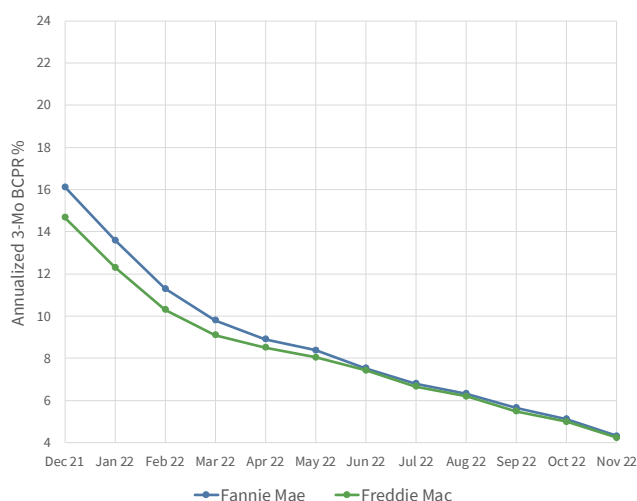


Benchmark CPR® Bulletin – Dec 2022

Monthly Benchmark CPR Results

30 Year Benchmark CPR*



15 Year Benchmark CPR*

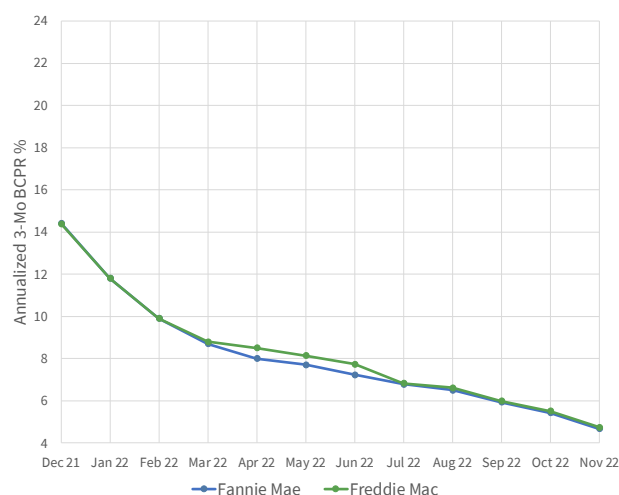


Table 1a. Components of Fannie Mae's 30 Year Oct and Nov BCPR Results

30 Yr FNM Cohort	BCPR3 Components				
	Reporting Period	BCPR3	Aug	Sep	Oct
Oct 2022	5.1	5.9	5.1	4.2	
Nov 2022	4.3		5.1	4.2	3.5

Table 1b. Components of Fannie Mae's 15 Year Oct and Nov BCPR Results

15 Yr FNM Cohort	BCPR3 Components				
	Reporting Period	BCPR3	Aug	Sep	Oct
Oct 2022	5.4	6.2	5.4	4.6	
Nov 2022	4.7		5.4	4.6	3.9

Table 2. Top 5 Fastest Sellers/Service: Fannie Mae**

Seller Name	UPB (\$MM)	Nov BCPR	Oct BCPR	Servicer Name	UPB (\$MM)	Nov BCPR	Oct BCPR
SOUTHSTATE BANK, NATIONAL ASSOCIA	3,209	130%	122%	NETWORK CAPITAL FUNDING CORPORATION	2,402	142%	120%
HIGHLANDS RESIDENTIAL MORTGAGE, LT	5,282	127%	114%	ROCKET MORTGAGE, LLC	190,700	141%	140%
ATLANTIC BAY MORTGAGE GROUP, LLC	3,630	127%	117%	IDAHO CENTRAL CREDIT UNION	2,310	131%	118%
MUTUAL OF OMAHA MORTGAGE, INC	4,066	125%	114%	SOUTHSTATE BANK, NATIONAL ASSOCIATION	3,201	130%	122%
CHURCHILL MORTGAGE CORPORATION	3,431	124%	122%	NOVA FINANCIAL AND INVESTMENT CORPORATI	2,072	129%	131%

