARP >105-125 LTV													
FRM 30 (incl FRM 25 & 40)	73	75	36	52	24	28	44	35	16	23	7	19	10
FRM 20	6	15	-	6	4	5	3	4	4	5	2	6	3
FRM 15	25	31	6	11	20	4	2	6	8	-	-	3	-
HARP > 125 LTV													
FRM 30 (incl FRM 25 & 40)	36	38	21	17	19	7	18	7	21	6	7	2	-
FRM 20	1	11	6	6	2	5	-	5	2	3	1	1	-
FRM 15	5	13	4	2	2	3	9	2	11	4	2	-	-
All Other Streamlined Refis													
FRM 30 (incl FRM 25 & 40)	1,064	1,157	823	649	649	581	560	469	377	382	334	319	306
FRM 20	255	565	362	294	229	227	191	127	115	81	78	69	80
FRM 15	1,168	1,075	688	733	581	473	514	307	244	211	196	201	229



Appendix: State Level Data

Enterprises Refinance Activity by State - November 30, 2018

State	November 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	138	5	-	-	-	-	2,029	61	3	-	-	3	61,003	9,973	2,250	32	11	2,293
AL	855	27	11	-	-	11	11,068	551	200	13	3	216	279,516	47,755	26,901	4,088	902	31,891
AR	622	13	3	-	-	3	6,801	271	30	1	1	32	158,636	29,091	12,077	1,705	324	14,106
AZ	3,154	76	20	4	-	24	37,146	1,172	416	38	15	469	682,750	90,371	84,131	38,813	43,973	166,917
CA	14,237	222	27	2	-	29	186,774	4,347	617	60	15	692	4,834,045	545,191	274,324	89,131	88,270	451,725
CO	3,138	43	-	-	-	-	40,725	717	33	2	-	35	817,265	123,787	53,126	4,897	1,100	59,123
CT	609	20	5	1	-	6	7,556	393	168	42	13	223	312,014	47,563	31,105	6,345	2,234	39,684
DC	179	10	-	-	-	-	2,233	104	6	-	2	8	72,197	9,155	3,082	351	178	3,611
DE	236	13	1	-	-	1	3,323	181	68	10	4	82	95,373	14,584	12,054	2,337	468	14,859
FL	5,084	154	48	8	-	56	63,329	2,483	838	154	54	1,046	1,154,136	202,247	155,230	73,062	100,321	328,613
GA	2,680	96	19	2	-	21	32,561	1,733	409	51	22	482	723,241	111,925	112,687	34,746	26,945	174,378
HI	228	13	-	-	-	-	3,868	186	10	-	-	10	116,133	14,685	7,504	1,300	588	9,392
IA	627	12	-	-	-	-	8,257	278	39	1	-	40	283,936	41,644	12,323	792	70	13,185
ID	701	12	1	-	-	1	8,286	207	24	5	-	29	157,940	21,985	19,802	6,738	3,536	30,076
IL	3,375	98	45	7	-	52	39,425	1,778	755	117	47	919	1,391,088	180,687	154,219	44,002	31,508	229,729
IN	1,587	42	5	-	-	5	19,027	897	134	8	2	144	515,015	80,733	43,698	4,318	711	48,727
KS	522	18	2	-	-	2	6,539	290	32	-	1	33	195,872	31,652	12,188	876	182	13,246
KY	872	26	1	-	-	1	10,608	392	39	3	-	42	284,588	40,302	14,639	833	122	15,594
LA	940	23	3	-	-	3	11,700	520	79	2	3	84	249,480	42,926	13,504	1,146	243	14,893
MA	1,845	59	4	1	-	5	24,311	1,023	101	11	1	113	832,092	76,468	54,356	8,592	2,254	65,202
MD	1,409	66	25	4	1	30	19,345	996	466	79	45	590	655,428	98,217	72,973	19,224	10,274	102,471
ME	282	11	-	-	-	-	3,381	132	27	1	-	28	99,838	14,707	8,916	1,031	154	10,101
MI	3,518	122	19	-	2	21	39,791	1,956	433	60	58	551	909,516	131,406	150,122	47,363	32,866	230,351
MN	1,826	59	7	1	-	8	22,617	830	130	12	1	143	656,410	100,767	90,238	19,640	6,674	116,552
