

February 2023 Market Snapshot





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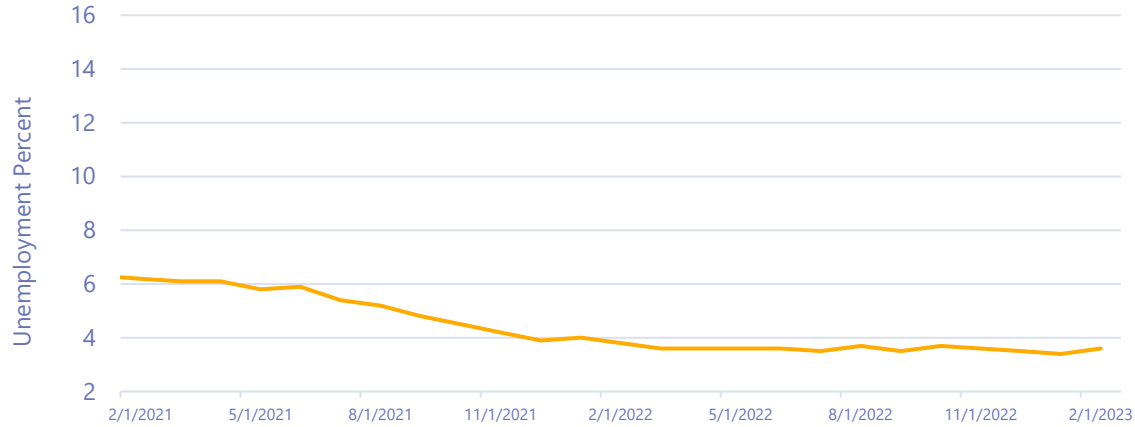
Summary

Macro- Economic Indicators

- Nonfarm payroll employment increased by 311,000 while the unemployment rate rose to 3.6% in February.
- The Federal Reserve increased the federal funds rate by 25 bps, bringing the benchmark rate to a range of 4.50% to 4.75% in February.
- The MBA Mortgage Refinance Application Index's weekly readings decreased in February with a reading of 400, which is down from 433 recorded in the last week of January.
- Preliminary US housing starts are estimated to be higher month-over-month with 1,450,000 housing starts estimated in February.
- The total number of loans in forbearance, tracked by the MBA's Monthly Loan Monitoring Survey, decreased month-over-month from 0.64% to 0.60%.

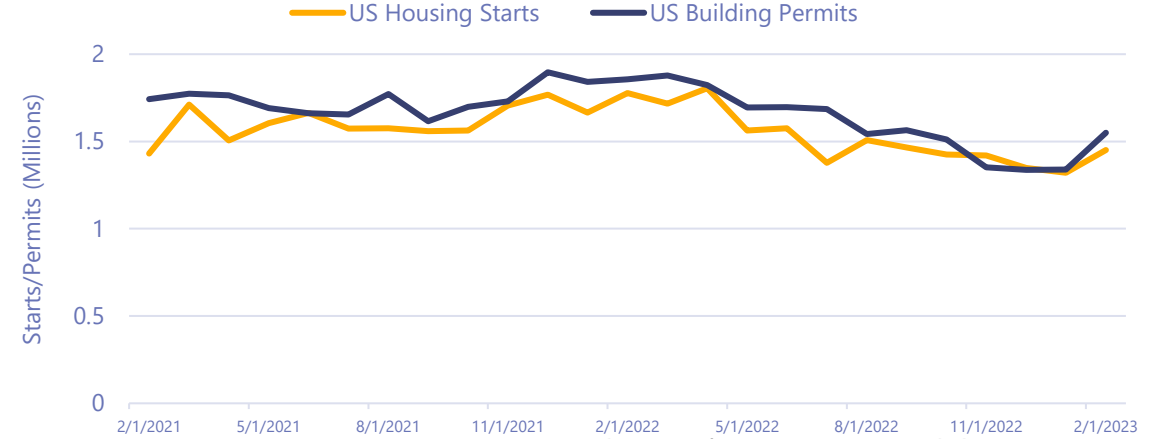
Macro-Economic Indicators

US Unemployment Rate



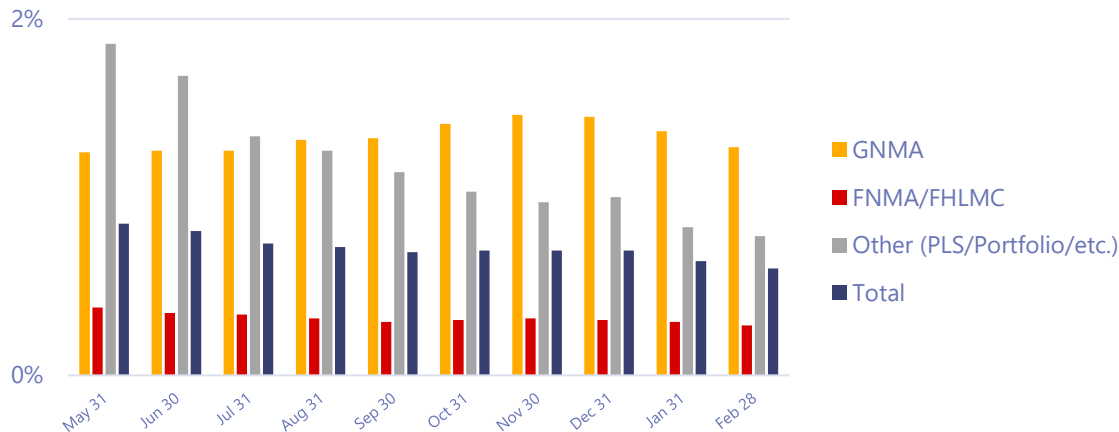
Sources: Thomson Reuters, Bureau of Labor Statistics, US Department of Labor

