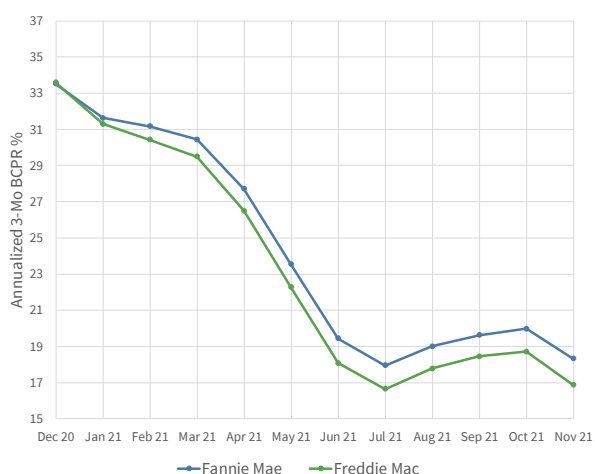


Benchmark CPR® Bulletin – Dec 2021

Monthly Benchmark CPR Results

30 Year Benchmark CPR*



15 Year Benchmark CPR*

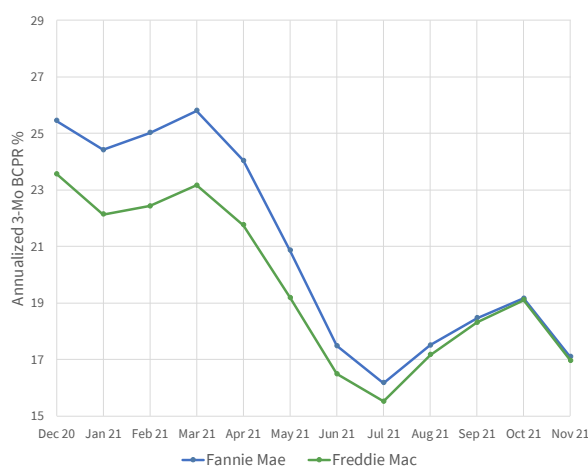


Table 1a. Components of Fannie Mae's 30 Year Oct and Nov BCPR Results

30 Yr FNM Cohort		BCPR3 Components			
Reporting Period	BCPR3	Aug	Sep	Oct	Nov
Oct 2021	20.0	20.8	20.7	18.4	
Nov 2021	18.3		20.7	18.4	15.9

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	Nov
Oct 2021	19.2	20.0	20.0	17.4	
Nov 2021	17.1		20.0	17.4	13.9

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
ONE AMERICAN BANK	2,840	173%	185%	NETWORK CAPITAL FUNDING CORPORATION	2,049	226%	264%
ROCKET MORTGAGE, LLC	145,744	160%	158%	PODIUM MORTGAGE CAPITAL LLC	9,077	185%	210%
LENNAR MORTGAGE, LLC	5,461	145%	152%	ROCKET MORTGAGE, LLC	114,332	156%	150%
LEADER BANK, NA	2,386	141%	137%	PINGORA LOAN SERVICING, LLC	3,697	149%	149%
NBKC BANK	2,294	139%	154%	LEADER BANK, NA	2,386	142%	137%

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
THE LOAN STORE LLC	3,577	264%	310%	PODIUM MORTGAGE CAPITAL LLC	5,463	174%	182%
ONE AMERICAN BANK	2,918	212%	206%	ROCKET MORTGAGE, LLC	74,901	163%	150%
NBKC BANK	3,198	164%	177%	MONEY SOURCE INC	1,805	163%	191%
MONEY SOURCE INC	1,820	162%	188%	FREMONT BANK	2,066	151%	180%
ROCKET MORTGAGE, LLC	94,489	162%	153%	NBKC BANK	2,911	150%	162%

* 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	Nov-2021	Oct-2021	Sep-2021	Nov-2020
Cohort BCPR1	14.2	16.4	18.6	26.3
Cohort BCPR3	18.3	20.0	19.6	34.0
Cohort BCPR6	21.9	22.6	23.5	43.3
WA BCPR3 of Top 25 Sellers*	19.8	21.7	21.4	37.2
WA NR-Adjusted % of Cohort for Top 25 Sellers*	111.2	111.5	111.8	108.5
BCPR3 Range (Max-Min) for Top 100 Sellers*	22.6	21.5	21.5	51.6
Total Current UPB (\$B)	1,567	1,538	1,511	961
% of Cohort UPB w/ NR-Adjusted BCPR3 0-90% of Cohort	33%	33%	32%	33%
% of Cohort UPB w/ NR-Adjusted BCPR3 90-110% of Cohort	40%	33%	31%	32%
% of Cohort UPB w/ NR-Adjusted BCPR3 110-130% of Cohort	15%	22%	25%	25%
% of Cohort UPB w/ NR-Adjusted BCPR3 >130% of Cohort	12%	12%	13%	10%

