



Office of Risk Management and Regulatory Affairs, Office of Evaluation, Reporting & Analysis Division

Quarterly Report to Congress on FHA Single- Family Mutual Mortgage Insurance Fund Programs

FY 2023 Q4 Data as of September 30, 2023

U.S. Department of Housing and Urban Development Federal Housing Administration

FOREWORD

On behalf of Secretary Marcia L. Fudge and Assistant Secretary for Housing Julia R. Gordon, and pursuant to requirements of Section 202(a)(5) of the National Housing Act as amended by the FHA Modernization Act of 2008 (Public Law 110-289, Page 122 Stat. 2834), I am herewith transmitting the Fiscal Year (FY) 2023 Fourth Quarter Report. This report covers mortgages that are obligations of the Mutual Mortgage Insurance (MMI) Fund of the Federal Housing Administration (FHA) for the reporting period covering July 1, 2023, through September 30, 2023.

Through FY 2023, FHA served 478,234 first-time homebuyers, representing 82 percent of FHA's forward purchase mortgage endorsements. FHA also served 176,871 households of color with purchase mortgages and 32,963 seniors were able to access their home equity using FHA's Home Equity Conversion Mortgage Program (HECM). Through the end of the COVID-19 National Emergency, which concluded on May 11, 2023, FHA maintained its strong focus on assisting homeowners facing hardships through the COVID-19 National Emergency. For those homeowners who fell behind on their mortgage payments since the start of the pandemic, FHA continued to deliver expanded flexibilities and forbearance options. The agency continues to engage with mortgage servicers, consumer advocates, and housing counselors to assist in ensuring that homeowners in need are aware of the loss mitigation tools available to them.

Despite a number of FHA borrowers continuing to face COVID-19 related hardships in the fourth quarter of FY 2023, the percentage of seriously delinquent mortgages (those past due 90 or more days) have declined to the pre-pandemic levels, with the serious delinquency rate declining from 8.81 percent at the end of the same quarter of FY 2021 to 3.93 at the end of this quarter. In addition, early payment defaults (defaults within six months of endorsement) declined from a peak of approximately nine percent in early 2020 to 1.82 percent in the current quarter, though still above pre-pandemic levels. FHA will continue to focus extensive efforts on helping struggling homeowners to obtain financial relief needed to achieve long-term homeownership sustainability.

This quarterly report also provides detailed information on the composition and credit quality of new insurance in force, and on FHA's financial position as of 9/30/2023. In addition to this report to Congress, FHA provides information regarding the status of its Single-Family mortgage insurance portfolio via the publication of other complementary reports, including HUD's Annual Report to Congress on the Financial Status of the Mutual Mortgage Insurance Fund and the annual independent actuarial review of the MMI Fund, both recently published on November 15, 2023. All FHA reports can be found in the Office of Housing Reading Room.

The Department is pleased to provide details to members of Congress on how this report was prepared or to answer any questions about the information presented.

Sincerely,

Mia N. Pittman

Deputy Assistant Secretary Office of Risk Management and Regulatory Affairs

Mia N. Pittman

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This report is in fulfillment of the requirement under section 2118 of the Housing and Economic Recovery Act of 2008 (12 USC 1708(a)(5)) that HUD report to the Congress on a quarterly basis respecting mortgages that are an obligation of the Mutual Mortgage Insurance Fund.

Endorsement Activity

During the fourth quarter of FY 2023, FHA endorsed 212,701 forward mortgages for insurance, an increase of 9.79 percent from the prior quarter (Figure 1a). This change is due to increases in both purchase and refinance activity, likely driven largely by the reduction in FHA mortgage insurance premiums. The dollar volume of purchase endorsements increased by 11.30 percent or \$5.31 billion from the previous quarter while refinance endorsement dollar volume of \$10.41 billion this quarter was up by \$1.35 billion or 14.84 percent from the prior quarter. The dollar volume of all forward mortgage endorsements of \$62.77 billion increased 11.87 percent from the prior quarter (Exhibit A-2).

