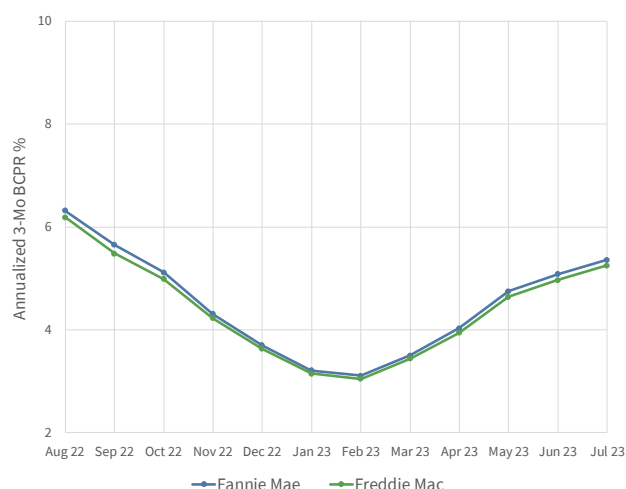


Benchmark CPR® Bulletin – Aug 2023

Monthly Benchmark CPR Results

30 Year Benchmark CPR*



15 Year Benchmark CPR*

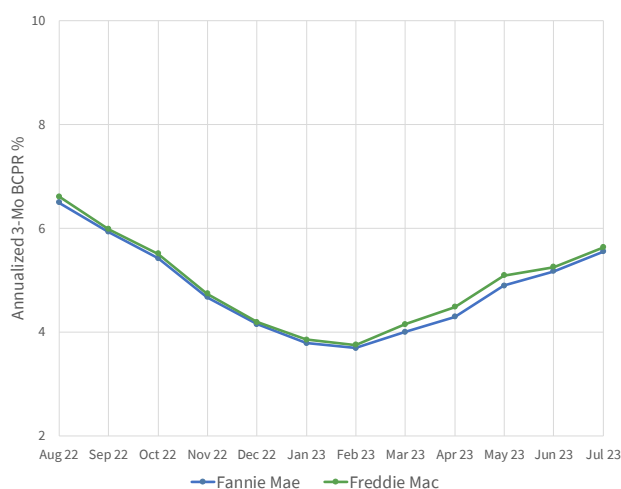


Table 1a. Components of Fannie Mae's 30 Year Jun and Jul BCPR Results

30 Yr FNM Cohort		BCPR3 Components			
Reporting Period	BCPR3	Apr	May	Jun	Jul
Jun 2023	5.1	4.3	5.4	5.6	
Jul 2023	5.4		5.4	5.6	5.1

Table 1b. Components of Fannie Mae's 15 Year Jun and Jul BCPR Results

15 Yr FNM Cohort		BCPR3 Components			
Reporting Period	BCPR3	Apr	May	Jun	Jul
Jun 2023	5.2	4.3	5.4	5.9	
Jul 2023	5.6		5.4	5.9	5.3

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

Seller Name	Orig UPB (\$MM)	Jul BCPR	Jun BCPR	Service Name	Orig UPB (\$MM)	Jul BCPR	Jun BCPR
REGIONS BANK	3,124	140%	131%	CITIZENS FIRST BANK	1,144	226%	250%
FIRST UNITED BANK AND TRUST COMPAN	2,088	130%	124%	ROCKET MORTGAGE, LLC	124,825	139%	143%
CHURCHILL MORTGAGE CORPORATION	2,416	123%	111%	ALCOVA MORTGAGE, LLC	1,088	132%	125%
SOUTHSTATE BANK, NATIONAL ASSOCIA	1,771	122%	121%	FIRST UNITED BANK AND TRUST COMPANY	2,088	130%	124%
ROCKET MORTGAGE, LLC	124,703	121%	125%	TRUSTMARK NATIONAL BANK	1,334	127%	130%

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

Seller Name	Orig UPB (\$MM)	Jul BCPR	Jun BCPR	Service Name	Orig UPB (\$MM)	Jul BCPR	Jun BCPR
AMERICAN FINANCING CORPORATION	1,091	172%	152%	CENTRAL TRUST BANK	808	168%	167%
FBC MORTGAGE LLC	1,562	136%	143%	MUTUAL OF OMAHA MORTGAGE, INC	1,828	144%	129%
AMERISAVE MORTGAGE CORPORATION	8,031	134%	125%	COLONIAL SAVINGS, FA	3,019	144%	142%
AMERIS BANK	1,986	134%	139%	ROCKET MORTGAGE, LLC	75,549	142%	144%
MUTUAL OF OMAHA MORTGAGE, INC	1,840	132%	132%	GRANDER MORTGAGE CAPITAL, LLC	1,775	140%	163%