US Housing Starts/US Building Permits



Source: Thomson Reuters, US Census Bureau

Loans in Forbearance

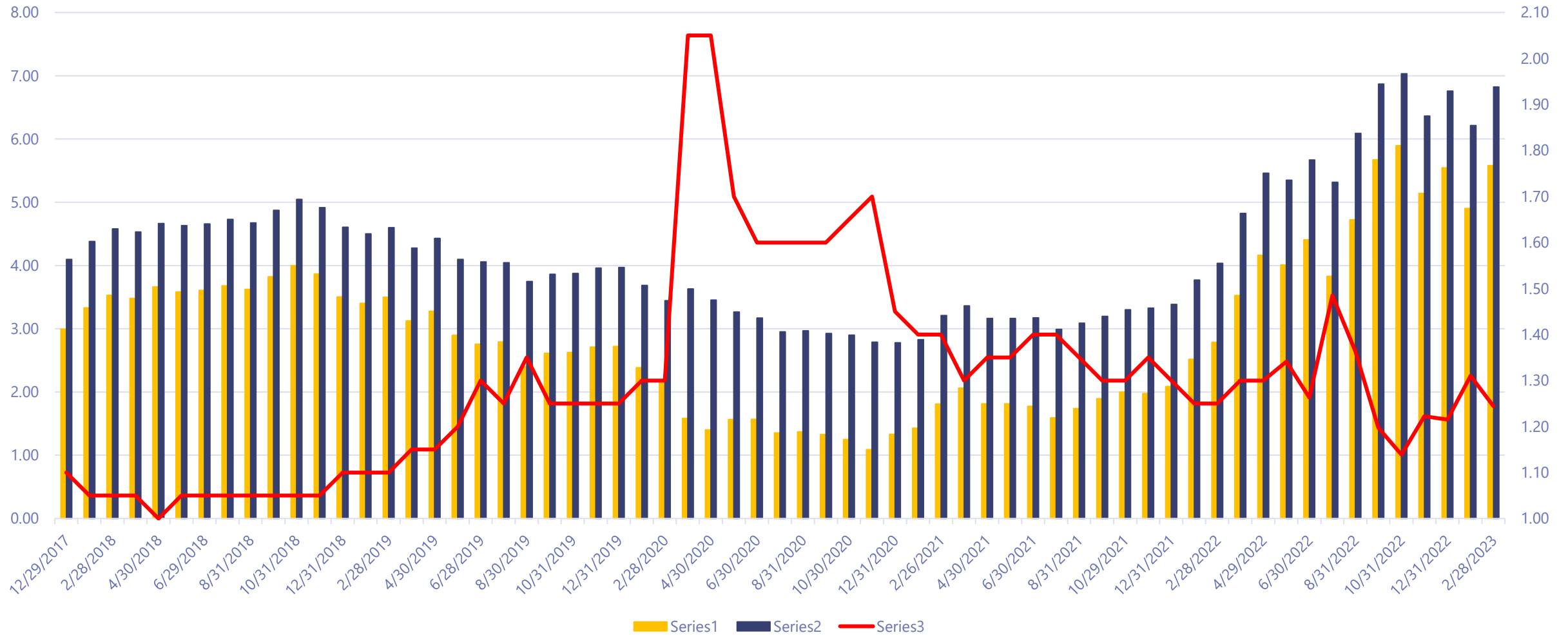


MBA Mortgage Refinance Application Index



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

Primary Secondary Spread Tracking



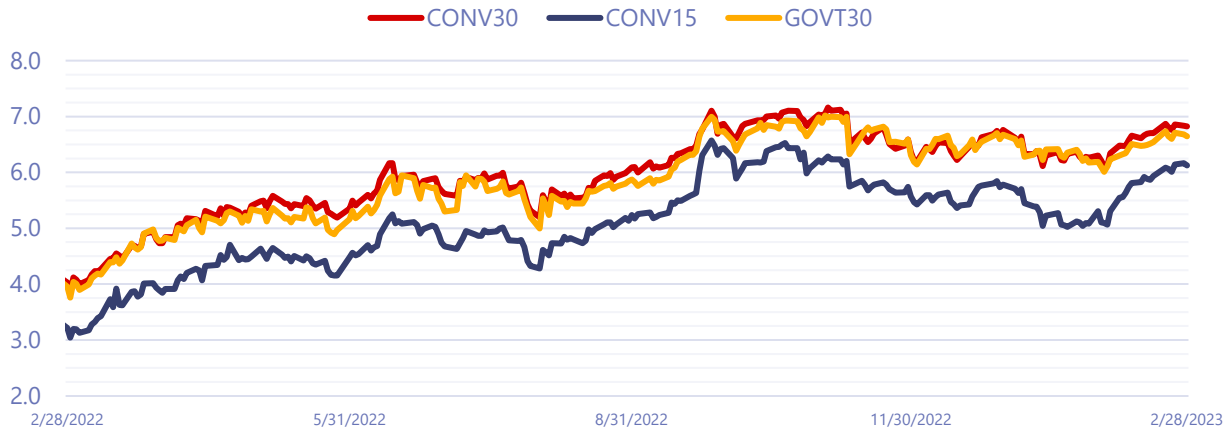
Rate History

Summary

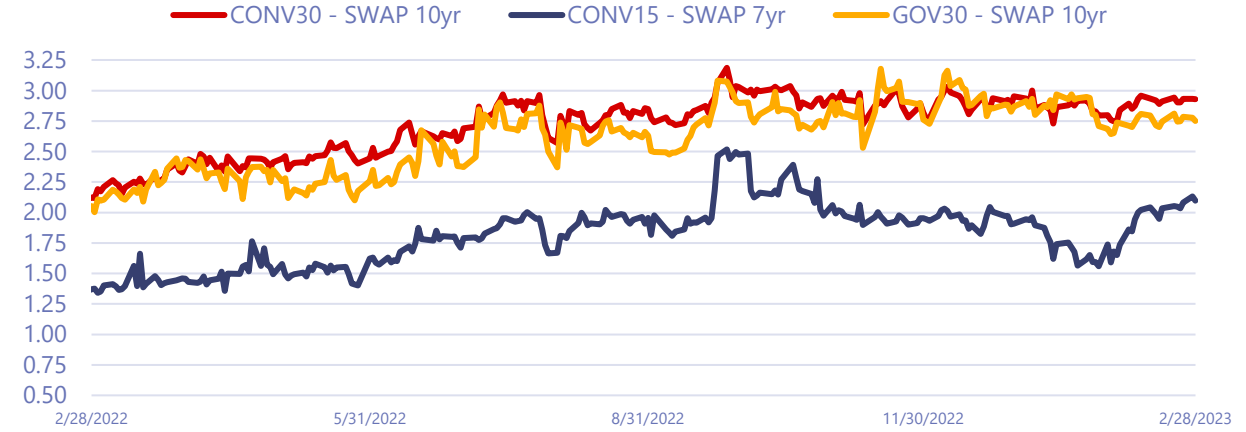
- PHOENIX primary mortgage rates increased from January to February. The fixed 30-year CONV rate was up 61.20 bps, the GOVT product also increased 55 bps, and the 15-year rates rose by 102.20 bps.
- SWAP rates increased in February and the 5-year SWAP rose 58.30 bps compared to January month-end.
- Volatilities were down month-over-month.
- Both LIBOR and SOFR rates keep moving upward in February.

Rate History

PHOENIX Mortgage Par Rates (%)



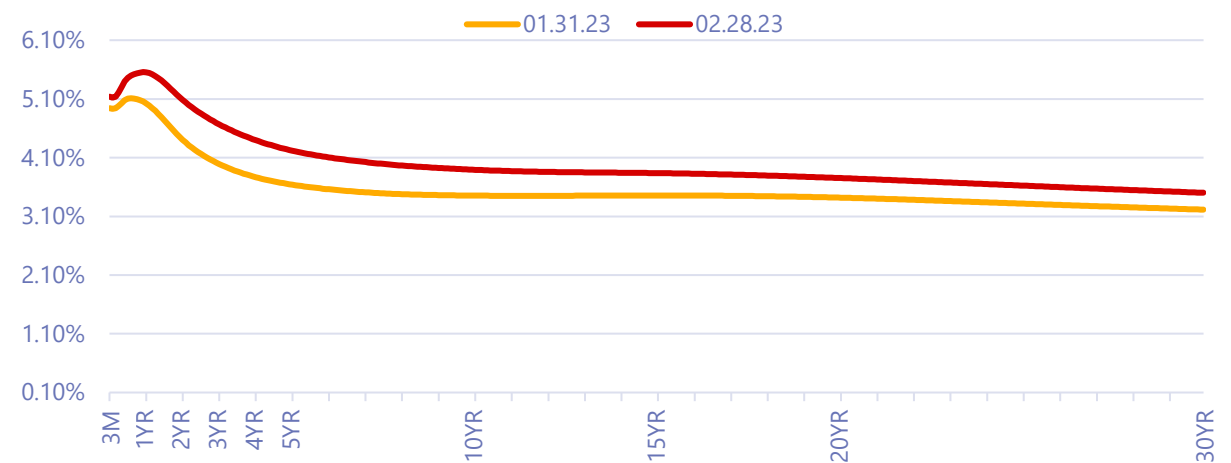
Mortgage Par Spread over SWAP Rates (%)



2yr and 10yr SWAP Spread



Yield Curve Comparison



Rate History (cont.)

Primary Rates as of 02/28/2023

Rate	2/28/2022	11/30/2022	1/31/2023	2/28/2023
CONV30	4.026	6.363	6.212	6.824
CONV15	3.213	5.569	5.104	6.126
GOV30	3.955	6.307	6.097	6.647
ARM 5/1	2.750	5.250	5.500	5.750

Secondary Rates as of 02/28/2023

Rate	2/28/2022	12/30/2022	1/31/2023	2/28/2023
FNMA 30	2.784	5.544	4.902	5.580
FNMA 15	2.196	4.764	4.215	5.116
GNMA II 30	2.518	5.319	4.778	5.402
GNMA II 15	2.196	4.546	5.493	4.973
ARM 5/1	2.940	5.490	5.420	5.750

Earnings Rates as of 02/28/2023

Rate	11/30/2022	12/30/2022	1/31/2023	2/28/2023
3 MO ED	4.836	4.821	4.942	5.140
6 MO ED	5.060	5.045	5.079	5.401
12 MO ED	5.149	5.104	5.056	5.556
2 YR SWAP	4.613	4.684	4.454	5.129
3 YR SWAP	4.164	4.306	4.015	4.694
5 YR SWAP	3.767	3.993	3.647	4.230
10 YR SWAP	3.545	3.806	3.454	3.895
15 YR SWAP	3.554	3.781	3.456	3.837
20 YR SWAP	3.505	3.709	3.420	3.754
30 YR SWAP	3.273	3.459	3.214	3.501

Source: Thomson Reuters and PHOENIX

Prepayment Speed Trends

Summary

- Quarter-over-quarter, national CPR speeds decreased to 4.18% in February from November's 4.98%.
- The national average prepayment speed for fixed-rate GNMA and GSE loans was 4.18% in February, 32 bps increase from January's rate of 3.86%.
- Over the month, the CONV 30-year CPRs increased by 0.30% while CONV 15-year CPRs decreased by 0.11%. FHA rose by 0.43%, while VA speeds grew by 0.78%.
- Prepayment speeds started to show signs of an upward trend.