FHA's purchase loan count was up by 8.65 percent from the previous quarter, from 155,426 to 168,863. Meanwhile, the FHA-to-FHA refinance endorsement count increased by 14.71 percent, from 16,274 to 18,668. The Conventional to FHA refinance endorsement count also increased 14.24 percent, from 22,033 to 25,170. Cash out refinance endorsements, (limited to 80% loan to value) made up 93.36 percent of all refinance endorsements for this quarter, up from 61.46 percent in FY 2022 and 19.40 percent in FY 2021.

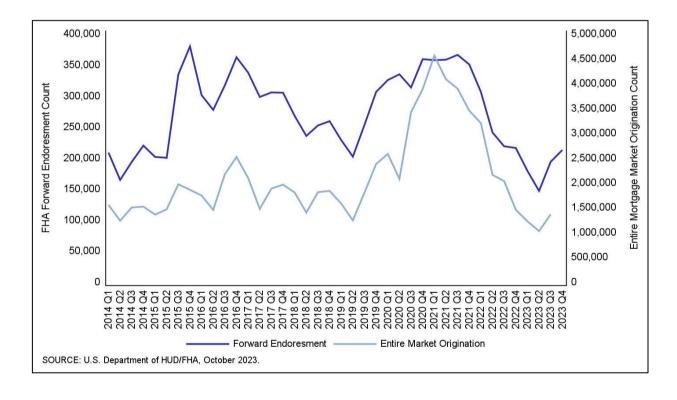
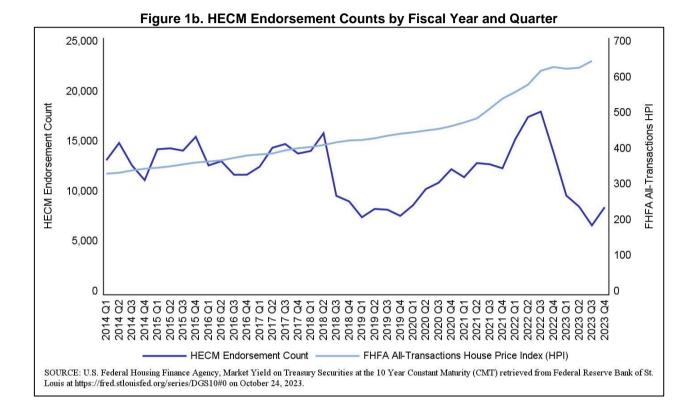


Figure 1a. Forward Endorsement Counts by Fiscal Year and Quarter

HECM endorsement volume was \$4.06 billion for the fourth quarter of FY 2023, an increase of 21.42 percent from the previous quarter. The HECM endorsement count was 8,390 this quarter, an increase of 27.68 percent from the prior quarter. Figure 1b shows HECM endorsements relative to the Federal Housing Finance Agency (FHFA) Housing Price Index (HPI). In addition, HECM refinance endorsement count declined from over 50 percent of all HECM endorsements in quarter one of FY 2022 to 9 percent this quarter.



FHA Loan Credit Characteristics

Average credit score for forward engagements (excluding streamline refinances) increased to 674 this quarter from 671 in the prior quarter, maintaining the upward trend that began in the fourth quarter of FY 2022. (Figure 2 and Exhibit A-4).

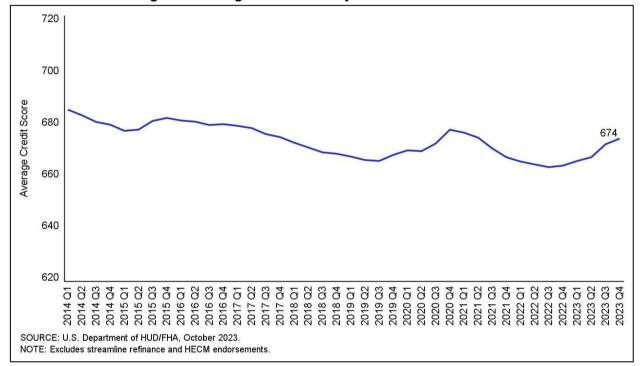


Figure 2. Average Credit Score by Fiscal Year and Quarter

As shown in Figure 3a, the distribution of credit scores for FHA forward endorsements has gradually shifted over the past few years. However, the core of the distribution continues to be in the 640–679 range (34.80 percent). In the fourth quarter of FY 2023, the share of 720+ credit scores increased by 1.47 percentage points from the prior quarter to 17.72 percent (Figure 3a and Exhibit A-3).

