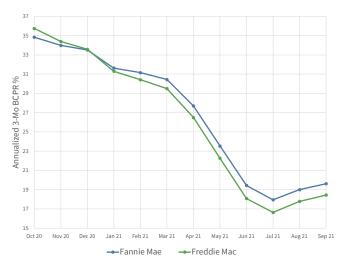
Benchmark CPR[™] Bulletin – Oct 2021

Monthly Benchmark CPR Results

30 Year Benchmark CPR^{*}

Aug 2

Sep 2021



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15 Year Benchmark CPR^{*}

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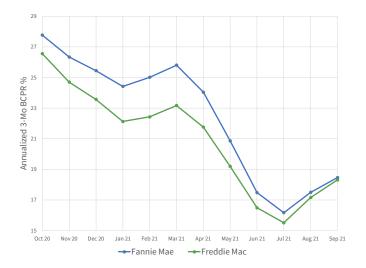


Table 1a. Components of Fannie Mae's 30 Year Aug and Sep BCPR Results						Table 1b. Components of Fannie Mae's 15 Year Aug and Sep BCPR Results								
30 Yr FNM Cohort			BCPR3 Co	mponents		15 Yr FNM Cohort	BCPR3 Components							
Reporting Period	BCPR3	Jun	Jul	Aug	Sep	Reporting Period	BCPR3	Jun	Jul	Aug	Sep			
Aug 2021	19.0	19.0	17.2	20.8		Aug 2021	17.5	17.2	15.2	20.0				

Sep 2021

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

20.7

Seller Name	UPB (\$MM)	Sep BCPR	Aug BCPR	Servicer Name	UPB (\$MM)	Sep BCPR	Aug BCPR
ONE AMERICAN BANK	2,989	177%	170%	NETWORK CAPITAL FUNDING CORPORATION	2,079	251%	211%
PROVIDENT FUNDING ASSOCIATES, LP	2,259	158%	159%	PODIUM MORTGAGE CAPITAL LLC	9,488	213%	213%
ROCKET MORTGAGE, LLC	136,928	155%	148%	PROVIDENT FUNDING ASSOCIATES, LP	2,255	158%	158%
LENNAR MORTGAGE, LLC	5,385	153%	156%	FREEDOM MORTGAGE CORPORATION	21,409	150%	158%
CANOPY MORTGAGE, LLC	2,161	140%	146%	PINGORA LOAN SERVICING, LLC	5,319	148%	145%

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

Seller Name	UPB (\$MM)	Sep BCPR	Aug BCPR	Servicer Name	UPB (\$MM)	Sep BCPR	Aug BCPR
THE LOAN STORE LLC	3,759	316%	320%	PODIUM MORTGAGE CAPITAL LLC	5,674	195%	200%
ONE AMERICAN BANK	3,044	200%	176%	MONEY SOURCE INC	1,815	193%	177%
MONEY SOURCE INC	1,841	188%	170%	FREMONT BANK	1,982	181%	178%
FREMONT BANK	1,982	181%	178%	NBKC BANK	2,734	160%	149%
NBKC BANK	3,118	172%	164%	FREEDOM MORTGAGE CORPORATION	14,507	149%	146%

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.

15.2

20.0

20.0

^{**} Population includes top 100 sellers/servicers by UPB and reflects Note Rate Adjusted BCPR3 values.

Data Dynamics®



Historical Benchmark CPR Data

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

Metric	Sep-2021	Aug-2021	Jul-2021	Sep-2020
Cohort BCPR1	18.6	18.7	15.4	29.2
Cohort BCPR3	19.6	19.0	18.0	34.5
Cohort BCPR6	23.5	25.9	28.1	43.0
WA BCPR3 of Top 25 Sellers*	21.4	20.8	19.7	37.3
WA NR-Adjusted % of Cohort for Top 25 Sellers*	118.8	112.0	111.9	107.1
BCPR3 Range (Max-Min) for Top 100 Sellers*	21.5	23.3	26.1	56.9
Total Current UPB (\$B)	1,511	1,489	1,454	867
% of Cohort UPB w/ NR-Adjusted BCPR3 0-90% of Cohort	32%	34%	32%	31%
% of Cohort UPB w/ NR-Adjusted BCPR3 90-110% of Cohort	31%	29%	31%	31%
% of Cohort UPB w/ NR-Adjusted BCPR3 110-130% of Cohort	25%	24%	25%	33%
% of Cohort UPB w/ NR-Adjusted BCPR3 >130% of Cohort	13%	13%	13%	4%

