December 2022 Market Snapshot





Contents

Macro-Economic Indicators

Rate History

Prepayment Speed Trends

Delinquency Trends

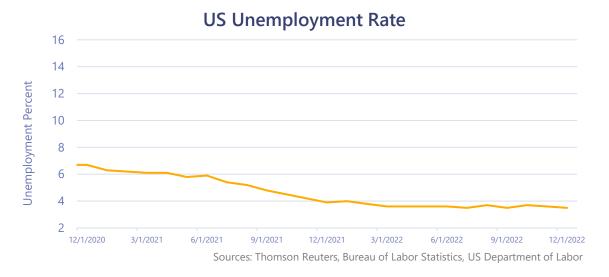


Macro-Economic Indicators

Summary

- Nonfarm payroll employment increased by 223,000 while the unemployment rate remained edged down to 3.5% in December.
- The Federal Reserve raised the federal funds rate by 50 bps in December, bringing the benchmark rate to a range of 4.25% to 4.50%.
- The MBA Mortgage Refinance Application Index's weekly readings continued to fall in December with a reading of 311, which is down from 326 recorded in the last week of November.
- Preliminary US housing starts are estimated to be lower month-overmonth with 1,337,000 housing starts estimated in December.
- The total number of loans in forbearance, tracked by the MBA's Monthly Loan Monitoring Survey, remained flat month-over-month at 0.70%.

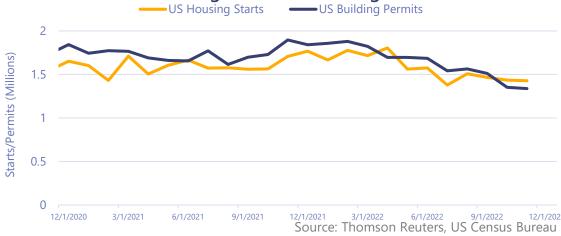
Macro-Economic Indicators



Loans in Forbearance



US Housing Starts/US Building Permits



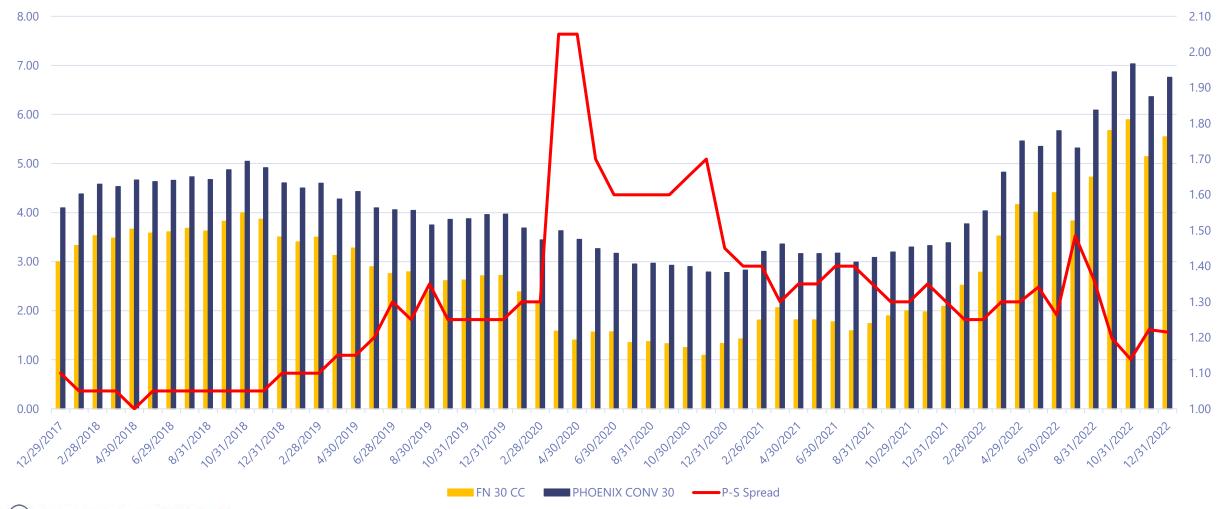
MBA Mortgage Refinance Application Index