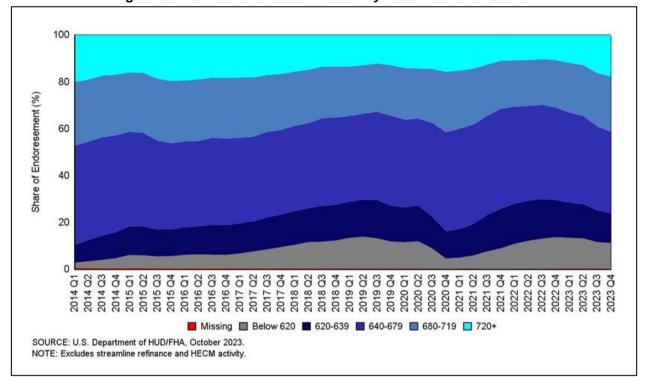


Figure 3a. Distribution of Credit Scores by Fiscal Year and Quarter

Figure 3b shows another perspective of the shift in FHA's credit profile, with loans endorsed with 720+ credit scores increasing to 17.72 percent in the fourth quarter of FY 2023 from 16.25 percent in the prior quarter. Loans endorsed with less than 620 credit scores declined from 11.33 percent in the prior quarter to 10.94 percent this quarter.

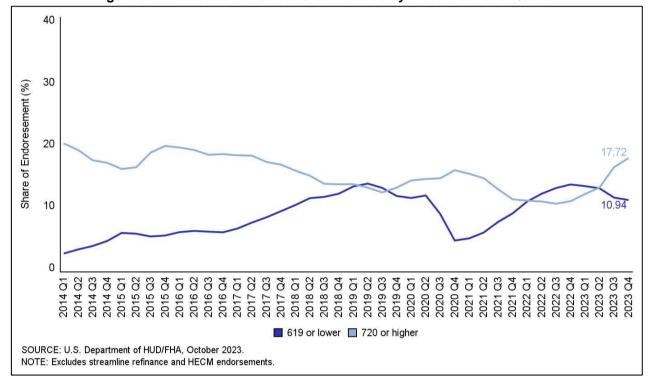
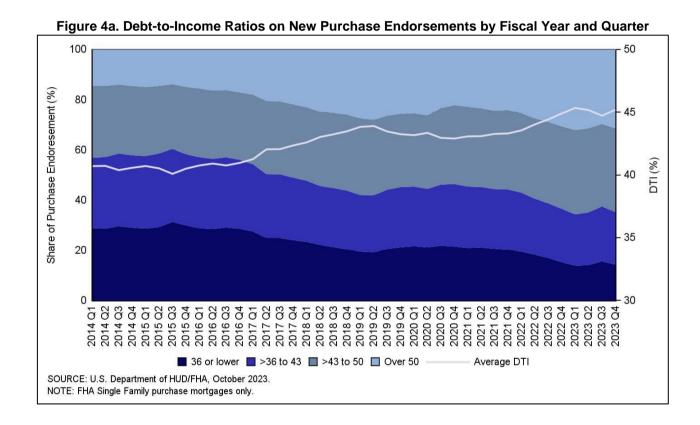


Figure 3b. Distribution of Select Credit Scores by Fiscal Year and Quarter

Debt-to-Income (DTI)

Approximately 31 percent of all FHA-insured forward purchase endorsements in the fourth quarter of FY 2023 had DTI ratios over 50 percent. This is up slightly from approximately 30 percent in the prior quarter, but nearly 6 percentage points higher than levels prior to the pandemic. The average DTI increased from 44.72 percent in the prior quarter to 45.19 percent this quarter. The DTI distribution and historical average DTI ratios are shown in Figure 4a below. In addition, Figure 4b reflects the mean DTI, mean payment-to-income ratio (PTI) and spread between those two ratios for forward purchase endorsements. The decrease in the spread suggests that borrowers are spending a larger share of their incomes on housing expenses, likely due to rising home prices and elevated mortgage rates.