MO	1,608	50	9	2	-	11	20,158	839	130	21	7	158	572,657	84,127	49,568	8,036	2,239	59,843
MS	476	18	2	-	-	2	5,299	242	67	7	1	75	119,577	21,371	10,493	1,422	411	12,326
MT	358	4	-	-	-	-	4,321	100	4	-	-	4	110,619	16,418	5,742	594	137	6,473
NC	2,132	67	9	1	-	10	28,140	1,448	221	15	3	239	784,117	150,316	77,440	9,986	1,632	89,058
ND	123	1	-	-	-	-	2,291	14	-	-	-	-	51,636	5,563	545	11	3	559
NE	490	15	1	-	-	1	5,729	150	6	-	-	6	169,034	28,079	7,853	303	26	8,182
NH	424	15	2	-	-	2	5,115	230	33	3	-	36	149,164	19,153	18,410	3,373	863	22,646
NJ	1,935	57	26	7	2	35	25,705	991	417	77	44	538	816,153	131,737	81,966	17,491	6,865	106,322
NM	363	16	4	-	-	4	5,050	306	65	2	1	68	142,897	25,511	16,433	2,413	268	19,114
NV	1,508	31	11	2	-	13	17,630	502	170	39	8	217	229,872	25,461	26,436	13,554	27,830	67,820
NY	2,768	58	2	-	-	2	32,380	1,398	225	32	10	267	966,857	193,128	64,796	8,696	2,435	75,927
OH	2,426	100	20	1	-	21	28,790	1,587	467	66	42	575	818,721	127,058	108,069	20,557	6,724	135,350
OK	605	25	1	-	-	1	7,725	293	35	1	1	37	182,385	28,210	8,955	334	73	9,362
OR	1,741	26	2	-	-	2	22,283	545	41	3	1	45	492,831	82,662	56,085	12,669	4,849	73,603
PA	2,103	93	19	-	-	19	27,133	1,419	345	34	19	398	849,190	150,140	67,331	8,497	2,262	78,090
RI	253	4	-	-	-	-	3,420	113	33	7	-	40	90,752	9,447	9,915	3,231	1,783	14,929
SC	1,053	27	2	1	-	3	13,825	671	143	13	11	167	329,873	51,364	35,043	6,787	2,934	44,764
SD	196	1	-	-	-	-	2,433	41	2	-	-	2	70,700	11,347	1,590	38	11	1,639
TN	1,536	39	5	-	-	5	19,984	672	88	8	3	99	411,596	66,288	33,105	4,336	906	38,347
TX	7,145	130	4	1	-	5	81,282	2,314	72	1	1	74	1,466,754	265,360	72,856	4,641	562	78,059
UT	1,512	14	-	-	-	-	18,876	280	23	2	-	25	368,823	42,325	34,803	6,696	1,541	43,040
VA	2,006	66	18	2	-	20	25,242	1,162	392	38	7	437	870,935	134,633	82,389	16,284	4,403	103,076
VT	130	4	-	-	-	-	1,903	91	22	1	-	23	67,561	7,620	2,829	206	26	3,061
WA	3,073	53	2	-	-	2	40,485	1,019	76	1	-	77	932,159	143,341	100,528	24,048	9,499	134,075
WI	1,466	28	6	-	1	7	19,344	547	135	20	12	167	786,526	99,606	56,038	7,935	2,349	66,322
WV	252	6	3	-	-	3	3,066	115	42	-	1	43	70,983	10,262	4,935	1,278	517	6,730
WY	169	6	1	-	-	1	2,123	55	8	-	-	8	55,225	8,377	2,627	263	80	2,970
Other ²	92	-	1	-	-	1	1,247	18	52	29	13	94	62,228	2,035	4,082	1,150	323	5,555
Total	86,607	2,194	396	47	6	449	1,081,679	38,660	8,371	1,090	472	9,933	27,577,337	4,048,760	2,462,311	596,191	435,459	3,493,961



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 - November 30, 2018

State	November 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	70	3	-	-	-	-	1,164	32	1	-	-	1	35,929	5,574	1,314	21	9	1,344
AL	509	21	7	-	-	7	6,924	396	141	7	1	149	188,944	32,804	17,767	2,589	566	20,922
AR	317	9	2	-	-	2	3,905	199	26	-	-	26	99,687	20,176	7,624	962	204	8,790