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

Metric	Sep-2021	Aug-2021	Jul-2021	Sep-2020
Cohort BCPR1	16.9	17.5	14.2	29.4
Cohort BCPR3	18.4	17.8	16.6	35.6
Cohort BCPR6	22.3	24.8	27.1	43.5
WA BCPR3 of Top 25 Sellers*	18.8	18.2	17.1	37.2
WA NR-Adjusted % of Cohort for Top 25 Sellers*	104.8	105.4	105.7	103.7
BCPR3 Range (Max-Min) for Top 100 Sellers*	27.1	27.1	32.2	55.1
Total Current UPB (\$B)	1,237	1,205	1,169	624
% of Cohort UPB w/ NR-Adjusted BCPR3 0-90% of Cohort	42%	34%	35%	28%
% of Cohort UPB w/ NR-Adjusted BCPR3 90-110% of Cohort	29%	36%	38%	43%
% of Cohort UPB w/ NR-Adjusted BCPR3 110-130% of Cohort	13%	14%	8%	24%
% of Cohort UPB w/ NR-Adjusted BCPR3 >130% of Cohort	16%	16%	19%	4%

Data Dynamics®



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

Metric	Sep-2021	Aug-2021	Jul-2021	Sep-2020
Cohort BCPR1	18.6	18.7	15.4	29.2
Cohort BCPR3	19.6	19.0	18.0	34.5
Cohort BCPR6	23.5	25.9	28.1	43.0
WA BCPR3 of Top 25 Servicers*	21.2	20.6	19.5	37.8
WA NR-Adjusted % of Cohort for Top 25 Servicers*	109.4	110.3	110.0	106.5
BCPR3 Range (Max-Min) for Top 100 Servicers*	34.1	36.3	35.8	54.6
Total Current UPB (\$B)	1,511	1,489	1,454	867
% of Cohort UPB w/ NR-Adjusted BCPR3 0-90% of Cohort	30%	30%	29%	29%
% of Cohort UPB w/ NR-Adjusted BCPR3 90-110% of Cohort	33%	30%	35%	39%
% of Cohort UPB w/ NR-Adjusted BCPR3 110-130% of Cohort	26%	28%	31%	22%
% of Cohort UPB w/ NR-Adjusted BCPR3 >130% of Cohort	11%	12%	4%	10%

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

Metric	Sep-2021	Aug-2021	Jul-2021	Sep-2020
Cohort BCPR1	16.9	17.5	14.2	29.4
Cohort BCPR3	18.4	17.8	16.6	35.6
Cohort BCPR6	22.3	24.8	27.1	43.5
WA BCPR3 of Top 25 Servicers*	18.7	18.0	16.8	37.4
WA NR-Adjusted % of Cohort for Top 25 Servicers*	104.1	104.9	105.0	102.2
BCPR3 Range (Max-Min) for Top 100 Servicers*	30.8	33.1	35.6	58.9
Total Current UPB (\$B)	1,237	1,205	1,169	624
% of Cohort UPB w/ NR-Adjusted BCPR3 0-90% of Cohort	38%	36%	31%	25%
% of Cohort UPB w/ NR-Adjusted BCPR3 90-110% of Cohort	33%	35%	41%	45%
% of Cohort UPB w/ NR-Adjusted BCPR3 110-130% of Cohort	17%	13%	16%	20%
% of Cohort UPB w/ NR-Adjusted BCPR3 >130% of Cohort	11%	15%	13%	10%

BCPR Component Profiles

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

	Orig amt	Beg bal	Beg loan											%	%		
	(\$MM)	(\$MM)	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. Jun component	1,454,756	1,421,712	5,272,347	275,922	3.25	10	756	74	34	21%	39%	34%	91%	5%	39%	1.7	19.0
b. Jul component	1,515,444	1,480,185	5,455,600	277,778	3.22	10	756	74	34	21%	39%	34%	91%	5%	39%	1.6	17.2
c. 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
d. 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
e. MoM profile change	24,754	22,674	68,708	989	-0.02	0	0	0	0	0%	0%	0%	0%	0%	0%	-0.3%	-0.2%
f. Sep pay-offs	29,818	28,782	99,062	301,312	3.46	14	750	76	35	26%	42%	33%	93%	4%	35%	100.0	100.0
g. Aug pay-offs	29,477	28,466	97,663	302,215	3.51	14	750	76	35	27%	44%	33%	94%	4%	35%	100.0	100.0
h. Jul-21 issuances	69,701	69,265	237,361	293,649	3.15	2	750	75	35	18%	37%	27%	95%	2%	53%	0.5	5.8
i. Jul-19 issuances	16,302	15,436	74,346	219,267	4.41	26	740	81	37	12%	48%	8%	89%	6%	73%	5.2	47.1
Fannie Mae universe																	
j. Sep universe	9,677,481	2,556,523	11,860,800	312,806	3.57	35	751	74	N/A	N/A	39%	23%	90%	6%	43%	2.3	24.1
k. Diff vs. Sep component	8,093,985	1,012,706	6,202,168	32,969	0.39	24	-5	1	N/A	N/A	0%	-11%	-2%	1%	4%	0.4	3.4

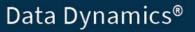
Records a-d: Collateral profiles of BCPR components as of the start of each month. Records b-d comprise the most recent BCPR3, while records a-c comprise the prior BCPR3. Records f-g: Profile of loans that paid off in each respective month.