CPR Summary

SUMMARY TABLES - February 2023

Loan Characteristics

Investor	Avg Orig Bal	WAC	WAvg Orig FICO	WAvg Orig LTV	WAvg Age	CPR	1mo CPR Change%
CONV Fixed 30	\$255,957	3.71	753	74	40	3.85%	8.56%
CONV Fixed 15	\$202,743	2.97	762	61	40	4.73%	-2.29%
GNMA Fixed 30	\$215,603	3.69	698	93	43	4.66%	14.42%
GNMA Fixed 15	\$141,983	3.23	720	77	54	8.12%	6.19%

Prepayments

Vintage	Avg Orig Bal	WAC	WAvg Orig FICO	WAvg Orig LTV	WAvg Age	CPR	1mo CPR Change%
2006	\$136,801	5.47	682	78	163	5.61%	4.51%
2007	\$144,701	5.36	677	79	152	5.39%	-3.94%
2008	\$142,979	5.21	680	82	148	5.43%	-2.96%
2009	\$157,206	4.85	722	80	152	5.94%	-1.03%
2010	\$163,636	4.63	732	79	143	6.27%	-0.13%
2011	\$163,102	4.42	737	78	133	6.17%	-4.09%
2012	\$188,240	3.76	748	80	124	5.19%	-5.74%
2013	\$179,187	3.79	743	79	114	5.45%	-2.14%
2014	\$162,140	4.24	729	80	99	6.14%	-0.29%
2015	\$186,151	3.93	734	79	88	5.58%	1.77%
2016	\$204,198	3.68	737	78	76	5.22%	0.10%
2017	\$192,114	4.08	728	80	63	6.08%	4.14%
2018	\$185,065	4.60	721	81	51	6.46%	0.86%
2019	\$219,300	3.98	734	80	39	5.77%	11.01%
2020	\$274,984	3.01	756	74	29	3.84%	10.71%

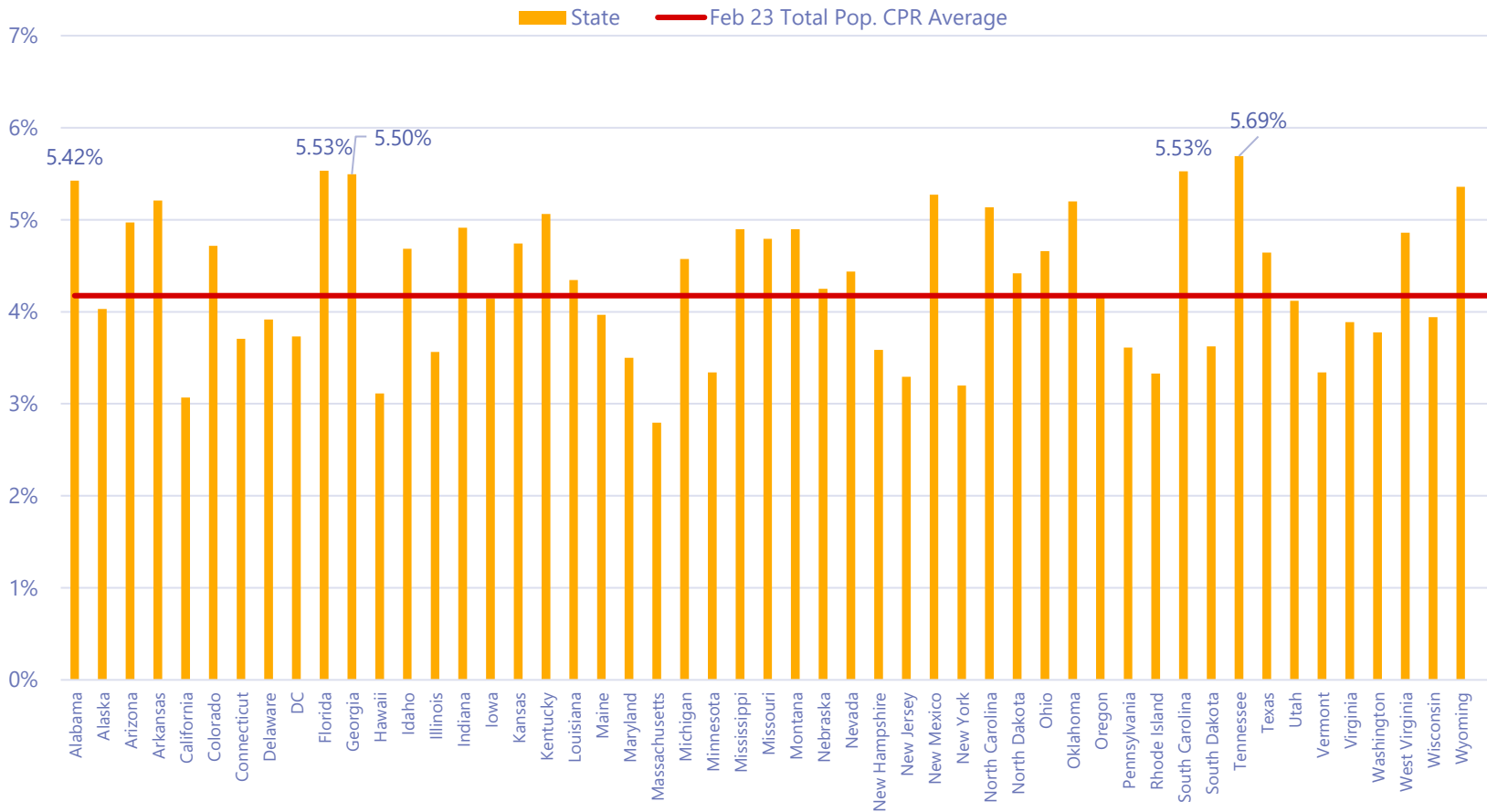
Tranche	Avg Orig Bal	WAC	WAvg Orig FICO	WAvg Orig LTV	WAvg Age	CPR	1mo CPR Change%
0.0000 - 2.4999	\$291,615	2.25	761	70	22	3.56%	7.26%
2.5000 - 2.9999	\$287,270	2.78	758	72	24	3.24%	10.83%
3.0000 - 3.4999	\$256,303	3.21	744	77	32	3.86%	10.17%
3.5000 - 3.9999	\$219,122	3.71	737	78	56	4.64%	5.41%
4.0000 - 4.4999	\$194,144	4.19	731	80	69	5.25%	4.63%
4.5000 - 4.9999	\$193,663	4.70	726	80	61	5.20%	5.82%
5.0000 - 5.4999	\$198,565	5.19	724	82	52	4.63%	4.69%
5.5000 - 5.9999	\$207,169	5.70	722	81	42	4.53%	10.09%
6.0000 - 6.4999	\$186,053	6.18	719	82	51	5.16%	12.01%
6.5000 or more	\$165,460	6.89	720	82	46	6.92%	10.76%