Source: Thomson Reuters, Mortgage Bankers Association (MBA) of America



Primary Secondary Spread Tracking



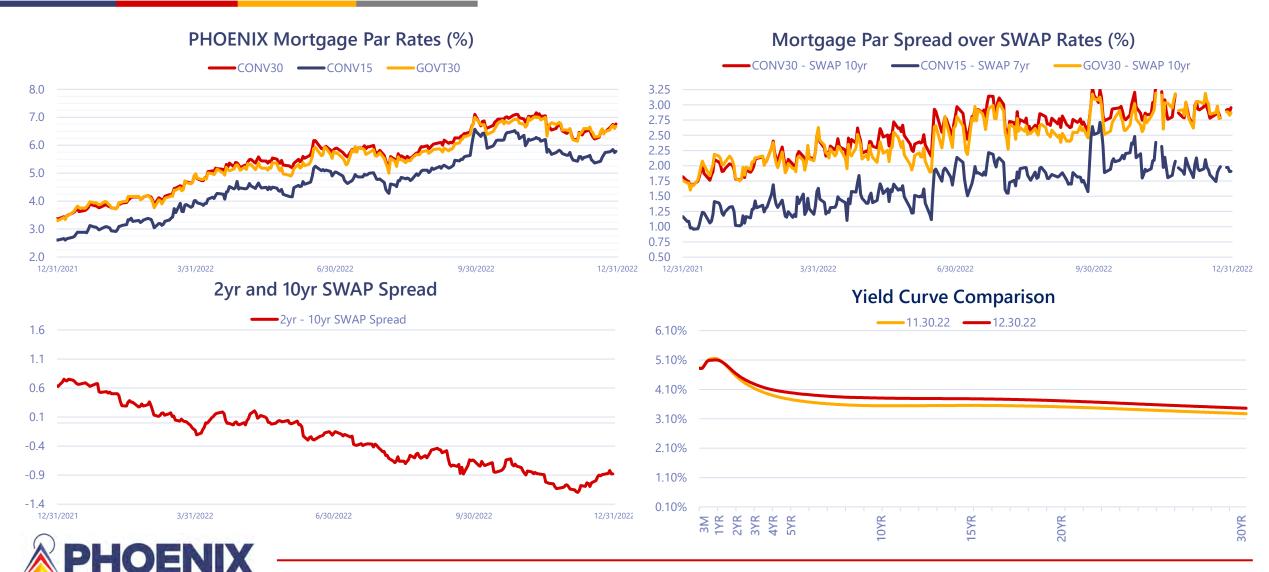


Rate History

Summary

- PHOENIX primary mortgage rates increased from November to December.
 The fixed 30-year CONV rate was up 39.60 bps, GOVT product also increased by 36.90 bps, and the 15-year rates rose by 21.20 bps.
- In December, the 5-year SWAP rate was up 22.60 bps compared to November month-end.
- Volatilities were up month-over-month.
- Both LIBOR and SOFR rates continued trending upward in December.
- Quarter-over-quarter PHOENIX par rates decreased.

Rate History



Rate History (cont.)

Primary Rates as of 12/30/2022

Rate	12/31/2021	9/30/2022	11/30/2022	12/30/2022
CONV30	3.359	6.994	6.586	6.759
CONV15	2.602	6.474	5.739	5.781
GOV30	3.296	6.935	6.590	6.676
ARM 5/1	2.250	4.500	5.250	5.500

Secondary Rates as of 12/30/2022

Rate	12/31/2021	10/31/2022	11/30/2022	12/30/2022
FNMA 30	2.087	5.894	5.141	5.544
FNMA 15	1.358	5.199	4.644	4.764
GNMA II 30	1.945	5.715	5.339	5.319
GNMA II 15	1.418	4.770	4.614	4.546
ARM 5/1	2.740	5.520	5.490	5.490

Earnings Rates as of 12/30/2022

Rate	9/30/2022	10/31/2022	11/30/2022	12/30/2022
3 MO ED	3.844	4.533	4.836	4.821
6 MO ED	4.349	4.903	5.060	5.045
12 MO ED	4.482	5.230	5.149	5.104
2 YR SWAP	4.493	4.845	4.613	4.684
3 YR SWAP	4.308	4.569	4.164	4.306
5 YR SWAP	4.098	4.286	3.767	3.993
10 YR SWAP	3.839	4.076	3.545	3.806
15 YR SWAP	3.762	4.045	3.554	3.781
20 YR SWAP	3.638	3.959	3.505	3.709
30 YR SWAP	3.321	3.682	3.273	3.459



Prepayment Speed Trends

Summary

- The national average prepayment speed for fixed-rate GNMA and GSE loans was 4.86% in December, 12 bps slower than November's rate of 4.98%.
- Over the month, the CONV 30-year CPRs decreased by 0.13% while CONV 15-year CPRs increased by 0.30%. FHA fell by 0.40%, while VA speeds slowed by 0.27%.
- Quarter-over-quarter, national CPR speed decreased to 4.86% in December from September's 7.30%.
- Prepayment speeds continue to trend downward.

CPR Summary

SUMMARY TABLES - December 2022

Loan Characteristics

Prepayments

Investor	Avg Orig Bal	WAC	WAvg Orig FICO	WAvg Orig LTV	WAvg Age	CPR	1mo CPR Change%
CONV Fixed 30	\$254,841	3.68	754	74	39	4.50%	-2.89%
CONV Fixed 15	\$202,096	2.96	762	61	38	5.70%	5.54%
GNMA Fixed 30	\$214,617	3.63	698	93	42	5.29%	-6.07%
GNMA Fixed 15	\$141,766	3.22	720	77	53	8.41%	-2.03%