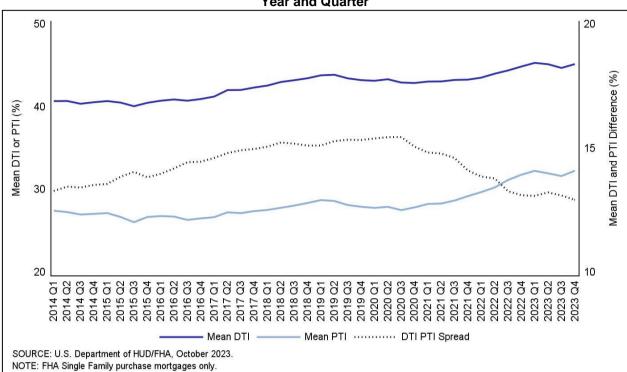


Figure 4b. Mean Debt-to-Income and Payment-to-Income Ratios on New Purchase Endorsements by Fiscal Year and Quarter

Average Loan-to-Value (LTV)

The average LTV ratio for purchase and refinance loans decreased from 90.03 percent in the prior quarter to 89.70 percent this quarter for all FHA forward mortgages combined (excluding streamline refinances). LTV ratios decreased across all endorsement types in the fourth quarter of fiscal year 2023. Typically, LTV ratios of refinance mortgages are lower than home purchase mortgages (Figure 5, Exhibit A-5, and Exhibit A-6).¹

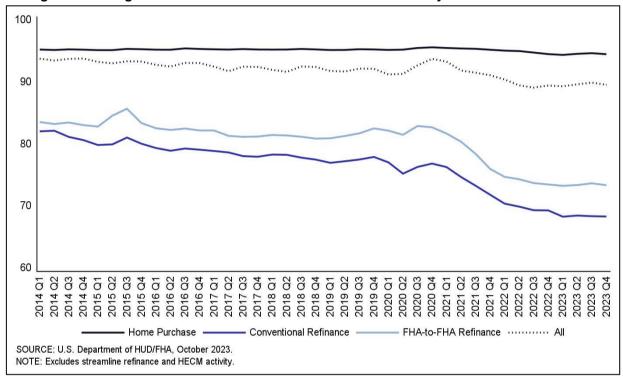


Figure 5. Average Loan-to-Value Ratios on New Endorsements by Fiscal Year and Quarter

¹ For a typical purchase mortgage endorsement, FHA charges an upfront mortgage insurance premium (UFMIP) of 1.75 percent of the loan balance. FHA permits borrowers to finance the UFMIP by having it added to the loan balance, and nearly all FHA borrowers do so. However, despite the increase in the loan balance, FHA reporting conventions have been, and remain, to report the LTV ratio on the loan balance without inclusion of the UFMIP. In the conventional market, custom would be to include a financed premium into the loan balance, and therefore the calculation of the LTV ratio. Additionally, in the conventional market for a low-down payment mortgage, an Interested Party Contribution (IPC) in excess of 3 percent of the value of the home is treated as a reduction in the value of the home, resulting in an increase in the reported LTV ratio of the transaction. For FHA-insured mortgages, no downward adjustment is made to the value of the property unless an IPC exceeds 6 percent of the value of the home.

Predicted and Actual Termination and Claim-Loss Rates

The predicted-versus-actual comparisons through FY 2023 are presented in Figure 6. Actual claims were below predicted levels due to prior year policy decisions regarding eviction moratoria, forbearance, and loss mitigation options. Through FY 2023, the number of actual claims was 14,971, or 67.18 percent lower than the predicted 45,610. While there were significantly fewer claims than predicted, those loans that resulted in claims had typically been delinquent longer, had missed more payments, and were in worse condition at foreclosure, thus resulting in the actual loss rate being 2.35 percentage points higher than predicted.