GSE and GNMA fixed rate product only

Source: Black Knight McDash

Prepayment Speed Trends

Average CPR by State - February 2023



Analysis

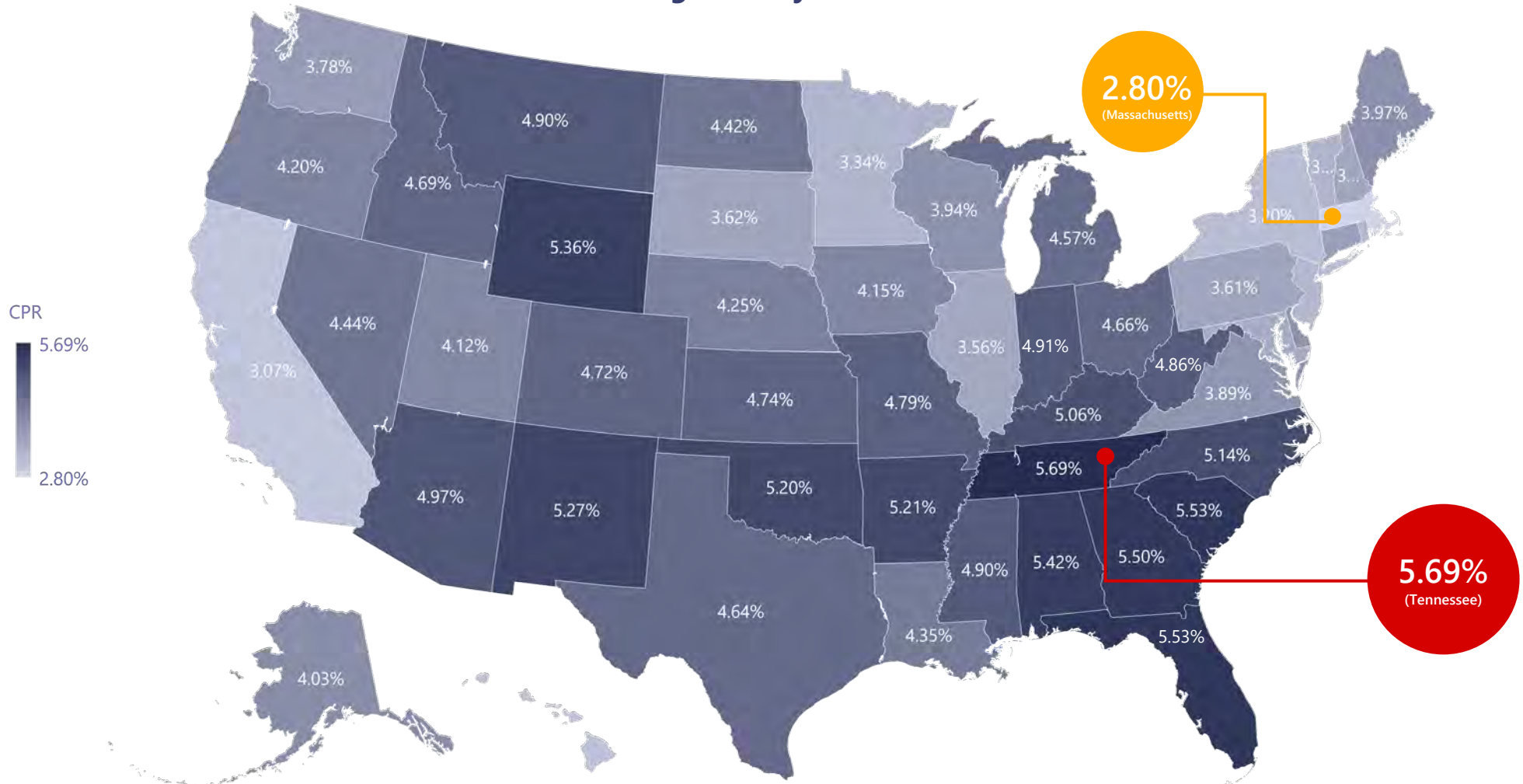
- Tennessee was the fastest prepaying state at 5.69%, closely followed by Florida and South Carolina (5.53%), Georgia (5.50%), and Alabama (5.42%).
- In February, the slowest prepaying state was Massachusetts at 2.80%.
- The Middle Atlantic region shows the slowest prepayment speeds on average, with a rate of 3.32% among PA, NY, and NJ. The East South-Central region had the highest prepayment speed at 5.20%.

GSE and GNMA fixed rate product only

Source: Black Knight McDash

Prepayment Speed Trends (cont.)

Average CPR by State

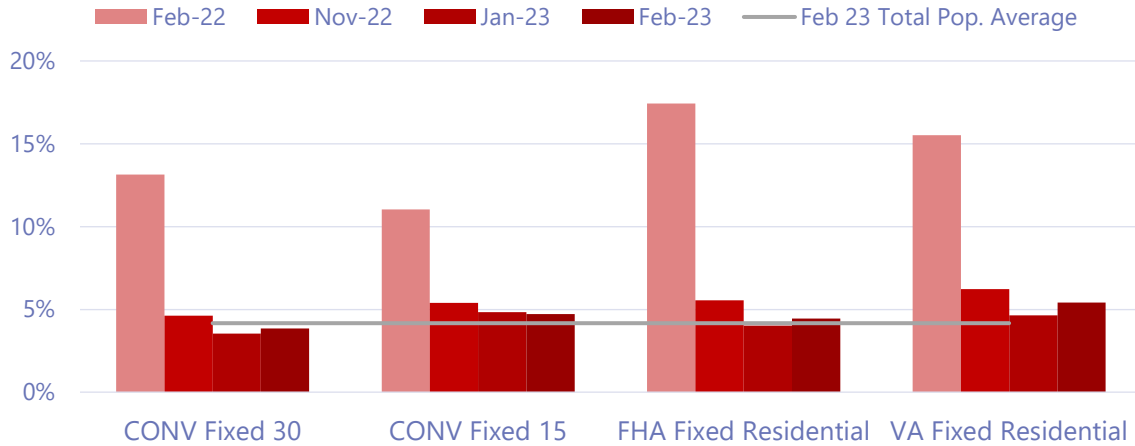


GSE and GNMA fixed rate product only

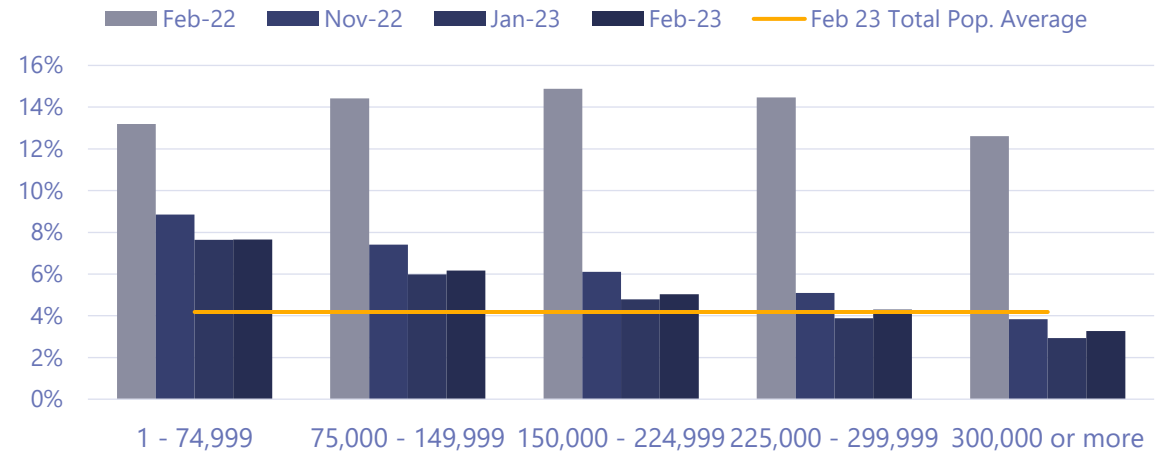
Source: Black Knight McDash

Prepayment Speed Trends (cont.)