Vintage	Avg Orig Bal	WAC	WAvg Orig FICO	WAvg Orig LTV	WAvg Age	CPR	1mo CPR Change%
2006	\$137,286	5.45	682	78	161	6.50%	-5.40%
2007	\$145,169	5.34	678	79	150	6.67%	-0.70%
2008	\$142,916	5.21	680	82	146	6.69%	4.14%
2009	\$157,252	4.85	723	79	150	7.44%	0.07%
2010	\$163,701	4.63	733	79	141	7.46%	0.55%
2011	\$163,126	4.41	737	78	131	7.51%	-0.31%
2012	\$188,174	3.76	748	80	122	6.63%	0.88%
2013	\$179,057	3.79	743	79	112	6.66%	-1.28%
2014	\$162,168	4.24	729	80	97	7.51%	-1.22%
2015	\$186,111	3.93	734	79	86	6.99%	-0.56%
2016	\$203,988	3.68	737	78	74	6.57%	-3.37%
2017	\$191,784	4.08	728	80	61	7.26%	-5.83%
2018	\$184,927	4.60	721	81	49	7.83%	-4.48%
2019	\$219,207	3.98	734	80	37	6.70%	-3.15%
2020	\$274,970	3.01	756	74	27	4.61%	-3.25%

Tranche	Avg Orig Bal	WAC	WAvg Orig FICO	WAvg Orig LTV	WAvg Age	CPR	1mo CPR Change%
0.0000 - 2.4999	\$291,647	2.25	761	70	20	4.25%	4.14%
2.5000 - 2.9999	\$287,124	2.78	758	72	22	3.75%	-1.47%
3.0000 - 3.4999	\$255,782	3.21	744	77	30	4.52%	-3.13%
3.5000 - 3.9999	\$218,682	3.71	737	78	54	5.61%	-1.74%
4.0000 - 4.4999	\$193,656	4.19	731	80	67	6.23%	-4.93%
4.5000 - 4.9999	\$192,341	4.70	726	80	60	6.05%	-3.49%
5.0000 - 5.4999	\$195,784	5.19	723	82	52	5.48%	-3.83%
5.5000 - 5.9999	\$200,509	5.69	721	81	44	5.08%	-2.98%
6.0000 - 6.4999	\$171,359	6.17	714	81	64	5.69%	-2.80%
6.5000 or more	\$142,231	6.88	716	81	68	5.89%	-8.72%