* 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/servicers by UPB 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	Jul-2023	Jun-2023	May-2023	Jul-2022
Cohort BCPR1	5.1	5.6	5.5	5.5
Cohort BCPR3	5.4	5.1	4.8	6.8
Cohort BCPR6	4.5	4.1	3.8	8.7
WA BCPR3 of Top 25 Sellers*	5.4	5.1	4.8	6.8
WA NR-Adjusted % of Cohort for Top 25 Sellers*	101.7	101.9	102.5	101.5
BCPR3 Range (Max-Min) for Top 100 Sellers*	4.8	5.6	4.4	4.7
Total Current UPB (\$B)	1,066	1,126	1,198	1,742
% of Cohort UPB w/ NR-Adjusted BCPR3 0-90% of Cohort	17%	30%	28%	19%
% of Cohort UPB w/ NR-Adjusted BCPR3 90-110% of Cohort	62%	48%	50%	58%
% of Cohort UPB w/ NR-Adjusted BCPR3 110-130% of Cohort	18%	19%	20%	21%
% of Cohort UPB w/ NR-Adjusted BCPR3 >130% of Cohort	3%	2%	2%	2%

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

Metric	Jul-2023	Jun-2023	May-2023	Jul-2022
Cohort BCPR1	5.0	5.6	5.4	5.4
Cohort BCPR3	5.2	5.0	4.6	6.6
Cohort BCPR6	4.4	4.0	3.7	8.3
WA BCPR3 of Top 25 Sellers*	5.2	5.0	4.6	6.0
WA NR-Adjusted % of Cohort for Top 25 Sellers*	99.8	99.7	99.7	99.8
BCPR3 Range (Max-Min) for Top 100 Sellers*	5.3	4.3	5.0	5.1
Total Current UPB (\$B)	1,002	1,037	1,114	1,551
% of Cohort UPB w/ NR-Adjusted BCPR3 0-90% of Cohort	18%	21%	18%	22%
% of Cohort UPB w/ NR-Adjusted BCPR3 90-110% of Cohort	67%	61%	65%	57%
% of Cohort UPB w/ NR-Adjusted BCPR3 110-130% of Cohort	12%	15%	15%	18%
% of Cohort UPB w/ NR-Adjusted BCPR3 >130% of Cohort	3%	2%	2%	3%

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

Metric	Jul-2023	Jun-2023	May-2023	Jul-2022
Cohort BCPR1	5.1	5.6	5.5	5.5
Cohort BCPR3	5.4	5.1	4.8	6.8
Cohort BCPR6	4.5	4.1	3.8	8.7
WA BCPR3 of Top 25 Servicers*	5.4	5.1	4.8	6.9
WA NR-Adjusted % of Cohort for Top 25 Servicers*	101.0	101.4	101.2	102.0
BCPR3 Range (Max-Min) for Top 100 Servicers*	10.9	11.5	5.3	4.4
Total Current UPB (\$B)	1,066	1,126	1,198	1,742
% of Cohort UPB w/ NR-Adjusted BCPR3 0-90% of Cohort	29%	28%	24%	20%
% of Cohort UPB w/ NR-Adjusted BCPR3 90-110% of Cohort	57%	57%	57%	59%
% of Cohort UPB w/ NR-Adjusted BCPR3 110-130% of Cohort	6%	7%	10%	12%
% of Cohort UPB w/ NR-Adjusted BCPR3 >130% of Cohort	8%	8%	8%	9%