Table 3. Top 5 Fastest Sellers/Service: Freddie Mac**

Seller Name	UPB (\$MM)	Nov BCPR	Oct BCPR	Servicer Name	UPB (\$MM)	Nov BCPR	Oct BCPR
GATEWAY FIRST BANK	3,476	154%	147%	GATEWAY FIRST BANK	3,164	159%	149%
TEXAS CAPITAL BANK, NA	2,606	145%	150%	ROCKET MORTGAGE, LLC	121,997	146%	146%
NOVA FINANCIAL AND INVESTMENT CORP	2,279	144%	128%	NOVA FINANCIAL AND INVESTMENT CORPORATI	2,279	144%	128%
AMERICAN FINANCING CORPORATION	1,877	135%	141%	INTERCAP LENDING INC	1,386	138%	121%
REGIONS BANK	2,270	134%	122%	RUSHMORE LOAN MANAGEMENT SERVICES LLC	1,297	135%	112%

* Report(s) include entire population for the last 24-months of issuance, all coupons, 30-year or 15-year fixed rate, top 100 Servicers by Current UPB. Rolling 24-month lookback for which a 3-month CPR is available.

** Population includes top 100 sellers/service: Fannie Mae and reflects Note Rate Adjusted BCPR3 values.

Historical Benchmark CPR Data

Table 4. Summary of Fannie Mae 30 Year Historical BCPR Data - Seller view

Metric	Nov-2022	Oct-2022	Sep-2022	Nov-2021
Cohort BCPR1	3.5	4.2	5.0	14.2
Cohort BCPR3	4.3	5.1	5.6	18.3
Cohort BCPR6	5.6	6.3	7.1	21.9
WA BCPR3 of Top 25 Sellers*	4.3	5.1	5.7	19.1
WA NR-Adjusted % of Cohort for Top 25 Sellers*	100.7	100.8	100.9	111.2
BCPR3 Range (Max-Min) for Top 100 Sellers*	2.4	2.9	3.1	22.6
Total Current UPB (\$B)	1,608	1,648	1,694	1,565
% of Cohort UPB w/ NR-Adjusted BCPR3 0-90% of Cohort	31%	27%	26%	33%
% of Cohort UPB w/ NR-Adjusted BCPR3 90-110% of Cohort	45%	50%	51%	40%
% of Cohort UPB w/ NR-Adjusted BCPR3 110-130% of Cohort	22%	21%	21%	15%
% of Cohort UPB w/ NR-Adjusted BCPR3 >130% of Cohort	3%	2%	2%	12%

Table 5. Summary of Freddie Mac 30 Year Historical BCPR Data - Seller view

Metric	Nov-2022	Oct-2022	Sep-2022	Nov-2021
Cohort BCPR1	3.4	4.1	5.0	12.7
Cohort BCPR3	4.2	5.0	5.5	16.9
Cohort BCPR6	5.4	6.1	6.9	20.6
WA BCPR3 of Top 25 Sellers*	4.2	5.0	5.5	17.2
WA NR-Adjusted % of Cohort for Top 25 Sellers*	100.1	100.1	100.0	104.0
BCPR3 Range (Max-Min) for Top 100 Sellers*	4.4	4.7	4.9	24.8
Total Current UPB (\$B)	1,470	1,495	1,518	1,336
% of Cohort UPB w/ NR-Adjusted BCPR3 0-90% of Cohort	22%	28%	20%	36%
% of Cohort UPB w/ NR-Adjusted BCPR3 90-110% of Cohort	61%	55%	61%	34%
% of Cohort UPB w/ NR-Adjusted BCPR3 110-130% of Cohort	13%	14%	9%	20%
% of Cohort UPB w/ NR-Adjusted BCPR3 >130% of Cohort	3%	3%	10%	10%

Table 6. Summary of Fannie Mae 30 Year Historical BCPR Data - Servicer view

Metric	Nov-2022	Oct-2022	Sep-2022	Nov-2021
Cohort BCPR1	3.5	4.2	5.0	14.2
Cohort BCPR3	4.3	5.1	5.6	18.3
Cohort BCPR6	5.6	6.3	7.1	21.9
WA BCPR3 of Top 25 Servicers*	4.3	5.1	5.7	19.0
WA NR-Adjusted % of Cohort for Top 25 Servicers*	100.4	100.5	100.5	109.8
BCPR3 Range (Max-Min) for Top 100 Servicers*	3.5	4.4	4.2	34.7
Total Current UPB (\$B)	1,608	1,648	1,694	1,565
% of Cohort UPB w/ NR-Adjusted BCPR3 0-90% of Cohort	26%	24%	26%	28%
% of Cohort UPB w/ NR-Adjusted BCPR3 90-110% of Cohort	55%	60%	58%	44%
% of Cohort UPB w/ NR-Adjusted BCPR3 110-130% of Cohort	10%	7%	8%	17%
% of Cohort UPB w/ NR-Adjusted BCPR3 >130% of Cohort	9%	9%	8%	12%