AZ	1,589	44	10	2	-	12	23,198	783	252	23	7	282	419,087	55,274	51,144	21,513	27,487	100,144
CA	7,712	160	22	-	-	22	121,338	2,926	431	33	10	474	3,107,174	360,495	174,605	50,191	52,100	276,896
CO	1,684	29	-	-	-	-	25,878	491	17	-	-	17	520,137	79,990	32,609	2,947	666	36,222
CT	306	13	5	1	-	6	4,539	295	113	27	8	148	191,949	31,759	19,799	3,826	1,424	25,049
DC	118	9	-	-	-	-	1,537	76	3	-	1	4	47,099	6,422	1,974	213	95	2,282
DE	120	8	1	-	-	1	2,042	125	52	4	3	59	58,684	9,491	7,412	1,442	330	9,184
FL	2,938	117	31	6	-	37	39,370	1,822	600	96	35	731	711,683	127,164	96,739	42,121	61,569	200,429
GA	1,416	67	13	2	-	15	19,333	1,199	267	31	7	305	438,225	71,881	69,493	18,999	15,046	103,538
HI	144	12	-	-	-	-	2,575	134	9	-	-	9	77,771	10,759	4,814	748	382	5,944
IA	369	10	-	-	-	-	5,272	213	24	-	-	24	178,622	23,996	6,771	463	50	7,284
ID	428	11	1	-	-	1	5,238	148	16	4	-	20	96,935	13,004	11,726	3,720	2,205	17,651
IL	1,596	63	30	6	-	36	22,918	1,183	521	80	29	630	801,288	113,837	89,540	22,404	16,452	128,396
IN	712	23	3	-	-	3	10,108	647	96	6	1	103	266,264	47,299	23,376	2,346	401	26,123
KS	272	13	1	-	-	1	3,755	205	24	-	1	25	105,522	18,978	7,280	536	124	7,940
KY	357	18	-	-	-	-	5,286	247	20	2	-	22	133,357	22,066	7,196	391	68	7,655
LA	483	15	3	-	-	3	7,147	387	56	2	1	59	168,386	30,222	8,259	581	139	8,979
MA	1,000	40	3	1	-	4	14,987	697	61	7	1	69	504,904	56,358	33,594	4,708	1,352	39,654
MD	788	51	18	4	1	23	11,955	677	313	49	25	387	395,074	59,040	44,322	11,108	6,479	61,909
ME	154	8	-	-	-	-	1,896	98	19	1	-	20	53,770	9,624	5,431	678	97	6,206
MI	1,740	83	16	-	2	18	23,750	1,373	314	38	34	386	533,251	78,240	89,346	25,141	18,253	132,740
MN	985	45	4	1	-	5	13,855	529	85	10	1	96	360,830	48,141	45,383	9,432	3,729	58,544
MO	901	41	5	2	-	7	12,193	589	76	12	1	89	332,565	54,123	28,464	4,439	1,168	34,071
MS	300	16	2	-	-	2	3,438	190	54	6	-	60	87,963	16,403	7,221	939	301	8,461
MT	186	4	-	-	-	-	2,684	75	3	-	-	3	71,277	10,436	3,596	350	104	4,050
NC	1,160	52	6	-	-	6	16,151	973	132	8	-	140	445,623	89,942	43,743	5,386	896	50,025
ND	72	1	-	-	-	-	1,158	9	-	-	-	-	30,765	3,007	319	8	1	328
NE	306	12	1	-	-	1	3,775	114	6	-	-	6	111,216	16,986	5,035	220	18	5,273
NH	229	11	2	-	-	2	3,013	165	24	2	-	26	86,405	12,655	10,949	1,868	530	13,347
NJ	1,017	39	20	5	2	27	16,394	716	286	50	29	365	518,059	83,853	52,001	10,176	4,246	66,423
NM	203	12	4	-	-	4	3,227	212	42	2	-	44	92,443	17,155	9,961	1,492	177	11,630
NV	909	25	7	1	-	8	11,589	370	114	27	5	146	143,474	15,956	16,849	8,011	16,692	41,552
NY	1,238	40	1	-	-	1	20,406	963	155	20	5	180	606,783	120,066	39,050	5,070	1,537	45,657
OH	1,126	63	16	1	-	17	15,839	1,097	347	39	25	411	428,396	76,093	59,644	10,761	3,667	74,072
OK	308	19	1	-	-	1	4,662	214	21	1	1	23	119,618	18,844	4,930	187	47	5,164