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

Metric	Jul-2023	Jun-2023	May-2023	Jul-2022
Cohort BCPR1	5.0	5.6	5.4	5.4
Cohort BCPR3	5.2	5.0	4.6	6.6
Cohort BCPR6	4.4	4.0	3.7	8.3
WA BCPR3 of Top 25 Servicers*	5.2	5.0	4.6	6.6
WA NR-Adjusted % of Cohort for Top 25 Servicers*	99.8	99.9	99.8	100.4
BCPR3 Range (Max-Min) for Top 100 Servicers*	5.6	5.6	5.3	5.6
Total Current UPB (\$B)	1,002	1,037	1,114	1,551
% of Cohort UPB w/ NR-Adjusted BCPR3 0-90% of Cohort	14%	19%	17%	14%
% of Cohort UPB w/ NR-Adjusted BCPR3 90-110% of Cohort	74%	69%	69%	70%
% of Cohort UPB w/ NR-Adjusted BCPR3 110-130% of Cohort	4%	6%	8%	9%
% of Cohort UPB w/ NR-Adjusted BCPR3 >130% of Cohort	7%	7%	6%	7%

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. Apr component	1,328,493	1,280,388	4,379,308	303,357	3.74	16	749	75	36	19%	39%	27%	92%	5%	54%	0.4	4.3
b. May component	1,252,338	1,207,057	4,102,230	305,282	3.85	16	749	75	36	18%	39%	25%	92%	5%	56%	0.5	5.4
c. Jun component	1,177,602	1,135,236	3,843,569	306,382	3.97	16	748	75	37	18%	39%	24%	92%	5%	58%	0.5	5.6
d. Jul component	1,114,016	1,074,142	3,622,193	307,553	4.10	16	748	76	37	18%	39%	23%	92%	5%	60%	0.4	5.1
e. MoM profile change	-63,586	-61,094	-221,376	1,170	0.13	0	0	0	0	0%	0%	-1%	0%	0%	2%	-9.2%	-9.0%
f. Jul pay-offs	4,368	4,107	15,341	284,791	4.24	16	741	75	37	13%	36%	23%	90%	6%	55%	100.0	100.0
g. Jun pay-offs	5,117	4,831	18,138	282,209	4.14	16	742	74	37	13%	37%	24%	90%	6%	53%	100.0	100.0
h. Jul-23 issuances	28,428	28,158	87,613	324,477	6.38	2	755	79	38	12%	47%	14%	91%	7%	87%	0.6	6.9
i. Jul-22 issuances	87,286	82,530	292,280	298,637	3.10	25	755	73	35	21%	41%	30%	93%	4%	43%	0.5	5.5
Fannie Mae universe																	
j. Jul universe	10,383,992	2,835,024	12,343,123	340,214	3.82	41	752	75	N/A	N/A	39%	23%	90%	6%	50%	0.5	5.6
k. Diff vs. Jul component	9,269,976	1,760,882	8,720,930	32,661	-0.28	25	4	-1	N/A	N/A	0%	0%	-1%	1%	-11%	0.1	0.6