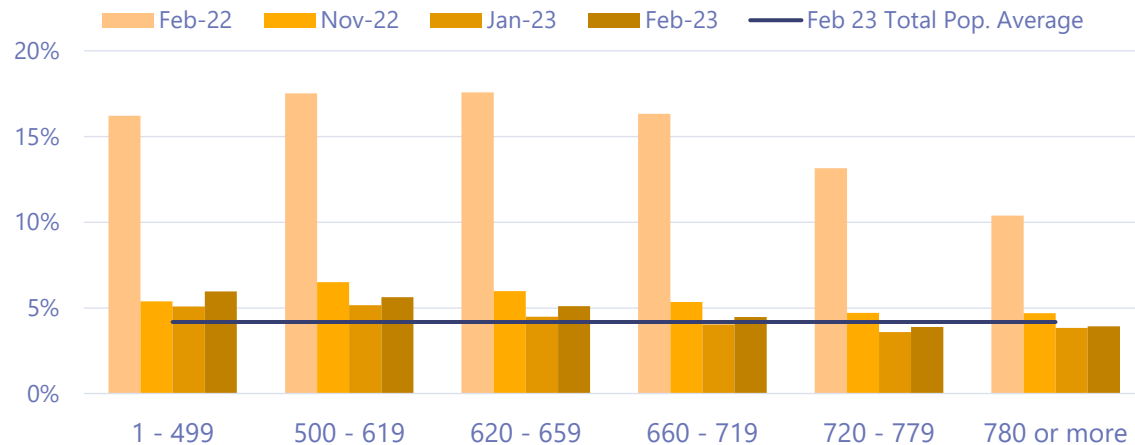
CPR by Fixed-Rate Product - February 2023



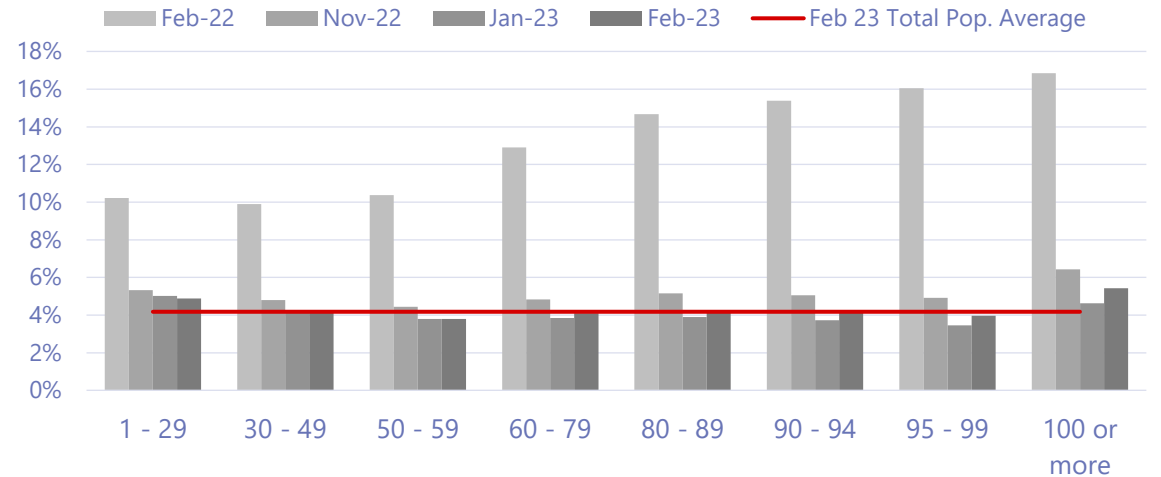
CPR by Original Loan Balance - February 2023



CPR by Original FICO - February 2023



CPR by Original LTV - February 2023



Delinquency Trends

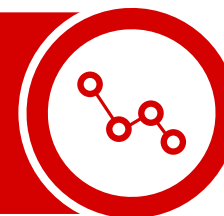
Summary

- The national delinquency and foreclosure rate went up to 2.90%, an increase of 13 bps compared to last month. This is 6 bps higher than the 2.84% national average delinquency and foreclosure rate from February 2022.
- CONV 30-year loans', CONV 15-year loans' and FHA loans' delinquency and foreclosure rates went up month-over-month whereas VA loans' delinquency and foreclosure rates remained the same.

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

Total delinquencies up

13 bps



Delinquency Summary

SUMMARY TABLES - February 2023

Loan Characteristics

Investor	Avg Orig Bal	WAC	WAvg Orig FICO	WAvg Orig LTV	WAvg Age
CONV Fixed 30	\$255,957	3.71	753	74	40
CONV Fixed 15	\$202,743	2.97	762	61	40
GNMA Fixed 30	\$215,603	3.69	698	93	43
GNMA Fixed 15	\$141,983	3.23	720	77	54

Delinquencies

30d DQ	60d DQ	+90d DQ	Total FC	Total DQ & FC	1mo DQ & FC Change%
0.97%	0.21%	0.50%	0.13%	1.81%	9.38%
0.48%	0.08%	0.16%	0.03%	0.75%	15.05%
3.57%	1.04%	2.13%	0.44%	7.18%	1.33%
1.35%	0.26%	0.49%	0.13%	2.23%	7.48%

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	\$136,801	5.47	682	78	163	4.69%	1.36%	2.64%	2.23%	10.91%	1.34%
2007	\$144,701	5.36	677	79	152	5.07%	1.47%	3.00%	2.32%	11.85%	0.77%
2008	\$142,979	5.21	680	82	148	5.14%	1.47%	2.35%	1.68%	10.63%	1.15%
2009	\$157,206	4.85	722	80	152	3.04%	0.80%	1.08%	0.50%	5.43%	2.15%
2010	\$163,636	4.63	732	79	143	2.35%	0.56%	0.83%	0.38%	4.12%	4.46%
2011	\$163,102	4.42	737	78	133	1.98%	0.50%	0.73%	0.30%	3.50%	4.91%
2012	\$188,240	3.76	748	80	124	1.24%	0.27%	0.43%	0.17%	2.12%	6.91%
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2015	\$186,151	3.93	734	79	88	2.16%	0.57%	1.00%	0.37%	4.10%	3.04%
2016	\$204,198	3.68	737	78	76	2.00%	0.51%	1.00%	0.34%	3.85%	2.58%
2017	\$192,114	4.08	728	80	63	2.76%	0.76%	1.47%	0.48%	5.47%	3.03%
2018	\$185,065	4.60	721	81	51	3.56%	1.04%	2.21%	0.71%	7.53%	1.68%
2019	\$219,300	3.98	734	80	39	2.32%	0.67%	1.45%	0.39%	4.82%	2.01%
2020	\$274,984	3.01	756	74	29	0.96%	0.22%	0.56%	0.09%	1.83%	4.98%

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%
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2.5000 - 2.9999	\$287,270	2.78	758	72	24	0.84%	0.20%	0.51%	0.06%	1.60%	5.53%
3.0000 - 3.4999	\$256,303	3.21	744	77	32	1.52%	0.41%	0.93%	0.16%	3.01%	3.29%
3.5000 - 3.9999	\$219,122	3.71	737	78	56	1.69%	0.43%	0.98%	0.22%	3.32%	4.17%
4.0000 - 4.4999	\$194,144	4.19	731	80	69	2.17%	0.56%	1.15%	0.35%	4.23%	4.27%
4.5000 - 4.9999	\$193,663	4.70	726	80	61	2.30%	0.59%	1.20%	0.35%	4.44%	5.04%
5.0000 - 5.4999	\$198,565	5.19	724	82	52	2.43%	0.66%	1.24%	0.36%	4.68%	4.84%
5.5000 - 5.9999	\$207,169	5.70	722	81	42	2.09%	0.57%	0.93%	0.24%	3.82%	5.34%
6.0000 - 6.4999	\$186,053	6.18	719	82	51	2.17%	0.55%	0.76%	0.30%	3.77%	2.03%
6.5000 or more	\$165,460	6.89	720	82	46	1.93%	0.40%	0.42%	0.37%	3.12%	5.94%