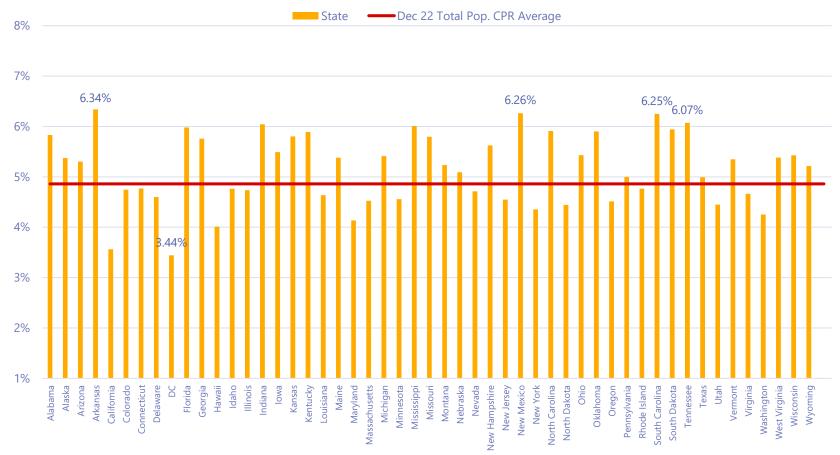
GSE and GNMA fixed rate product only

Source: Black Knight McDash



Prepayment Speed Trends

Average CPR by State - December 2022



GSE and GNMA fixed rate product only

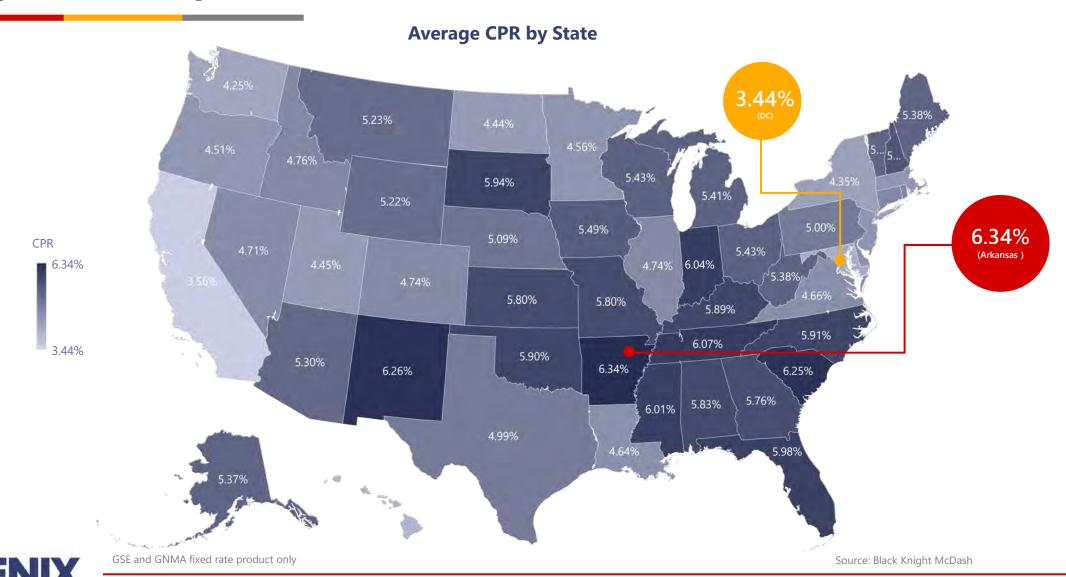
Source: Black Knight McDash

Analysis

- Arkansas was the fastest prepaying state at 6.34%, closely followed by New Mexico (6.26%), South Carolina (6.25%), and Tennessee (6.07%).
- In December, the slowest prepaying state was DC at 3.44%.
- The Pacific region shows the slowest prepayment speeds on average, with a rate of 4.33% among WA, OR, CA, AK, and HI. This region also had the lowest delinquency rate (2.01%). The East South-Central region had the highest prepayment speed at 5.95%.

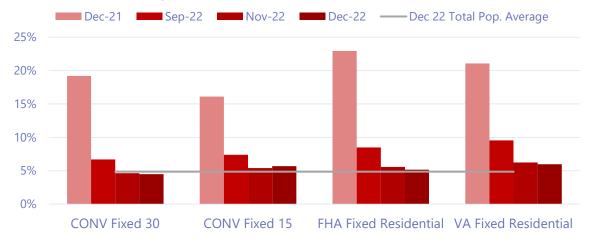


Prepayment Speed Trends (cont.)

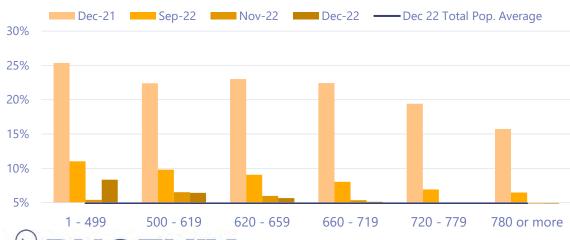


Prepayment Speed Trends (cont.)

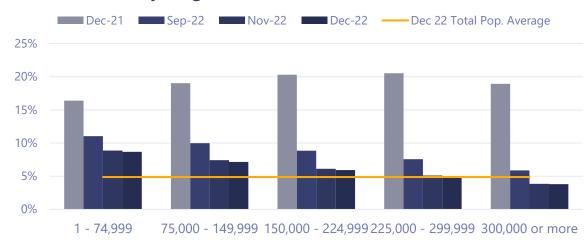
CPR by Fixed-Rate Product - December 2022



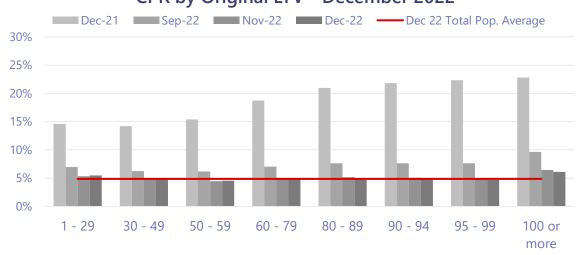
CPR by Original FICO - December 2022



CPR by Original Loan Balance - December 2022



CPR by Original LTV - December 2022



Delinquency Trends

Summary

- The national delinquency and foreclosure rate went up to 2.82%, an increase of 4 bps compared to last month. This new value is 2 bps lower than the 2.84% national average delinquency and foreclosure rate from December 2021.
- CONV 30-year loans' and CONV 15-year loans' delinquency and foreclosure rates remained unchanged.
- On a month-over-month basis, national average delinquency and foreclosure rates for fixed-rate FHA increased by 7 bps whereas it decreased by 10 bps for VA.

NOTE: Non-paying loans in forbearance are counted as delinquent in our data source.

Total delinquencies up

4 bps



Delinquency Summary

SUMMARY TABLES - December 2022

Loan Characteristics

Delinquencies

Investor	Avg Orig Bal	WAC	WAvg Orig FICO	WAvg Orig LTV	WAvg Age	30d DQ	60d DQ	+90d DQ	Total FC	Total DQ & FC	1mo DQ & FC Change%
CONV Fixed 30	\$254,841	3.68	754	74	39	0.90%	0.22%	0.52%	0.12%	1.76%	-0.06%
CONV Fixed 15	\$202,096	2.96	762	61	38	0.45%	0.08%	0.16%	0.03%	0.72%	-0.69%
GNMA Fixed 30	\$214,617	3.63	698	93	42	3.48%	1.08%	2.06%	0.37%	6.98%	1.91%
GNMA Fixed 15	\$141,766	3.22	720	77	53	1.22%	0.28%	0.46%	0.14%	2.10%	-0.76%