OR	942	18	1	-	-	1	13,945	343	32	1	-	33	293,020	48,865	32,610	7,153	3,000	42,763
PA	1,176	75	16	-	-	16	16,800	1,029	238	22	13	273	528,942	91,651	39,983	5,119	1,424	46,526
RI	122	3	-	-	-	-	2,001	84	25	6	-	31	54,640	6,385	6,312	1,843	1,116	9,271
SC	626	18	-	1	-	1	8,438	482	98	11	5	114	202,755	34,305	20,996	3,963	1,773	26,732
SD	104	1	-	-	-	-	1,510	30	-	-	-	-	50,953	6,341	934	27	9	970
TN	854	29	3	-	-	3	11,823	472	66	6	1	73	257,885	43,984	20,564	2,750	648	23,962
TX	3,963	108	3	1	-	4	53,457	1,704	53	1	1	55	988,216	172,136	47,882	3,242	369	51,493
UT	782	11	-	-	-	-	11,362	176	14	-	-	14	216,419	26,512	19,769	3,569	911	24,249
VA	1,021	46	15	-	-	15	15,170	797	256	25	6	287	530,887	84,951	50,710	9,591	2,920	63,221
VT	59	3	-	-	-	-	949	68	17	-	-	17	33,577	4,575	1,490	111	13	1,614
WA	1,701	36	2	-	-	2	25,706	671	59	1	-	60	579,103	92,733	60,704	13,609	6,025	80,338
WI	764	19	4	-	1	5	11,647	398	99	12	7	118	495,294	62,863	29,730	4,059	1,353	35,142
WV	125	2	1	-	-	1	1,757	77	22	-	1	23	41,186	6,206	2,837	607	287	3,731
WY	94	3	1	-	-	1	1,382	31	7	-	-	7	38,611	5,683	1,808	164	56	2,028
Other ²	78	-	-	-	-	-	1,075	9	34	22	12	68	50,651	1,060	2,847	800	242	3,889
Total	46,173	1,579	281	34	6	321	669,521	26,940	5,741	694	277	6,712	16,931,298	2,556,363	1,478,456	332,594	258,757	2,069,807



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 - November 30, 2018

State	November 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	68	2	-	-	-	-	865	29	2	-	-	2	25,074	4,399	936	11	2	949
AL	346	6	4	-	-	4	4,144	155	59	6	2	67	90,572	14,951	9,134	1,499	336	10,969
AR	305	4	1	-	-	1	2,896	72	4	1	1	6	58,949	8,915	4,453	743	120	5,316
AZ	1,565	32	10	2	-	12	13,948	389	164	15	8	187	263,663	35,097	32,987	17,300	16,486	66,773
CA	6,525	62	5	2	-	7	65,436	1,421	186	27	5	218	1,726,871	184,696	99,719	38,940	36,170	174,829
CO	1,454	14	-	-	-	-	14,847	226	16	2	-	18	297,128	43,797	20,517	1,950	434	22,901
CT	303	7	-	-	-	-	3,017	98	55	15	5	75	120,065	15,804	11,306	2,519	810	14,635
DC	61	1	-	-	-	-	696	28	3	-	1	4	25,098	2,733	1,108	138	83	1,329
DE	116	5	-	-	-	-	1,281	56	16	6	1	23	36,689	5,093	4,642	895	138	5,675
FL	2,146	37	17	2	-	19	23,959	661	238	58	19	315	442,453	75,083	58,491	30,941	38,752	128,184
GA	1,264	29	6	-	-	6	13,228	534	142	20	15	177	285,016	40,044	43,194	15,747	11,899	70,840
HI	84	1	-	-	-	-	1,293	52	1	-	-	1	38,362	3,926	2,690	552	206	3,448
IA	258	2	-	-	-	-	2,985	65	15	1	-	16	105,314	17,648	5,552	329	20	5,901
ID	273	1	-	-	-	-	3,048	59	8	1	-	9	61,005	8,981	8,076	3,018	1,331	12,425
IL	1,779	35	15	1	-	16	16,507	595	234	37	18	289	589,800	66,850	64,679	21,598	15,056	101,333
IN	875	19	2	-	-	2	8,919	250	38	2	1	41	248,751	33,434	20,322	1,972	310	22,604
KS	250	5	1	-	-	1	2,784	85	8	-	-	8	90,350	12,674	4,908	340	58	5,306