GSE and GNMA fixed rate product only

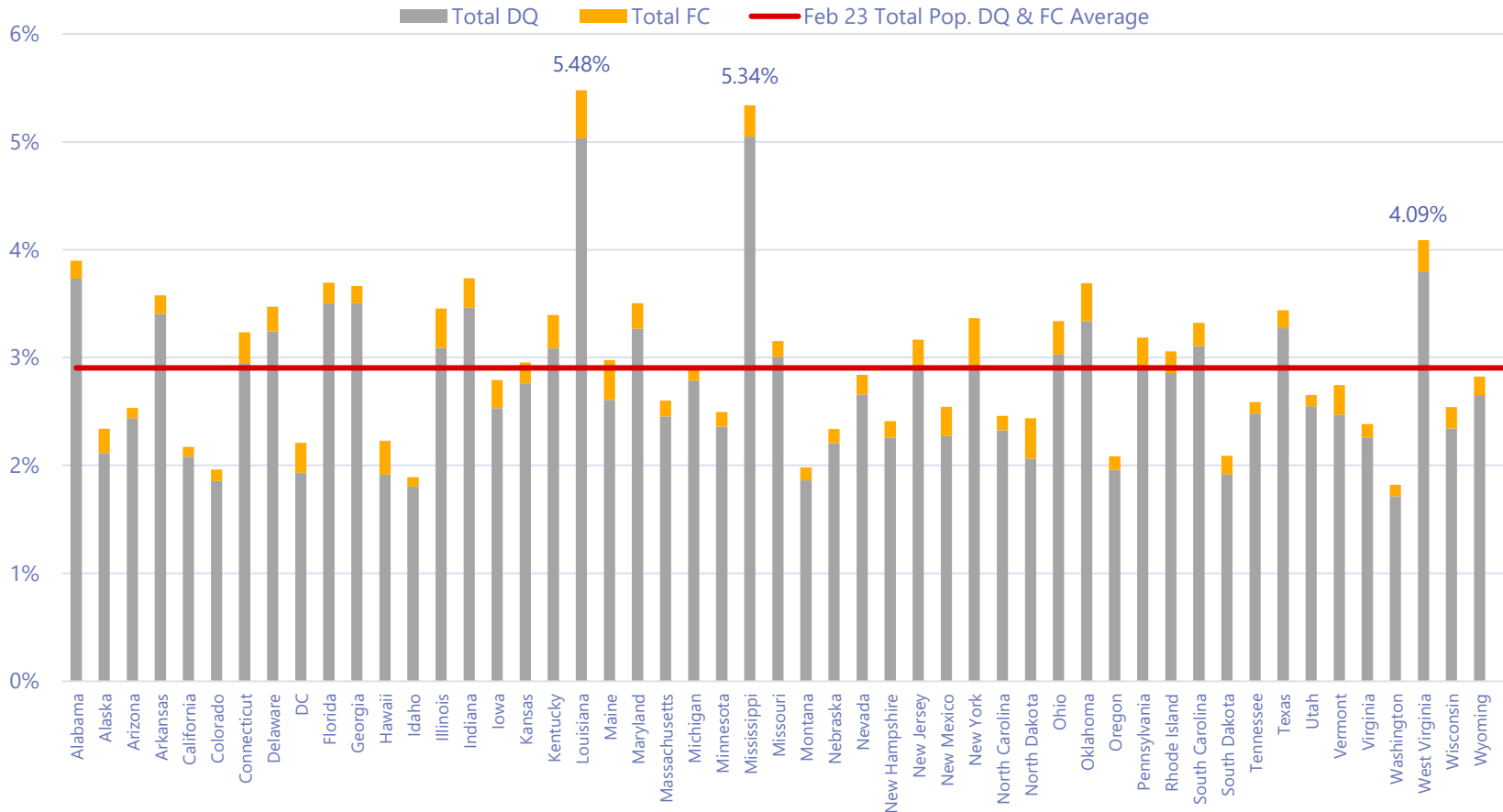
Source: Black Knight McDash



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Delinquency Trends

Average Delinquency and Foreclosure by State - February 2023



Analysis

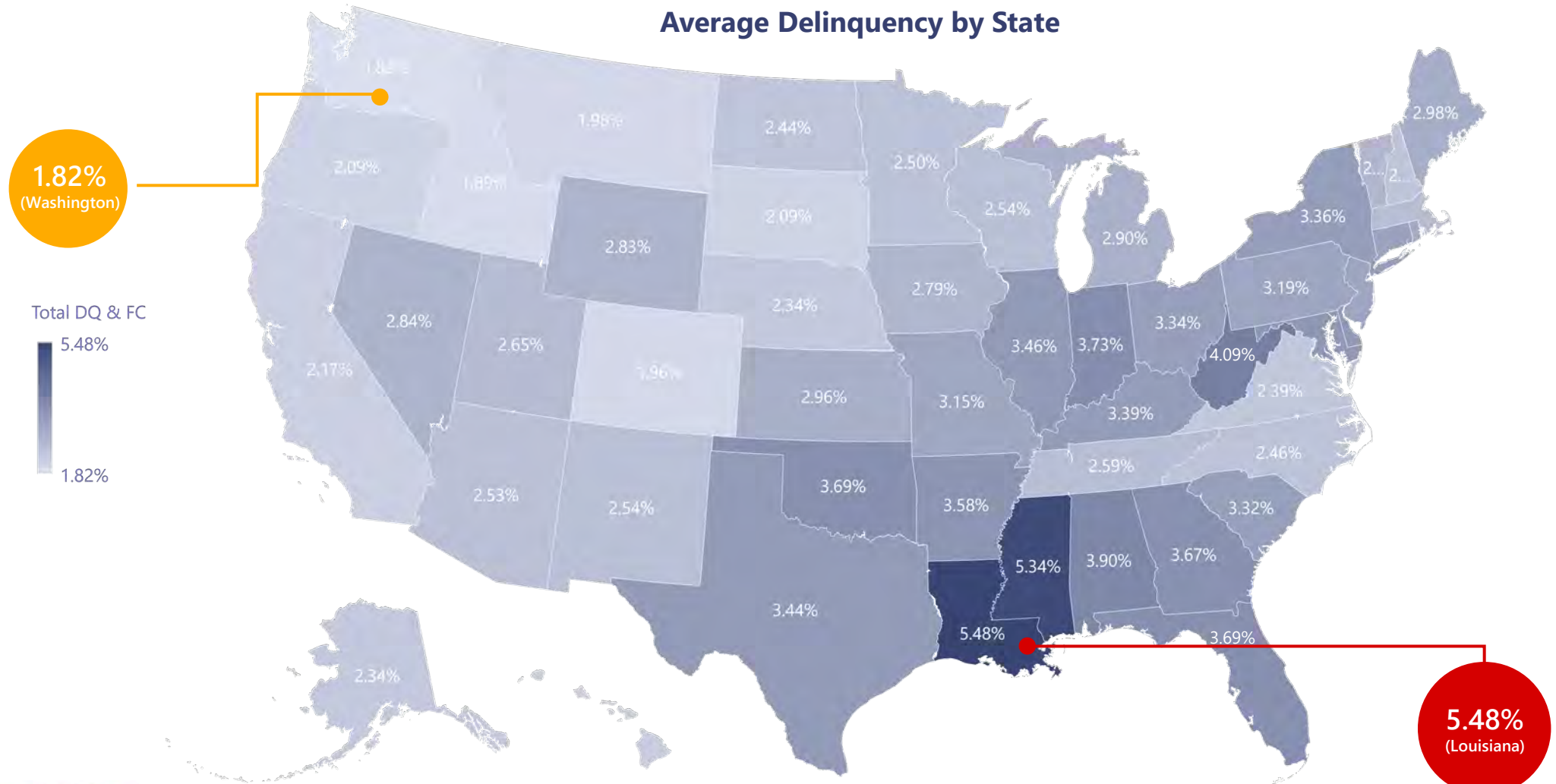
- Washington was the best-performing state, where delinquency and foreclosure rates are 1.82%, 20 bps higher than January month-end.
- The nation's most delinquent state is Louisiana with a 5.48% delinquency and foreclosure rate 65 bps higher than January month-end.
- Compared to February 2022, New York had the nation's largest decrease, moving from 4.03% to 3.36% (-67 bps).
- Regionally, the West South Central region of TX, OK, AR, and LA have the highest delinquency rate (4.04%), and the East South Central states of KY, TN, MS, and AL are close behind at 3.74%.

GSE and GNMA fixed rate product only

Source: Black Knight McDash



Delinquency Trends (cont.)