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 e-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 j: 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)	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23
85k	\$6,438	\$5,792	0%	-3%	-7%	-14%	-4%	-12%	10%	29%	-4%	15%	1%	-4%
110k	\$12,667	\$11,421	12%	-16%	-5%	-16%	-1%	-8%	7%	26%	-3%	16%	5%	-9%
125k	\$11,658	\$10,548	5%	-8%	-9%	-14%	-9%	-12%	12%	30%	6%	7%	1%	-7%
150k	\$27,375	\$24,823	2%	-12%	-14%	-13%	-4%	-16%	17%	25%	0%	20%	4%	-10%
175k	\$34,349	\$31,273	0%	-12%	-11%	-19%	-8%	-10%	11%	38%	-8%	16%	5%	-11%
200k	\$45,683	\$41,664	4%	-10%	-20%	-14%	-2%	-16%	13%	42%	-12%	27%	3%	-11%
225k	\$50,254	\$45,980	0%	-12%	-17%	-15%	-8%	-16%	20%	42%	-10%	27%	0%	-8%
NY	\$29,593	\$28,000	13%	-14%	-23%	-2%	-1%	-13%	-2%	25%	-19%	33%	12%	-11%
TX	\$78,205	\$72,392	-3%	-14%	-21%	-15%	-7%	-11%	35%	24%	-5%	29%	-3%	-5%
FL	\$66,330	\$60,822	3%	-11%	-12%	-16%	0%	-13%	23%	41%	-5%	24%	1%	-11%
LTV>=95	\$138,167	\$129,939	3%	-14%	-21%	-14%	-9%	-15%	26%	39%	2%	16%	4%	-11%
Investor***	\$32,580	\$29,844	-3%	-4%	-25%	-14%	-3%	-12%	27%	37%	0%	25%	-3%	-7%
FICO<700	\$83,629	\$76,018	4%	-10%	-19%	-19%	-5%	-15%	27%	34%	-7%	36%	-2%	-5%
Non-Spec	\$469,404	\$430,970	3%	-13%	-16%	-18%	-4%	-17%	16%	46%	-7%	26%	5%	-11%
Retail	\$664,923	\$609,338	3%	-12%	-16%	-15%	-5%	-16%	19%	39%	-5%	22%	2%	-8%
Correspondent	\$256,380	\$237,119	3%	-12%	-18%	-15%	-5%	-15%	21%	38%	-5%	26%	6%	-12%
Broker	\$165,453	\$153,429	3%	-12%	-18%	-22%	1%	-13%	16%	42%	-10%	36%	0%	-11%
Purchase	\$676,766	\$630,246	5%	-11%	-16%	-13%	-5%	-11%	20%	38%	-5%	22%	1%	-9%
Refi	\$166,174	\$149,764	0%	-13%	-18%	-20%	-3%	-22%	12%	45%	-9%	28%	4%	-12%
Cash-out	\$243,816	\$219,876	4%	-12%	-18%	-16%	-5%	-16%	22%	36%	-5%	30%	6%	-10%
Principal	\$991,963	\$913,998	3%	-12%	-17%	-17%	-5%	-15%	19%	39%	-6%	25%	4%	-10%
Second Home	\$33,623	\$29,813	6%	-10%	-16%	-16%	2%	-15%	14%	49%	-17%	32%	-6%	0%
Investment***	\$61,171	\$56,074	-4%	-8%	-22%	-11%	-4%	-11%	22%	33%	2%	23%	-5%	-7%
Standard Appraisal	\$840,356	\$777,198	3%	-12%	-17%	-16%	-5%	-15%	19%	39%	-5%	23%	3%	-9%
Appraisal Waiver	\$246,400	\$222,687	2%	-13%	-15%	-18%	-3%	-15%	18%	39%	-8%	32%	1%	-11%

*** 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](#).

[Benchmark CPR Dashboard](#)

[Benchmark CPR Historical Data Download](#)

[Benchmark CPR Methodology Overview](#)

[Benchmark CPR Video Tutorial](#)

[MBS Cohort Analyzer Dashboard](#)

[MBS Cohort Analyzer User Guide](#)

[MBS Cohort Analyzer Video](#)

[Data Dynamics Overview](#)

Stay Connected

[Sign up for news, commentaries, and announcements](#)

This commentary is provided by Fannie Mae solely for informational purposes based on information available at the time it is published. This document is based upon information and assumptions (including financial, statistical or historical data and computations based upon such data) that we consider reliable and reasonable, but we do not represent that such information, assumptions, data, or computations are accurate or complete, or appropriate or useful in any particular context, including the context of any investment decision, and it should not be relied upon as such. It is subject to change without notice. Fannie Mae disclaims any responsibility for updating the commentary or the opinions or information discussed herein. The opinions presented in the commentary represent the views of professionals employed by Fannie Mae of certain factors that may impact the performance of certain loans in Connecticut Avenue Securities reference pools. The effect of factors other than those assumed, including factors not mentioned, considered or foreseen, by themselves or in conjunction with other factors, could produce dramatically different performance or results. Statements in this commentary regarding the future impact of data quality improvements are forward-looking, and actual results may be materially different due to, among other reasons, those described in “risk factors” in our most recent Form 10-K and Form 10-Q. Fannie Mae does not represent that such views are the sole or most accurate explanations for loan performance or that there are not credible alternative views or opinions. Fannie Mae publishes this commentary as a service to interested parties and disclaims any liability for any errors contained herein. Fannie Mae securities are more fully described in applicable offering circulars, prospectuses, or supplements thereto (such applicable offering circulars, prospectuses and supplements, the “Offering Documentation”), which discuss certain investment risks and contain a more complete description of such securities. All statements made herein are qualified in their entirety by reference to the Offering Documentation. An offering only may be made through delivery of the Offering Documentation. Investors considering purchasing a Fannie Mae security should consult their own financial and legal advisors for information about such security, the risks and investment considerations arising from an investment in such security, the appropriate tools to analyze such investment, and the suitability of such investment in each investor’s particular circumstances.