Table 7. Summary of Freddie Mac 30 Year Historical BCPR Data - Servicer view

Metric	Nov-2022	Oct-2022	Sep-2022	Nov-2021
Cohort BCPR1	3.4	4.1	5.0	12.7
Cohort BCPR3	4.2	5.0	5.5	16.9
Cohort BCPR6	5.4	6.1	6.9	20.6
WA BCPR3 of Top 25 Servicers*	4.2	5.0	5.5	17.2
WA NR-Adjusted % of Cohort for Top 25 Servicers*	99.6	99.9	99.8	103.5
BCPR3 Range (Max-Min) for Top 100 Servicers*	4.7	4.8	4.9	24.9
Total Current UPB (\$B)	1,470	1,495	1,518	1,336
% of Cohort UPB w/ NR-Adjusted BCPR3 0-90% of Cohort	24%	24%	14%	38%
% of Cohort UPB w/ NR-Adjusted BCPR3 90-110% of Cohort	63%	62%	71%	32%
% of Cohort UPB w/ NR-Adjusted BCPR3 110-130% of Cohort	5%	7%	8%	20%
% of Cohort UPB w/ NR-Adjusted BCPR3 >130% of Cohort	7%	6%	7%	10%

BCPR Component Profiles

Table 8. Fannie Mae 30-Year BCPR Component Collateral Profiles

	Orig amt (\$MM)	Beg bal (\$MM)	Beg loan count	WA OLS	WA WAC	WA WALA	WA FICO	WA LTV	WA DTI	% CA	% TPO	% AW	% Owner	% Investor	% Purchase	SMM	CPR
Fannie Mae BCPR																	
a. Aug component	1,799,511	1,739,182	6,110,439	294,498	3.20	14	754	73	35	21%	37%	33%	91%	5%	44%	0.5	5.9
b. Sep component	1,766,141	1,705,837	5,973,026	295,686	3.24	15	753	73	35	21%	38%	32%	91%	5%	45%	0.4	5.1
c. Oct component	1,717,975	1,658,534	5,786,644	296,886	3.30	15	753	74	35	21%	38%	32%	91%	5%	46%	0.4	4.2
d. Nov component	1,675,952	1,617,217	5,629,477	297,710	3.36	15	752	74	35	20%	38%	31%	91%	5%	47%	0.3	3.5
e. MoM profile change	-42,023	-41,317	-157,167	824	0.06	0	0	0	0	0%	0%	-1%	0%	0%	1%	-17.2%	-16.9%
f. Nov pay-offs	4,421	4,160	16,633	266,034	3.37	16	746	73	35	15%	33%	31%	89%	6%	41%	100.0	100.0
g. Nov pay-offs	5,608	5,299	21,114	265,709	3.31	16	746	73	35	16%	34%	32%	90%	6%	40%	100.0	100.0
h. Sep-22 issuances	36,203	35,935	114,529	316,100	5.48	2	747	79	38	13%	42%	19%	92%	6%	82%	0.4	5.2
i. Sep-20 issuances	72,935	68,759	251,787	289,671	3.04	25	761	74	34	21%	35%	37%	91%	5%	41%	0.5	5.4
Fannie Mae universe																	
j. Nov universe	10,255,037	2,777,369	12,190,738	333,500	3.64	37	751	74	N/A	N/A	39%	24%	90%	6%	47%	0.4	4.8
k. Diff vs. Nov component	8,579,085	1,160,152	6,561,261	35,790	0.28	21	-1	1	N/A	N/A	1%	-7%	-1%	1%	0%	0.1	1.2

Records a-d: Collateral profiles of BCPR components as of the start of each month. Records b-d comprise the most recent BCPR3, while records a-c comprise the prior BCPR3.
 Records f-g: Profile of loans that paid off in each respective month.
 Records h-i: Profile of loans issued in the most recent month added to the BCPR3 population and loans issued in the month that rolled off (aged out) of the BCPR3 population.
 Record i: Overall Fannie Mae 30-year TBA-eligible universe.