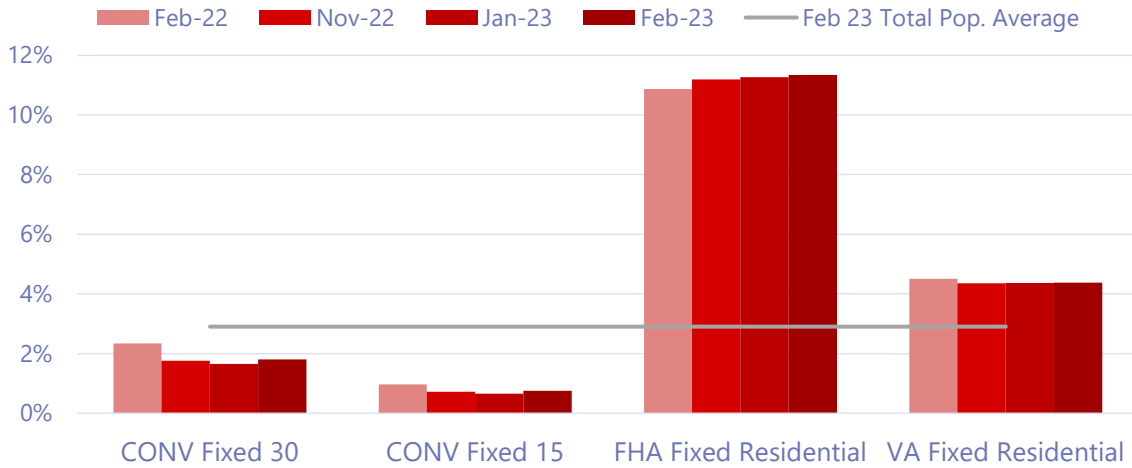


GSE and GNMA fixed rate product only

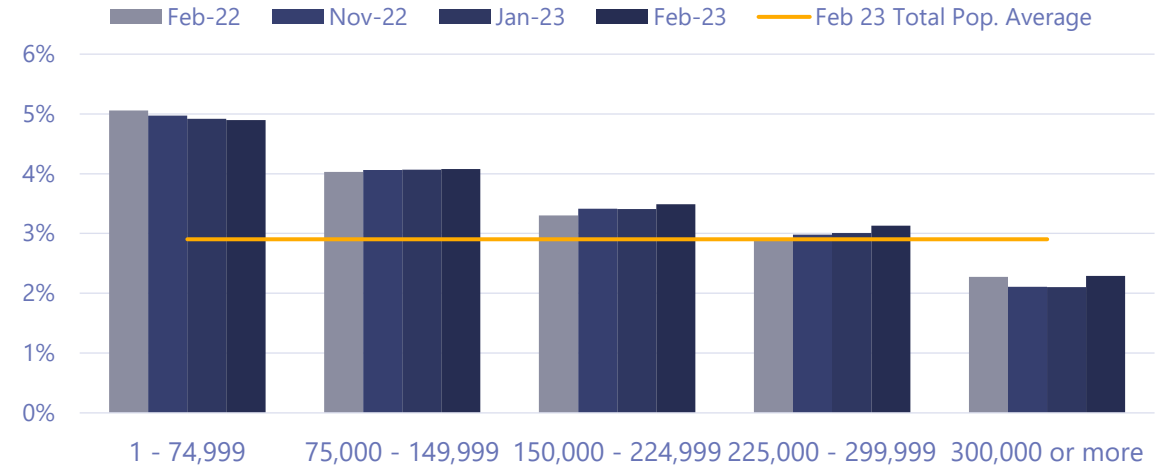
Source: Black Knight McDash

Delinquency Trends (cont.)

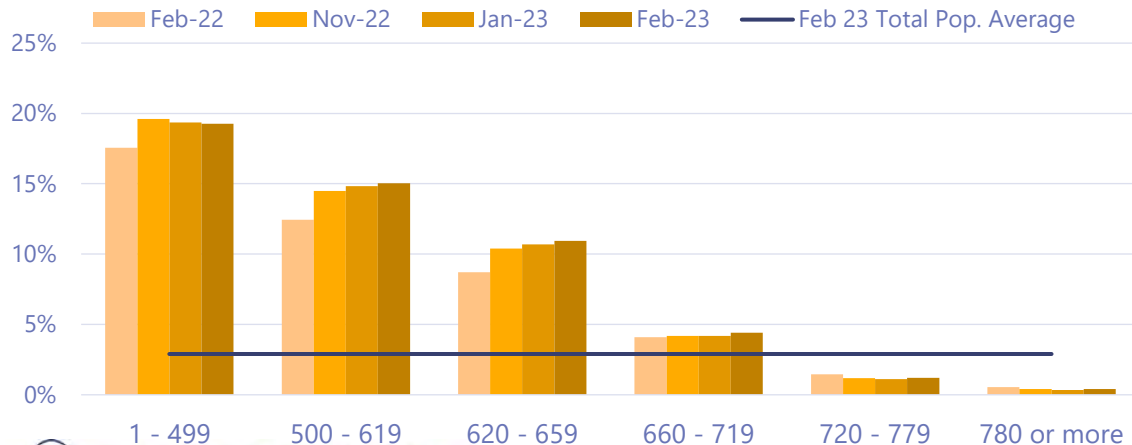
Delinquency and Foreclosure by Fixed-Rate Product - February 2023



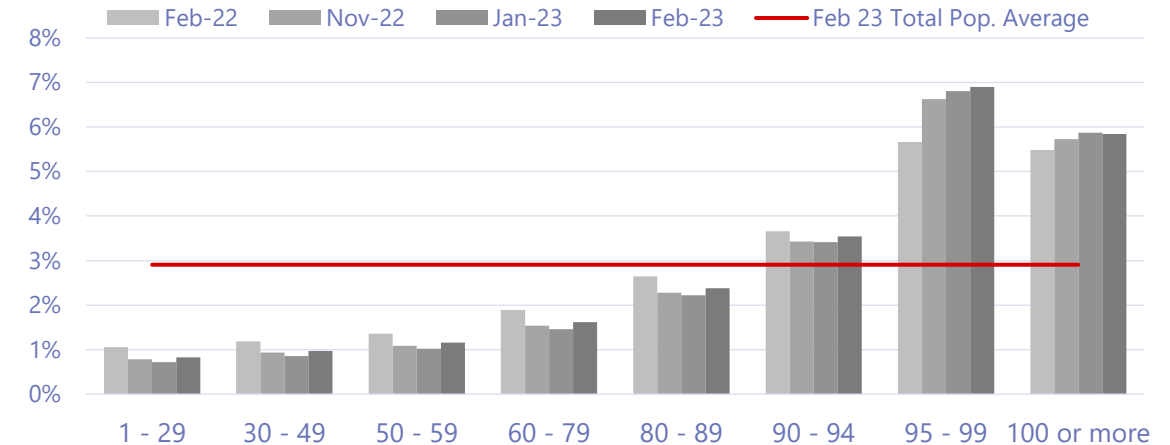
Delinquency and Foreclosure by Original Loan Balance - February 2023