Vintage	Avg Orig Bal	WAC	WAvg Orig FICO	WAvg Orig LTV	WAvg Age	30d DQ	60d DQ	+90d DQ	Total FC	Total DQ & FC	1mo DQ & FC Change%
2006	\$137,286	5.45	682	78	161	4.63%	1.40%	2.89%	2.07%	10.99%	0.79%
2007	\$145,169	5.34	678	79	150	5.04%	1.54%	3.23%	2.21%	12.01%	-0.18%
2008	\$142,916	5.21	680	82	146	5.15%	1.48%	2.48%	1.56%	10.67%	-0.05%
2009	\$157,252	4.85	723	79	150	3.01%	0.81%	1.13%	0.44%	5.39%	0.26%
2010	\$163,701	4.63	733	79	141	2.29%	0.58%	0.85%	0.35%	4.07%	1.70%
2011	\$163,126	4.41	737	78	131	1.92%	0.50%	0.77%	0.27%	3.46%	1.17%
2012	\$188,174	3.76	748	80	122	1.17%	0.27%	0.46%	0.16%	2.06%	1.08%
2013	\$179,057	3.79	743	79	112	1.34%	0.34%	0.60%	0.22%	2.50%	0.36%
2014	\$162,168	4.24	729	80	97	2.36%	0.65%	1.17%	0.41%	4.59%	0.68%
2015	\$186,111	3.93	734	79	86	2.10%	0.59%	1.05%	0.34%	4.08%	0.72%
2016	\$203,988	3.68	737	78	74	1.95%	0.54%	1.04%	0.32%	3.85%	0.47%
2017	\$191,784	4.08	728	80	61	2.68%	0.77%	1.52%	0.43%	5.40%	0.47%
2018	\$184,927	4.60	721	81	49	3.47%	1.11%	2.29%	0.61%	7.48%	0.59%
2019	\$219,207	3.98	734	80	37	2.25%	0.70%	1.50%	0.34%	4.79%	0.82%
2020	\$274,970	3.01	756	74	27	0.93%	0.23%	0.58%	0.07%	1.82%	1.17%

Tranche	Avg Orig Bal	WAC	WAvg Orig FICO	WAvg Orig LTV	WAvg Age	30d DQ	60d DQ	+90d DQ	Total FC	Total DQ & FC	1mo DQ & FC Change%
0.0000 - 2.4999	\$291,647	2.25	761	70	20	0.58%	0.14%	0.39%	0.06%	1.16%	-3.41%
2.5000 - 2.9999	\$287,124	2.78	758	72	22	0.81%	0.21%	0.50%	0.05%	1.57%	2.21%
3.0000 - 3.4999	\$255,782	3.21	744	77	30	1.45%	0.43%	0.92%	0.13%	2.94%	1.59%
3.5000 - 3.9999	\$218,682	3.71	737	78	54	1.62%	0.45%	0.97%	0.19%	3.24%	2.02%
4.0000 - 4.4999	\$193,656	4.19	731	80	67	2.09%	0.57%	1.18%	0.32%	4.15%	1.37%
4.5000 - 4.9999	\$192,341	4.70	726	80	60	2.17%	0.60%	1.19%	0.32%	4.28%	1.47%
5.0000 - 5.4999	\$195,784	5.19	723	82	52	2.30%	0.67%	1.16%	0.32%	4.44%	2.51%
5.5000 - 5.9999	\$200,509	5.69	721	81	44	2.00%	0.56%	0.79%	0.23%	3.58%	3.47%
6.0000 - 6.4999	\$171,359	6.17	714	81	64	2.24%	0.57%	0.74%	0.34%	3.89%	-2.87%
6.5000 or more	\$142,231	6.88	716	81	68	1.89%	0.39%	0.58%	0.55%	3.41%	-27.61%