KY	515	8	1	-	-	1	5,322	145	19	1	-	20	151,231	18,236	7,443	442	54	7,939
LA	457	8	-	-	-	-	4,553	133	23	-	2	25	81,094	12,704	5,245	565	104	5,914
MA	845	19	1	-	-	1	9,324	326	40	4	-	44	327,188	20,110	20,762	3,884	902	25,548
MD	621	15	7	-	-	7	7,390	319	153	30	20	203	260,354	39,177	28,651	8,116	3,795	40,562
ME	128	3	-	-	-	-	1,485	34	8	-	-	8	46,068	5,083	3,485	353	57	3,895
MI	1,778	39	3	-	-	3	16,041	583	119	22	24	165	376,265	53,166	60,776	22,222	14,613	97,611
MN	841	14	3	-	-	3	8,762	301	45	2	-	47	295,580	52,626	44,855	10,208	2,945	58,008
MO	707	9	4	-	-	4	7,965	250	54	9	6	69	240,092	30,004	21,104	3,597	1,071	25,772
MS	176	2	-	-	-	-	1,861	52	13	1	1	15	31,614	4,968	3,272	483	110	3,865
MT	172	-	-	-	-	-	1,637	25	1	-	-	1	39,342	5,982	2,146	244	33	2,423
NC	972	15	3	1	-	4	11,989	475	89	7	3	99	338,494	60,374	33,697	4,600	736	39,033
ND	51	-	-	-	-	-	1,133	5	-	-	-	-	20,871	2,556	226	3	2	231
NE	184	3	-	-	-	-	1,954	36	-	-	-	-	57,818	11,093	2,818	83	8	2,909
NH	195	4	-	-	-	-	2,102	65	9	1	-	10	62,759	6,498	7,461	1,505	333	9,299
NJ	918	18	6	2	-	8	9,311	275	131	27	15	173	298,094	47,884	29,965	7,315	2,619	39,899
NM	160	4	-	-	-	-	1,823	94	23	-	1	24	50,454	8,356	6,472	921	91	7,484
NV	599	6	4	1	-	5	6,041	132	56	12	3	71	86,398	9,505	9,587	5,543	11,138	26,268
NY	1,530	18	1	-	-	1	11,974	435	70	12	5	87	360,074	73,062	25,746	3,626	898	30,270
OH	1,300	37	4	-	-	4	12,951	490	120	27	17	164	390,325	50,965	48,425	9,796	3,057	61,278
OK	297	6	-	-	-	-	3,063	79	14	-	-	14	62,767	9,366	4,025	147	26	4,198
OR	799	8	1	-	-	1	8,338	202	9	2	1	12	199,811	33,797	23,475	5,516	1,849	30,840
PA	927	18	3	-	-	3	10,333	390	107	12	6	125	320,248	58,489	27,348	3,378	838	31,564
RI	131	1	-	-	-	-	1,419	29	8	1	-	9	36,112	3,062	3,603	1,388	667	5,658
SC	427	9	2	-	-	2	5,387	189	45	2	6	53	127,118	17,059	14,047	2,824	1,161	18,032
SD	92	-	-	-	-	-	923	11	2	-	-	2	19,747	5,006	656	11	2	669
TN	682	10	2	-	-	2	8,161	200	22	2	2	26	153,711	22,304	12,541	1,586	258	14,385
TX	3,182	22	1	-	-	1	27,825	610	19	-	-	19	478,538	93,224	24,974	1,399	193	26,566
UT	730	3	-	-	-	-	7,514	104	9	2	-	11	152,404	15,813	15,034	3,127	630	18,791
VA	985	20	3	2	-	5	10,072	365	136	13	1	150	340,048	49,682	31,679	6,693	1,483	39,855
VT	71	1	-	-	-	-	954	23	5	1	-	6	33,984	3,045	1,339	95	13	1,447
WA	1,372	17	-	-	-	-	14,779	348	17	-	-	17	353,056	50,608	39,824	10,439	3,474	53,737
WI	702	9	2	-	-	2	7,697	149	36	8	5	49	291,232	36,743	26,308	3,876	996	31,180
WV	127	4	2	-	-	2	1,309	38	20	-	-	20	29,797	4,056	2,098	671	230	2,999
WY	75	3	-	-	-	-	741	24	1	-	-	1	16,614	2,694	819	99	24	942
Other ²	14	-	1	-	-	1	172	9	18	7	1	26	11,577	975	1,235	350	81	1,666
Total	40,434	615	115	13	-	128	412,158	11,720	2,630	396	195	3,221	10,646,039	1,492,397	983,855	263,597	176,702	1,424,154



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.