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

Metric	Nov-2021	Oct-2021	Sep-2021	Nov-2020
Cohort BCPR1	12.7	15.0	16.9	25.9
Cohort BCPR3	16.9	18.7	18.4	34.4
Cohort BCPR6	20.6	21.3	22.3	43.8
WA BCPR3 of Top 25 Sellers*	17.0	18.9	18.8	36.1
WA NR-Adjusted % of Cohort for Top 25 Sellers*	104.0	103.9	104.8	104.4
BCPR3 Range (Max-Min) for Top 100 Sellers*	24.8	30.3	27.1	52.1
Total Current UPB (\$B)	1,336	1,286	1,237	704
% of Cohort UPB w/ NR-Adjusted BCPR3 0-90% of Cohort	36%	42%	42%	32%
% of Cohort UPB w/ NR-Adjusted BCPR3 90-110% of Cohort	34%	28%	29%	41%
% of Cohort UPB w/ NR-Adjusted BCPR3 110-130% of Cohort	20%	20%	13%	15%
% of Cohort UPB w/ NR-Adjusted BCPR3 >130% of Cohort	10%	11%	16%	12%

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

Metric	Nov-2021	Oct-2021	Sep-2021	Nov-2020
Cohort BCPR1	14.2	16.4	18.6	26.3
Cohort BCPR3	18.3	20.0	19.6	34.0
Cohort BCPR6	21.9	22.6	23.5	43.3
WA BCPR3 of Top 25 Sellers*	19.7	21.5	21.2	37.9
WA NR-Adjusted % of Cohort for Top 25 Sellers*	109.9	109.6	109.4	108.0
BCPR3 Range (Max-Min) for Top 100 Sellers*	34.7	39.0	34.1	57.1
Total Current UPB (\$B)	1,567	1,538	1,511	961
% of Cohort UPB w/ NR-Adjusted BCPR3 0-90% of Cohort	28%	29%	30%	34%
% of Cohort UPB w/ NR-Adjusted BCPR3 90-110% of Cohort	44%	35%	33%	31%
% of Cohort UPB w/ NR-Adjusted BCPR3 110-130% of Cohort	17%	25%	26%	20%
% of Cohort UPB w/ NR-Adjusted BCPR3 >130% of Cohort	12%	12%	11%	14%

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

Metric	Nov-2021	Oct-2021	Sep-2021	Nov-2020
Cohort BCPR1	12.7	15.0	16.9	25.9
Cohort BCPR3	16.9	18.7	18.4	34.4
Cohort BCPR6	20.6	21.3	22.3	43.8
WA BCPR3 of Top 25 Sellers*	17.1	18.9	18.7	36.3
WA NR-Adjusted % of Cohort for Top 25 Sellers*	104.2	104.4	104.1	103.6
BCPR3 Range (Max-Min) for Top 100 Sellers*	24.9	29.4	30.8	57.6
Total Current UPB (\$B)	1,336	1,286	1,237	704
% of Cohort UPB w/ NR-Adjusted BCPR3 0-90% of Cohort	37%	37%	38%	33%
% of Cohort UPB w/ NR-Adjusted BCPR3 90-110% of Cohort	33%	32%	33%	44%
% of Cohort UPB w/ NR-Adjusted BCPR3 110-130% of Cohort	20%	20%	17%	13%
% of Cohort UPB w/ NR-Adjusted BCPR3 >130% of Cohort	10%	11%	11%	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	1,558,742	1,521,142	5,589,924	278,849	3.20	11	756	74	34	21%	39%	34%	91%	5%	39%	1.9	20.8
b. Sep component	1,583,496	1,543,817	5,658,632	279,837	3.18	11	756	74	34	21%	39%	34%	91%	5%	39%	1.9	20.7
c. Oct component	1,608,478	1,567,137	5,728,780	280,771	3.16	11	756	73	34	21%	39%	34%	91%	5%	39%	1.7	18.4
d. Nov component	1,635,310	1,592,161	5,796,151	282,137	3.14	11	756	73	34	21%	39%	34%	92%	5%	39%	1.4	15.8
e. MoM profile change	26,832	25,025	67,371	1,366	-0.02	0	0	0	0	0%	0%	0%	0%	0%	0%	-15.0%	-13.8%
f. Nov pay-offs	22,784	21,932	77,638	293,619	3.41	15	747	75	36	24%	40%	32%	92%	5%	34%	100.0	100.0
g. Oct pay-offs	26,494	25,534	89,151	297,391	3.43	14	749	75	35	25%	41%	33%	92%	5%	35%	100.0	100.0
h. Sep-21 issuances	74,427	73,980	245,942	302,620	3.06	2	749	73	35	21%	39%	35%	93%	3%	45%	0.3	3.9
i. Sep-19 issuances	22,041	20,828	93,000	237,004	4.06	25	745	79	36	13%	46%	14%	91%	5%	64%	4.3	41.1
Fannie Mae universe																	
j. Nov universe	9,803,346	2,583,106	11,870,822	315,697	3.53	34	751	74	N/A	N/A	39%	24%	90%	6%	43%	1.9	20.2
k. Diff vs. Nov componen	8,168,036	990,944	6,074,671	33,559	0.39	23	-4	1	N/A	N/A	0%	-11%	-2%	1%	4%	0.4	4.3