GSE and GNMA fixed rate product only

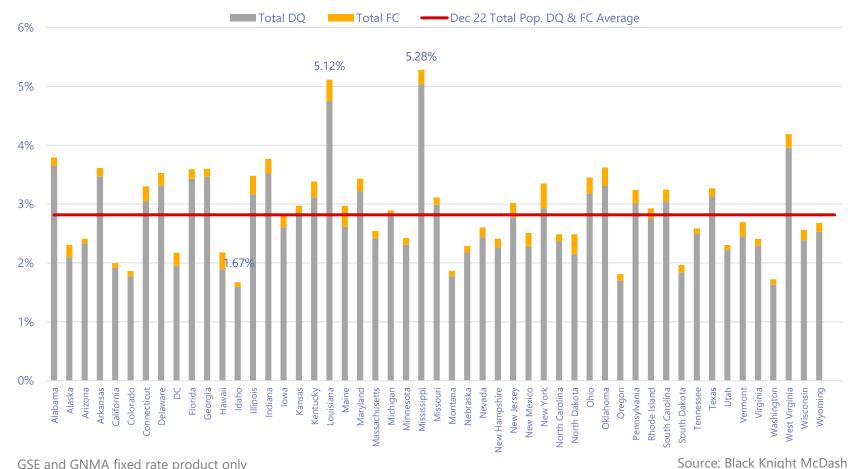
Source: Black Knight McDash



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Delinquency Trends

Average Delinquency and Foreclosure by State - December 2022

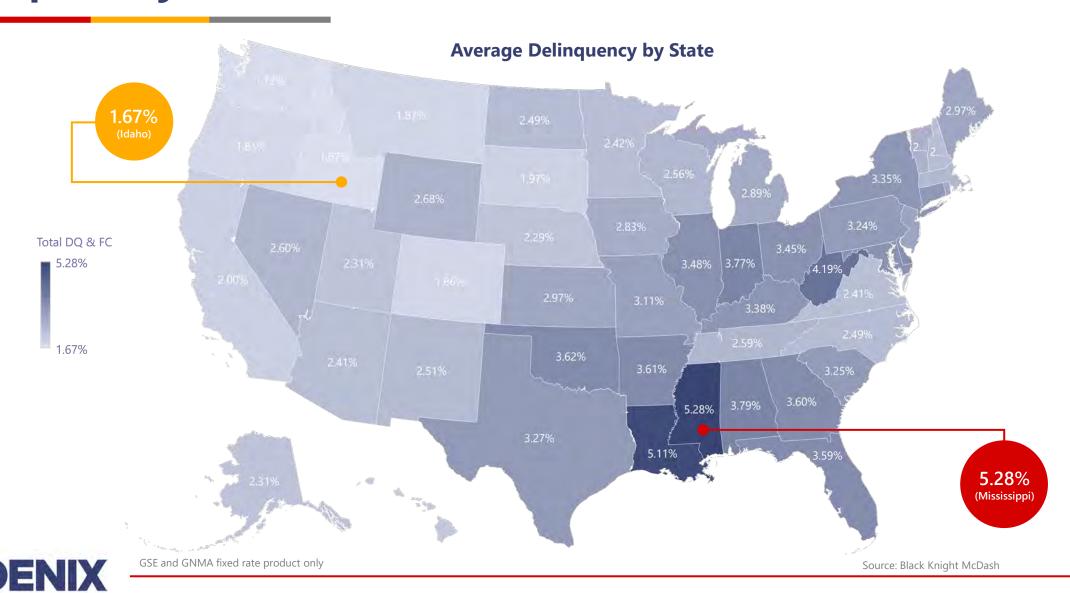


GSE and GNMA fixed rate product only

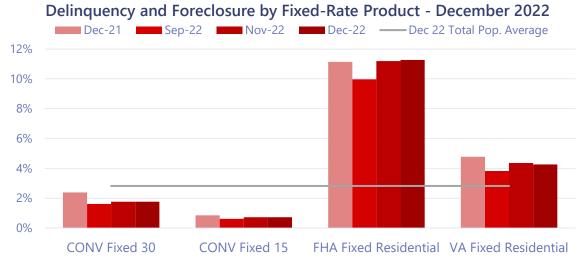
Analysis

- Idaho remains the best-performing state, where delinquency and foreclosure rates are 1.67%, 5 bps higher than November month-end.
- The nation's most delinquent state is Mississippi with a 5.28% delinquency and foreclosure rate 7 bps higher than November month-end
- Compared to December 2021, New York had the nation's largest decrease, moving from 4.16% to 3.35% (-81 bps).
- Regionally, the West South Central region of TX, OK, AR, and LA have the highest delinquency rate (3.89%), and the East South Central states of KY, TN, MS, and AL are close behind at 3.70%.

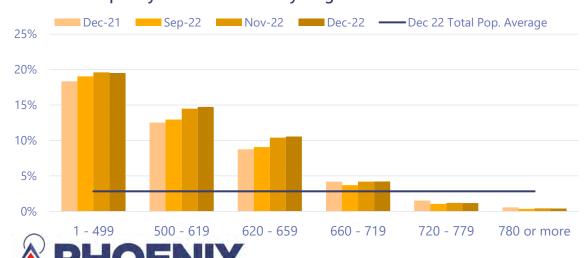
Delinquency Trends (cont.)



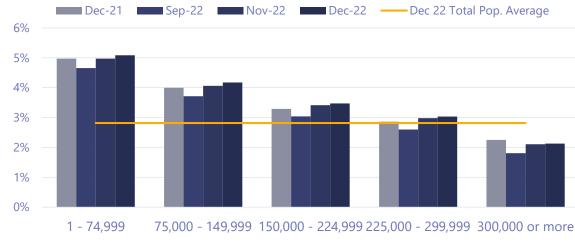
Delinquency Trends (cont.)