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

	Orig	Current												
Population	Amount	UPB (\$ MM)	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21
	(\$ MM)													
85k	\$11,544	\$10,325	1%	-8%	6%	-19%	1%	23%	-11%	-11%	7%	-6%	1%	3%
110k	\$24,746	\$22,000	-2%	-8%	12%	-23%	5%	18%	-18%	-11%	11%	-6%	6%	2%
125k	\$25,314	\$22,418	1%	-4%	2%	-14%	1%	23%	-22%	-10%	6%	-3%	3%	5%
150k	\$58,441	\$51,459	1%	-10%	5%	-16%	5%	18%	-23%	-14%	11%	-7%	11%	3%
175k	\$76,492	\$66,653	1%	-11%	5%	-15%	5%	14%	-23%	-15%	11%	-5%	11%	2%
200k	\$101,791	\$88,041	0%	-14%	7%	-12%	0%	11%	-24%	-17%	11%	-3%	12%	2%
225k	\$114,274	\$97,917	-1%	-13%	7%	-10%	3%	10%	-25%	-20%	13%	-5%	13%	3%
NY	\$47,601	\$43,520	8%	-12%	-2%	-18%	-1%	17%	-26%	-22%	-6%	-9 %	9 %	-12%
TX FL	\$89,474	\$75,256	-3%	-15%	7%	-3%	-7%	20%	-28%	-16%	8%	-7%	15%	-2%
FL	\$81,895	\$70,726	0%	-17%	13%	-15%	7%	14%	-26%	-19%	11%	-8%	9%	6%
LTV>=95	\$164,617	\$133,015	4%	-10%	10%	-9%	8%	7%	-28%	-20%	10%	-6%	18%	-2%
Investor	\$52,529	\$43,124	7%	-16%	11%	-8%	6%	11%	-25%	-19%	-6%	-12%	21%	9%
FICO<700	\$111,962	\$88,467	6%	-8%	9%	-16%	5%	12%	-21%	-13%	4%	-8%	12%	0%
Non-Spec	\$1,010,728	\$785,627	3%	-13%	9%	-9 %	2%	-1%	-37%	-20%	11%	- 9 %	29%	-1%
Retail	\$1,165,448	\$977,929	2%	-12%	9%	-11%	4%	9%	-31%	-18%	11%	-5%	21%	3%
Correspondent	\$484,564	\$364,834	2%	-11%	6%	-10%	2%	4%	-30%	-22%	7%	-10%	15%	-1%
Broker	\$323,064	\$256,220	10%	-13%	13%	-8%	1%	-7%	-34%	-14%	8%	-11%	33%	-8%
Purchase	\$754,477	\$626,311	1%	-13%	5%	-10%	5%	10%	-29%	-23%	5%	-11%	14%	-1%
Refi	\$835,230	\$670,045	5%	-13%	12%	-8%	1%	-1%	-36%	-14%	14%	-4%	29%	1%
Cash-out	\$382,277	\$302,627	4%	-9%	9%	-14%	1%	3%	-28%	-18%	9%	-8%	19%	-1%
Principal	\$1,809,314	\$1,462,491	3%	-12%	8%	-10%	3%	3%	-32%	-18%	10%	-7%	22%	-1%
Second Home	\$70,082	\$58,718	2%	-17%	8%	-12%	2%	9%	-26%	-23%	7%	-8%	8%	4%
Investment	\$92,466	\$77,775	6%	-13%	8%	-10%	6%	14%	-23%	-20%	-1%	-10%	16%	6%
Standard Appraisal	\$1,302,203	\$1,055,269	3%	-12%	8%	-11%	5%	8%	-29%	-20%	7%	-8%	16%	0%
Appraisal Waiver	\$669,667	\$543,715	2%	-14%	10%	-9%	-2%	-4%	-38%	-14%	15%	-6%	33%	-1%





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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Benchmark CPR Methodology Overview

Benchmark CPR Video Tutorial

MBS Cohort Analyzer Dashboard

MBS Cohort Analyzer User Guide

MBS Cohort Analyzer Video

Data Dynamics Overview

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