Delinquency and Foreclosure by Original FICO - February 2023



Delinquency and Foreclosure by Original LTV - February 2023



Tables



State Summary

Prepayment and Delinquency

SUMMARY TABLES - February 2023

State	Loan Characteristics					Prepayments			Delinquencies						
	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	\$235,099	3.60	743	77	41	4.18%	8.13%	100.00%	1.50%	0.38%	0.83%	0.19%	2.90%	4.69%	100.00%
Alabama	\$182,725	3.70	732	83	44	5.42%	9.93%	129.89%	2.09%	0.56%	1.08%	0.16%	3.90%	4.17%	134.19%
Alaska	\$270,823	3.53	740	84	44	4.03%	-8.89%	96.50%	1.17%	0.32%	0.62%	0.22%	2.34%	7.00%	80.58%
Arizona	\$236,955	3.61	742	76	33	4.97%	10.54%	119.01%	1.40%	0.35%	0.69%	0.10%	2.53%	5.63%	87.22%
Arkansas	\$164,504	3.68	733	83	43	5.21%	3.72%	124.71%	1.89%	0.50%	1.02%	0.17%	3.58%	-0.69%	123.14%
California	\$337,789	3.43	752	68	40	3.07%	9.69%	73.44%	1.16%	0.27%	0.65%	0.09%	2.17%	9.86%	74.83%
Colorado	\$296,359	3.48	752	74	33	4.72%	17.93%	112.91%	1.03%	0.27%	0.57%	0.11%	1.96%	6.74%	67.60%
Connecticut	\$234,244	3.66	741	78	50	3.71%	-1.91%	88.77%	1.67%	0.42%	0.86%	0.29%	3.24%	1.16%	111.40%
Delaware	\$229,898	3.66	738	79	44	3.92%	2.84%	93.75%	1.84%	0.50%	0.91%	0.23%	3.47%	-0.20%	119.56%
DC	\$376,502	3.45	760	72	43	3.73%	40.46%	89.37%	0.90%	0.24%	0.79%	0.28%	2.21%	5.14%	76.10%
Florida	\$224,940	3.74	737	80	38	5.53%	12.62%	132.52%	1.82%	0.45%	1.24%	0.19%	3.69%	7.86%	127.17%
Georgia	\$211,576	3.69	733	81	40	5.50%	21.30%	131.59%	1.90%	0.51%	1.10%	0.16%	3.67%	5.68%	126.21%
Hawaii	\$397,605	3.46	753	72	46	3.11%	-6.44%	74.50%	1.06%	0.23%	0.62%	0.31%	2.23%	8.31%	76.72%
Idaho	\$241,213	3.53	746	72	33	4.69%	7.70%	112.19%	1.09%	0.27%	0.44%	0.09%	1.89%	12.01%	65.19%
Illinois	\$199,052	3.66	741	80	45	3.56%	-0.64%	85.34%	1.61%	0.46%	1.03%	0.37%	3.46%	0.23%	119.01%
Indiana	\$163,170	3.78	733	82	40	4.91%	8.26%	117.67%	1.95%	0.53%	0.99%	0.27%	3.73%	0.46%	128.58%
Iowa	\$166,016	3.52	744	81	43	4.15%	-1.38%	99.26%	1.42%	0.37%	0.74%	0.26%	2.79%	2.35%	96.11%
Kansas	\$175,475	3.63	740	81	42	4.74%	1.07%	113.55%	1.58%	0.41%	0.78%	0.19%	2.96%	2.28%	101.76%
Kentucky	\$169,660	3.70	734	81	42	5.06%	6.79%	121.24%	1.73%	0.45%	0.90%	0.31%	3.39%	1.01%	116.87%
Louisiana	\$187,328	3.74	726	83	46	4.35%	9.91%	104.07%	2.67%	0.76%	1.60%	0.45%	5.48%	4.56%	188.64%
Maine	\$204,905	3.61	741	77	43	3.97%	-3.53%	95.02%	1.47%	0.41%	0.73%	0.37%	2.98%	0.61%	102.51%
Maryland	\$276,065	3.53	741	80	44	3.50%	8.39%	83.81%	1.75%	0.47%	1.04%	0.24%	3.50%	1.95%	120.66%
Massachusetts	\$298,828	3.47	747	72	42	2.80%	-10.62%	66.93%	1.44%	0.32%	0.69%	0.15%	2.60%	4.58%	89.60%
Michigan	\$168,119	3.65	741	78	42	4.57%	8.50%	109.48%	1.53%	0.43%	0.82%	0.12%	2.90%	3.75%	99.97%
Minnesota	\$219,404	3.57	750	79	42	3.34%	-1.39%	80.00%	1.27%	0.36%	0.73%	0.14%	2.50%	3.66%	85.92%
Mississippi	\$170,150	3.76	722	84	44	4.90%	14.29%	117.24%	2.67%	0.75%	1.63%	0.29%	5.34%	0.23%	183.88%
Missouri	\$172,004	3.67	739	81	42	4.79%	9.68%	114.80%	1.69%	0.44%	0.88%	0.15%	3.15%	2.07%	108.57%
Montana	\$228,751	3.58	749	75	41	4.90%	6.55%	117.29%	1.10%	0.24%	0.52%	0.12%	1.98%	8.07%	68.22%
Nebraska	\$173,952	3.54	745	80	40	4.25%	0.57%	101.77%	1.25%	0.33%	0.63%	0.13%	2.34%	2.19%	80.51%
Nevada	\$251,843	3.65	739	78	34	4.44%	6.94%	106.27%	1.44%	0.38%	0.84%	0.18%	2.84%	7.41%	97.80%
New Hampshire	\$235,911	3.57	743	76	43	3.59%	-15.60%	85.90%	1.32%	0.34%	0.60%	0.15%	2.41%	2.47%	82.99%
New Jersey	\$276,718	3.57	743	76	44	3.29%	-6.71%	78.86%	1.59%	0.41%	0.90%	0.27%	3.17%	5.25%	109.06%
New Mexico	\$193,106	3.76	738	80	46	5.27%	-2.04%	126.27%	1.33%	0.33%	0.61%	0.27%	2.54%	3.16%	87.57%
New York	\$266,587	3.75	743	73	53	3.20%	-7.62%	76.60%	1.58%	0.40%	0.92%	0.46%	3.36%	2.75%	115.84%
North Carolina	\$209,396	3.62	743	79	40	5.14%	10.48%	122.96%	1.36%	0.32%	0.66%	0.13%	2.46%	2.63%	84.75%
North Dakota	\$205,924	3.43	748	81	40	4.42%	8.98%	105.82%	1.11%	0.34%	0.62%	0.37%	2.44%	2.44%	83.95%
Ohio	\$158,550	3.76	734	82	44	4.66%	11.30%	111.59%	1.71%	0.46%	0.87%	0.31%	3.34%	0.24%	114.91%
Oklahoma	\$169,460	3.83	733	84	44	5.20%	1.86%	124.52%	1.84%	0.48%	1.02%	0.35%	3.69%	1.88%	127.03%
Oregon	\$266,071	3.56	752	74	38	4.20%	17.01%	100.65%	1.16%	0.24%	0.56%	0.13%	2.09%	14.62%	71.83%
Pennsylvania	\$191,288	3.66	741	80	47	3.61%	-5.96%	86.49%	1.64%	0.43%	0.84%	0.27%	3.19%	1.11%	109.68%
Rhode Island	\$234,057	3.62	740	77	44	3.33%	-14.97%	79.69%	1.69%	0.41%	0.76%	0.20%	3.06%	7.64%	105.30%
South Carolina	\$202,447	3.66	737	80	39	5.53%	9.43%	132.33%	1.75%	0.46%	0.90%	0.22%	3.32%	3.07%	114.36%
South Dakota	\$194,647	3.42	750	79	38	3.62%	-23.19%	86.78%	1.11%	0.26%	0.55%	0.17%	2.09%	2.20%	71.97%
Tennessee	\$208,692	3.65	738	79	37	5.69%	14.85%	136.30%	1.40%	0.36%	0.73%	0.11%	2.59%	4.23%	89.08%
Texas	\$221,060	3.73	735	80	38	4.64%	16.54%	111.21%	1.83%	0.48%	0.96%	0.17%	3.44%	4.65%	118.46%
Utah	\$282,721	3.47	745	75	31	4.12%	10.13%	98.66%	1.56%	0.36%	0.63%	0.10%	2.65%	16.00%	91.39%
Vermont	\$204,846	3.69	745	77	48	3.34%	-18.04%	79.98%	1.41%	0.35%	0.71%	0.28%	2.75%	1.70%	94.52%
Virginia	\$272,529	3.47	747	79	41	3.89%	7.67%	93.10%	1.25%	0.32%	0.69%	0.13%	2.39%	-0.17%	82.13%
Washington	\$307,809	3.49	750	73	36	3.78%	15.37%	90.42%	0.98%	0.23%	0.50%	0.11%	1.82%	5.63%	62.67%
West Virginia	\$161,041	3.74	726	84	46	4.86%	3.21%	116.38%	2.23%	0.57%	0.99%	0.30%	4.09%	1.34%	140.77%
Wisconsin	\$185,272	3.62	742	79	42	3.94%	3.28%	94.35%	1.30%	0.37%	0.67%	0.20%	2.54%	0.08%	87.53%
Wyoming	\$221,436	3.53	743	79	40	5.36%	7.78%	128.33%	1.49%	0.44%	0.72%	0.17%	2.83%	6.48%	97.28%

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