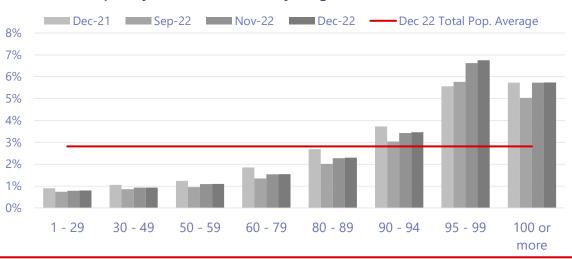
Delinquency and Foreclosure by Original FICO - December 2022



Delinquency and Foreclosure by Original Loan Balance - December 2022



Delinquency and Foreclosure by Original LTV – December 2022



Tables

State SummaryPrepayment and Delinquency

	Loan	Characte	ristics		Prepayments			Delinquencies							
State	WAvg Orig Bal	WAC	WAvg Orig FICO	WAvg Orig LTV	WAvg Age	CPR	1mo CPR Change%	CPR Factor	30d DQ	60d DQ	+90d DQ	Total FC	Total DQ & FC	1mo DQ & FC Change%	DQ Factor
National	\$233,955	3.57	743	77	40	4.86%	-2.43%	100.00%	1.43%	0.40%	0.83%	0.17%	2.82%	1.51%	100.00%
Alabama	\$181,958	3.66	732	83	43	5.83%	-7.19%	120.00%	2.02%	0.54%	1.10%	0.14%	3.79%	2.29%	134.60%
Alaska	\$270,276	3.51	740	84	42	5.37%	-13.33%	110.53%	1.18%	0.30%	0.62%	0.21%	2.31%	1.01%	81.87%
Arizona	\$234,887	3.57	743	76	32	5.30%	3.25%	109.05%	1.30%	0.35%	0.68%	0.08%	2.41%	-0.17%	85.52%
Arkansas	\$163,935	3.64	733	83	42	6.34%	-3.60%	130.41%	1.86%	0.51%	1.10%	0.15%	3.61%	4.24%	128.18%
California	\$336,405	3.40	752	68	38	3.56%	1.42%	73.29%	1.03%	0.26%	0.63%	0.08%	2.00%	-0.10%	70.94%
Colorado	\$294,323	3.44	752	74	32	4.74%	-8.10%	97.59%	0.97%	0.26%	0.54%	0.09%	1.86%	-1.69%	66.08%
Connecticut	\$234,489	3.63	740	79	48	4.77%	-4.28%	98.13%	1.69%	0.44%	0.91%	0.26%	3.30%	-1.99%	117.25%
Delaware	\$228,764	3.63	739	79	43	4.60%	-3.67%	94.61%	1.92%	0.48%	0.92%	0.21%	3.53%	1.79%	125.23%
DC	\$375,464	3.43	760	71	41	3.44%	-25.96%	70.82%	0.90%	0.22%	0.83%	0.22%	2.17%	2.65%	77.04%
Florida	\$223,298	3.68	737	80	37	5.98%	7.86%	123.05%	1.59%	0.63%	1.21%	0.17%	3.59%	-0.25%	127.50%
Georgia	\$210,091	3.64	733	81	39	5.76%	-3.54%	118.44%	1.91%	0.49%	1.07%	0.14%	3.60%	6.04%	127.71%
Hawaii	\$395,002	3.44	753	72	45	4.01%	9.65%	82.53%	1.04%	0.22%	0.63%	0.29%	2.18%	4.45%	77.40%
Idaho	\$239,108	3.50	747	72	32	4.76%	-14.01%	97.98%	0.96%	0.22%	0.41%	0.08%	1.67%	3.15%	59.30%
Illinois	\$198,082	3.62	741	80	44	4.74%	-3.21%	97.43%	1.66%	0.48%	1.02%	0.32%	3.48%	3.85%	123.46%
Indiana	\$161,820 \$165,389	3.73	733 744	82 81	39 42	6.04% 5.49%	-5.27% -10.22%	124.36% 113.00%	2.00%	0.55%	0.98%	0.25%	3.77% 2.83%	3.89% 4.70%	133.68%
Kansas	\$174,268	3.59	740	81	40	5.80%	-4.12%	119.38%	1.57%	0.44%	0.78%	0.23%	2.97%	-0.03%	105.39%
Kentucky	\$168,653	3.65	734	81	41	5.89%	-7.77%	121.19%	1.72%	0.48%	0.91%	0.17%	3.38%	2.48%	120.05%
Louisiana	\$186,612	3.71	726	83	45	4.64%	-5.98%	95.41%	2.45%	0.77%	1.53%	0.37%	5.11%	4.05%	181.48%
Maine	\$203,393	3.58	741	77	42	5.38%	-11.04%	110.72%	1.49%	0.38%	0.74%	0.36%	2.97%	4.06%	105.39%
Maryland	\$274,976	3.50	741	80	42	4.14%	-4.61%	85.10%	1.73%	0.45%	1.05%	0.21%	3.43%	4.66%	121.82%
Massachusetts	\$297,827	3.44	747	72	41	4.53%	1.69%	93.13%	1.38%	0.34%	0.71%	0.13%	2.54%	-1.36%	90.28%
Michigan	\$167,251	3.62	741	78	41	5.41%	-3.74%	111.32%	1.52%	0.46%	0.82%	0.10%	2.89%	4.07%	102.63%