BCPR Heatmap

Table 9. MoM Percentage Changes of Various Spec & Loan Cuts on the BCPR1 Heatmap

Population	Orig Amount (\$ MM)	Current UPB (\$ MM)	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22
85k	\$9,797	\$8,680	0%	-18%	-4%	22%	-10%	-2%	-3%	-9%	0%	-3%	-7%	-14%
110k	\$20,601	\$18,313	-6%	-21%	-6%	17%	-6%	-2%	-4%	-13%	12%	-16%	-5%	-16%
125k	\$20,389	\$18,116	-6%	-20%	-8%	19%	-9%	-8%	4%	-17%	5%	-8%	-9%	-14%
150k	\$46,263	\$41,313	-6%	-20%	-10%	20%	-12%	-5%	1%	-11%	2%	-12%	-14%	-13%
175k	\$58,977	\$52,712	-7%	-22%	-8%	17%	-14%	-4%	-3%	-8%	0%	-12%	-11%	-19%
200k	\$77,610	\$69,509	-8%	-22%	-9%	17%	-15%	-7%	3%	-16%	4%	-10%	-20%	-14%
225k	\$84,446	\$75,792	-9%	-21%	-10%	12%	-14%	-6%	-4%	-12%	0%	-12%	-17%	-15%
NY	\$45,635	\$42,817	-8%	-21%	-15%	2%	-22%	-7%	24%	-18%	13%	-14%	-23%	-2%
TX	\$93,983	\$86,065	-10%	-16%	-13%	5%	-12%	-4%	-4%	-13%	-3%	-14%	-21%	-15%
FL	\$85,446	\$77,597	2%	-22%	-11%	9%	-16%	-11%	-4%	-19%	3%	-11%	-12%	-16%
LTV>=95	\$167,321	\$155,228	-15%	-26%	-22%	0%	-24%	-8%	-5%	-17%	3%	-14%	-21%	-14%
Investor***	\$49,960	\$44,784	-11%	-26%	-10%	12%	-22%	-3%	-17%	-17%	-3%	-4%	-25%	-14%
FICO<700	\$119,021	\$105,931	-8%	-24%	-14%	5%	-22%	-18%	-2%	-20%	4%	-10%	-19%	-19%
Non-Spec	\$770,223	\$691,217	-12%	-25%	-19%	9%	-15%	-9%	-1%	-20%	3%	-13%	-16%	-18%
Retail	\$1,025,061	\$923,099	-10%	-24%	-14%	11%	-15%	-9%	-1%	-17%	3%	-12%	-16%	-15%
Correspondent	\$357,983	\$323,786	-12%	-24%	-17%	7%	-18%	-7%	-4%	-17%	3%	-12%	-18%	-15%
Broker	\$267,220	\$241,749	-10%	-24%	-19%	7%	-18%	-9%	-4%	-21%	3%	-12%	-18%	-22%
Purchase	\$791,100	\$730,502	-9%	-22%	-18%	8%	-20%	-9%	-2%	-15%	5%	-11%	-16%	-13%
Refi	\$479,208	\$418,509	-11%	-25%	-14%	12%	-13%	-7%	-1%	-20%	0%	-13%	-18%	-20%
Cash-out	\$379,957	\$339,623	-12%	-24%	-16%	7%	-16%	-9%	-1%	-16%	4%	-12%	-18%	-16%
Principal	\$1,504,070	\$1,358,439	-11%	-24%	-16%	9%	-16%	-9%	-1%	-18%	3%	-12%	-17%	-17%
Second Home	\$56,473	\$49,760	-3%	-19%	-15%	19%	-15%	0%	-8%	-13%	6%	-10%	-16%	-16%
Investment***	\$89,722	\$80,435	-7%	-25%	-9%	15%	-19%	-5%	-12%	-16%	-4%	-8%	-22%	-11%
Standard Appraisal	\$1,153,082	\$1,048,248	-10%	-24%	-16%	7%	-18%	-9%	-3%	-18%	3%	-12%	-17%	-16%
Appraisal Waiver	\$497,183	\$440,386	-11%	-24%	-15%	14%	-13%	-7%	-1%	-17%	2%	-13%	-15%	-18%

*** Note that the Investor cut is listed twice. The first instance is the Investor story as part of a specified pooling waterfall. The second instance is a pure isolation of all investor loans in relation to principal residence and second homes. Note the UPB differences between the two, as several investor loans are pooled in other stories.

Additional Resources

For questions, contact the Fannie Mae Investor Help Line at 1-800-232-6643, Option 3 or by [e-mail](#).

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