Figure 6. Termination and Claim Loss Experience Compared to Forecasts

As September 2023	Year to Date Predicted	Year to Date Actual	Deviation ¹ (Actual Minus Predicted)	Percentage Deviation (Actual Versus Predicted)
Prepayment Counts	649,219	469,974	-179,245	-27.61
Claim Counts ²	45,610	14,971	-30,639	-67.18
Claims (\$ millions) ³	3,636	1,049	-2,587	-71.15
Net Loss on Claims (%) ⁴	27.36	29.71	2.35	8.61

Note: Due to differences in timing and data sources, the cash flow amounts may not reconcile fully with other tables in this report. Excludes HECM endorsements.

¹ Deviations in this quarter's predicted versus actual prepayments, claims and loss rates have resulted from persistent and unexpected economic and policy conditions which were not in existence during the original modeled estimates. It is expected as budgetary and forecast models become more aligned with policy and economic

realities, deviations in predicted and actual values should tighten.

² Projections of prepayment counts, claim counts, and claim dollars are modeled for the FY 2023 FHA financial statements. All projections shown here use quarterly forecasts and thus reflect cyclical trends throughout the year.

³ Claim payments and counts reported here include those for conveyance (foreclosure) claims, pre-foreclosure (short) sales, and claims paid in connection with sales of delinquent mortgages. They do not include payments for loss mitigation mortgage-workout actions.

⁴ These rates are losses as a percentage of the defaulted mortgage balance, for both conveyance and pre-foreclosure-sale claims. Includes only mortgages in the MMI

Budget Execution Credit Subsidy Rates

The budget execution subsidy rate for forward mortgages for FY 2023 is -1.15 percent. The subsidy rate for HECM mortgages is -4.19 percent for FY 2023 (Figure 7).

Figure 7. Budget Execution Credit Subsidy Rates (CSR), FY 2023 Q4

Type of Mortgage	Rate (%) ¹
Forward Mortgages ²	-1.15
Reverse Mortgages (HECM)	-4.19

¹ Budget execution credit subsidy rates are the expected net present value, per dollar of new insurance endorsements, of all cash flows from insurance operations over the life of the mortgage insurance as of the year of the insurance commitments. A negative rate means that the present value of premium revenues is expected to be greater than the present value of net claim expenses over the life of the insurance, i.e., a negative subsidy. Mortgages with negative credit subsidies are expected to produce receipts for the federal budget. These initial budget-execution rates are those approved by the Office of Management and Budget for budget accounting. The rates are updated on an annual basis, once the insurance is in place, to reflect both actual experience and updated forecasts of future mortgage performance and insurance cash flows. For a historical breakdown of credit subsidy rates and re-estimates, see https://www.govinfo.gov/content/pkg/BUDGET-2023-BUD.pdf.

² Revised Forward Mortgage CSR as of April 1, 2023 due to reduction in annual mortgage insurance premium charged to borrower effective March 20, 2023 (see https://www.hud.gov/sites/dfiles/OCHCO/documents/2023-05hsgml.pdf).

MMI Fund Cash and Investments

As Figure 8 shows, the total cash and investments of the MMI Fund decreased to \$141.53 billion in the fourth quarter of FY 2023, with \$9.14 billion held in the Financing account and \$132.39 billion held in the Capital Reserve account. MMI Fund Total Capital Resources is derived from netting other assets and liabilities from total cash and investments.