Minnesota	\$218,386	3.54	750	79	41	4.56%	-7.06%	93.74%	1.23%	0.36%	0.73%	0.11%	2.42%	2.02%	85.98%
Mississippi	\$169,431	3.72	722	84	43	6.01%	1.56%	123.62%	2.66%	0.75%	1.63%	0.25%	5.28%	1.30%	187.40%
Missouri	\$171,548	3.63	739	81	41	5.80%	-4.40%	119.24%	1.66%	0.45%	0.88%	0.12%	3.11%	1.87%	110.43%
Montana	\$227,514	3.55	749	75	40	5.23%	-2.66%	107.65%	1.02%	0.25%	0.51%	0.09%	1.87%	0.21%	66.22%
Nebraska	\$173,125	3.50	745	80	39	5.09%	-11.67%	104.77%	1.22%	0.33%	0.63%	0.11%	2.29%	1.42%	81.16%
Nevada	\$249,869	3.61	739	78	33	4.71%	-11.11%	97.00%	1.28%	0.36%	0.80%	0.16%	2.60%	0.35%	92.30%
New Hampshire	\$234,671	3.54	743	76	42	5.62%	-11.07%	115.72%	1.29%	0.33%	0.65%	0.14%	2.41%	1.09%	85.56%
New Jersey	\$275,649	3.53	743	75	43	4.55%	-1.77%	93.58%	1.47%	0.40%	0.91%	0.25%	3.02%	-2.14%	107.31%
New Mexico	\$191,632	3.71	739	80	46	6.26%	-4.58%	128.89%	1.29%	0.32%	0.67%	0.23%	2.51%	1.05%	89.00%
New York	\$265,679	3.73	743	73	52	4.35%	-2.14%	89.59%	1.57%	0.39%	0.97%	0.43%	3.35%	2.76%	118.95%
North Carolina	\$207,884	3.57	743	79	39	5.91%	-2.19%	121.58%	1.34%	0.33%	0.70%	0.12%	2.49%	1.43%	88.22%
North Dakota	\$205,265	3.41	748	81	38	4.44%	-19.86%	91.42%	1.16%	0.35%	0.64%	0.34%	2.49%	8.37%	88.22%
Ohio	\$157,471	3.71	734	82	43	5.43%	-9.39%	111.75%	1.79%	0.51%	0.87%	0.27%	3.45%	2.71%	122.50%
Oklahoma	\$169,456	3.78	733	84	43	5.90%	-3.12%	121.40%	1.76%	0.49%	1.06%	0.31%	3.62%	1.23%	128.46%
Oregon	\$264,501	3.54	752	74	37	4.51%	-7.61%	92.88%	0.91%	0.24%	0.55%	0.11%	1.81%	0.72%	64.27%
Pennsylvania	\$190,481	3.63	741	79	46	5.00%	-1.48%	102.86%	1.69%	0.46%	0.85%	0.23%	3.24%	4.75%	115.05%
Rhode Island	\$233,443	3.59	740	77	43	4.77%	-6.62%	98.11%	1.58%	0.39%	0.79%	0.17%	2.93%	0.07%	103.87%
South Carolina	\$200,781	3.62	737	80	38	6.25%	-1.23%	128.60%	1.71%	0.44%	0.89%	0.20%	3.25%	3.91%	115.15%
South Dakota	\$193,866	3.39	750	79	37	5.94%	-9.45%	122.24%	1.03%	0.25%	0.56%	0.13%	1.97%	2.61%	69.77%
Tennessee	\$207,335	3.60	738	79	36	6.07%	-3.68%	124.92%	1.42%	0.36%	0.72%	0.09%	2.59%	4.31%	91.80%
Texas	\$219,510 \$278,927	3.68	735 745	80 75	37	4.99%	-0.26%	102.72% 91.56%	1.70%	0.47%	0.95%	0.14%	3.27%	0.12%	116.08% 81.80%
Vermont	\$278,927	3.44	745	75	48	4.45% 5.35%	-0.20%	91.56%	1.23%	0.37%	0.62%	0.09%	2.31%	-0.59%	95.56%
Virginia	\$202,154	3.43	747	79	40	4.66%	-1.98%	95.91%	1.27%	0.45%	0.73%	0.12%	2.69%	-0.59%	95.56% 85.42%
Washington	\$305,936	3.43	750	79	35	4.06%	-1.98%	95.91% 87.49%	0.93%	0.22%	0.49%	0.12%	1.72%	0.64%	61.14%
West Virginia	\$160,445	3.70	726	83	45	5.38%	-8.96%	110.76%	2.29%	0.61%	1.06%	0.23%	4.19%	2.12%	148.65%
Wisconsin	\$184,452	3.59	743	79	41	5.43%	-2.99%	111.67%	1.34%	0.36%	0.69%	0.18%	2.56%	2.56%	90.99%
Wyoming	\$220,648	3.50	743	79	39	5.22%	-18.24%	107.33%	1.46%	0.41%	0.66%	0.15%	2.68%	3.83%	95.14%
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