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 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)	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21
85k	\$11,558	\$10,303	6%	-19%	1%	23%	-11%	-11%	7%	-6%	1%	3%	0%	-2%
110k	\$25,046	\$22,158	12%	-23%	5%	18%	-18%	-11%	11%	-6%	6%	2%	-6%	-1%
125k	\$25,519	\$22,509	2%	-14%	1%	23%	-22%	-10%	6%	-3%	3%	5%	-4%	-6%
150k	\$58,982	\$51,780	5%	-16%	5%	18%	-23%	-14%	11%	-7%	11%	3%	-4%	-9%
175k	\$77,133	\$67,077	5%	-15%	5%	14%	-23%	-15%	11%	-5%	11%	2%	-5%	-9%
200k	\$103,167	\$89,016	7%	-12%	0%	11%	-24%	-17%	11%	-3%	12%	2%	-7%	-11%
225k	\$115,570	\$98,912	7%	-10%	3%	10%	-25%	-20%	13%	-5%	13%	3%	-8%	-11%
NY	\$48,488	\$44,475	-2%	-18%	-1%	17%	-26%	-22%	-6%	-9%	9%	-12%	17%	-12%
TX	\$93,386	\$78,946	7%	-3%	-7%	20%	-28%	-16%	8%	-7%	15%	-2%	-8%	-16%
FL	\$84,808	\$73,294	13%	-15%	7%	14%	-26%	-19%	11%	-8%	9%	6%	-8%	-12%
LTV>=95	\$167,299	\$136,762	10%	-9%	8%	7%	-28%	-20%	10%	-6%	18%	-2%	-15%	-13%
Investor***	\$53,734	\$43,911	11%	-8%	6%	11%	-25%	-19%	-6%	-12%	21%	9%	-2%	-11%
FICO<700	\$117,858	\$94,378	9%	-16%	5%	12%	-21%	-13%	4%	-8%	12%	0%	-8%	-8%
Non-Spec	\$1,037,300	\$815,490	9%	-9%	2%	-1%	-37%	-20%	11%	-9%	29%	-1%	-15%	-16%
Retail	\$1,209,314	\$1,014,705	9%	-11%	4%	9%	-31%	-18%	11%	-5%	21%	3%	-10%	-13%
Correspondent	\$477,607	\$367,512	6%	-10%	2%	4%	-30%	-22%	7%	-10%	15%	-1%	-13%	-14%
Broker	\$334,605	\$267,260	13%	-8%	1%	-7%	-34%	-14%	8%	-11%	33%	-8%	-18%	-13%
Purchase	\$769,110	\$647,784	5%	-10%	5%	10%	-29%	-23%	5%	-11%	14%	-1%	-11%	-13%
Refi	\$846,864	\$677,739	12%	-8%	1%	-1%	-36%	-14%	14%	-4%	29%	1%	-14%	-15%
Cash-out	\$404,484	\$323,953	9%	-14%	1%	3%	-28%	-18%	9%	-8%	19%	-1%	-9%	-12%
Principal	\$1,853,515	\$1,509,320	8%	-10%	3%	3%	-32%	-18%	10%	-7%	22%	-1%	-13%	-14%
Second Home	\$72,697	\$61,358	8%	-12%	2%	9%	-26%	-23%	7%	-8%	8%	4%	0%	-11%
Investment***	\$94,123	\$78,798	8%	-10%	6%	14%	-23%	-20%	-1%	-10%	16%	6%	0%	-8%
Standard Appraisal	\$1,320,364	\$1,078,837	8%	-11%	5%	8%	-29%	-20%	7%	-8%	16%	0%	-11%	-12%
Appraisal Waiver	\$699,979	\$570,639	10%	-9%	-2%	-4%	-38%	-14%	15%	-6%	33%	-1%	-14%	-16%

*** 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.