Figure 8. MMI Fund Cash and Investments by Quarter, FY 2015 - FY 2023

Fiscal	Capital Reserve Acccount ¹	Financing Acccount ²	Total ^{3,4}
Year/Quarter	(\$billions)	(\$billions)	(\$billions)
2015 Q1	10.43	35.76	46.20
2015 Q2	12.87	33.46	46.33
2015 Q3	11.97	34.52	46.49
2015 Q4	15.99	29.64	45.63
2016 Q1	18.17	27.34	45.51
2016 Q2	20.21	25.33	45.55
2016 Q3	34.44	16.55	50.99
2016 Q4	37.24	12.59	49.83
2017 Q1	40.32	9.58	49.90
2017 Q2	43.05	7.42	50.46
2017 Q3	28.82	22.83	51.65
2017 Q4	31.64	18.47	50.11
2018 Q1	33.49	17.34	50.83
2018 Q2	35.14	16.47	51.61
2018 Q3	25.35	27.08	52.42
2018 Q4	27.22	23.00	50.22
2019 Q1	28.89	20.63	49.52
2019 Q2	30.41	19.47	49.87
2019 Q3	48.41	10.43	58.84
2019 Q4	51.01	4.28	55.30
2020 Q1	52.90	3.92	56.82
2020 Q2	54.90	17.51	72.41
2020 Q3	67.63	6.68	74.31
2020 Q4	69.57	10.28	79.86
2021 Q1	72.65	9.62	82.27
2021 Q2	77.03	7.76	84.79
2021 Q3	82.41	4.95	87.36
2021 Q4	97.79	4.56	102.34
2022 Q1	97.25	7.59	104.83
2022 Q2	98.83	6.00	104.83
2022 Q3	119.55	18.46	138.01
2022 Q4	121.61	10.03	131.65
2023 Q1	123.24	10.23	133.47
2023 Q2	125.60	10.38	135.98
2023 Q3	131.01	17.11	148.13
2023 Q4	132.39	9.14	141.53

SOURCE: U.S. Department of HUD/FHA, October 2023.

NOTE: Only end-of-year balances represent audited figures.

This is an on-budget account that records net receipts provided by FHA to the federal budget over time. Balances are held in cash and Treasury securities. The securities earn interest for FHA. Periods in which irregular changes to the balance are seen represent times when HUD transfers funds to/from the Financing account for the rebalancing required by annual budget re-estimates. The MMI Fund Cash and Investments includes a \$1.7 billion mandatory appropriation taken in FY 2013.

This is a series of off-budget cash accounts used to manage insurance operation collections and disbursements.

³ Total is the sum of cash and investments in the Capital Reserve and Financing accounts. It excludes other assets and liabilities.

⁴ Capital Reserve Account and Financing Account may not always add to total because of rounding

Cash Flows from Business Operations

The net cash flow decreased from \$1,062 million in the prior quarter to \$737 million this quarter due to higher forward claim costs that were partially offset by lower HECM claim costs and still comparable to the fourth quarter FY 2022 level. With the end of the COVID-19 National Emergency and the associated COVID-19 forbearance option, delinquent loans progressed faster to claim, contributing to higher forward claim costs this quarter. HECM Type-2 submissions, however, dropped from the peak in the prior quarter, as program change effects that sped up assignments earlier this year have declined. FHA proactively reduced average losses per claim through a more diversified asset disposition strategy, which includes promoting third-party sales at foreclosure auctions through its Claims Without Conveyance of Title (CWCOT) program and expanding the use of pre-foreclosure (short) and note sales. Overall, claim costs (measured by loss rate) have decreased from a high of 55 percent in 2014 to around 25 percent over the last four quarters (Exhibit A-7).

Figure 9. Business Operations Cash Flows, FY 2023 Q1 - FY 2023 Q4 (\$ millions)

	FY 2023 Q1	FY 2023 Q2	FY 2023 Q3	FY 2023 Q4	Past 4 Quarters
Collections:					
Premiums	3,153	3,072	3,469	3,394	13,088
Property Sale Receipts	128	139	173	174	614
Note Sale Proceeds ¹	0	0	17	83	100
Note Collections ²	888	842	1,040	1,084	3,854
Other	10	45	19	17	91
Total	4,179	4,098	4,718	4,752	17,747
Disbursements:					
Claims ³	-2,247	-2,611	-3,602	-3,951	-12,411
Property Maintenance	-12	-13	-16	-20	-61
Note Disbursements	-28	-29	-33	-43	-133
Other	-3	-5	-5	-1	-14
Total	-2,290	-2,658	-3,656	-4,015	-12,619
Net Operations Cash Flow	1,889	1,440	1,062	737	5,128

SOURCE: U.S. Department of HUD/FHA, October 2023.

NOTE: Unaudited figures; details may not sum to total due to rounding. Due to differences in timing and data sources, the cash flow amounts may not reconcile fully with other tables in this report.

¹ Note Sale Proceeds are the Cash Receipts from Note Sales.

² Note Collections, include Principal and Interest collections on HUD-held defaulted notes (Partial Claims)

³ Claims payments shown here include conveyance, pre-foreclosure sale, note sales, loss mitigation (home retention) actions, and all HECM claims (assignment and shortfall claims).

Early-Payment Default Rates

The overall Early-Payment Default (EPD) rate remained stable but still higher than the pre-pandemic levels. FHA saw a large jump in EPD rate at the beginning of the COVID-19 pandemic, which remained elevated through mid-2020. The EPD rate in the fourth quarter of FY 2023 was 1.82 percent, comparable to the previous quarter's 1.81 percent. Specifically, the EPD rate for home purchases decreased from 2.02 percent to 1.96 percent, while the EPD rate for refinances increased from 1.06 percent to 1.26 percent.

Figure 10. Early Payment Default Rates

Origination Fiscal	Purchase	Refinance	All
Year/Quarter			
2014 Q1	0.33	0.29	0.32
2014 Q2	0.37	0.33	0.36
2014 Q3	0.46	0.37	0.44
2014 Q4	0.45	0.34	0.43
2015 Q1	0.36	0.27	0.34
2015 Q2	0.42	0.24	0.35
2015 Q3	0.43	0.28	0.37
2015 Q4	0.42	0.34	0.40
2016 Q1	0.31	0.27	0.30
2016 Q2	0.37	0.23	0.32
2016 Q3	0.46	0.34	0.42
2016 Q4	0.45	0.32	0.41
2017 Q1	0.31	0.22	0.28
2017 Q2	0.41	0.24	0.35
2017 Q3	1.14	0.65	1.02
2017 Q4	1.44	1.17	1.38
2018 Q1	0.48	0.35	0.44
2018 Q2	0.57	0.30	0.49
2018 Q3	0.85	0.45	0.77
2018 Q4	0.96	0.47	0.87
2019 Q1	0.79	0.47	0.72
2019 Q2	0.77	0.42	0.68
2019 Q3	1.00	0.46	0.87
2019 Q4	0.85	0.41	0.72
2020 Q1	2.61	2.35	2.51
2020 Q2	8.71	9.17	8.91
2020 Q3	4.68	5.98	5.18
2020 Q4	2.57	2.55	2.57
2021 Q1	1.93	1.36	1.73
2021 Q2	1.43	0.76	1.11
2021 Q3	1.87	0.89	1.43
2021 Q4	2.39	1.22	1.96
2022 Q1	2.20	1.09	1.81
2022 Q2	2.04	0.99	1.69
2022 Q3	2.68	1.14	2.26
2022 Q4	2.56	1.36	2.30
2023 Q1	2.02	1.06	1.81
2023 Q2 ¹	1.96	1.26	1.82

NOTE: EPD Rate is the percent of mortgages originated in each quarter for FHA insurance that experience a three-month delinquency in the first six payment cycles.

Data for the first two months of the quarter only. There is a 7-month lag. Due to late reporting by a large servicer, the EPD rates in FY 2020 Q4 are likely understated.

Serious Delinquency Rates

The pandemic and its impact on the health and economic condition of citizens has been a major factor in the increase of FHA's serious delinquency (SDQ) rate in comparison to pre-pandemic levels. Starting in April 2020, a significant number of FHA borrowers requested approval to pause their monthly mortgage payments under the forbearance provisions of the CARES Act. As forbearance requests transitioned into payment delinquencies starting in the summer of 2020, the SDQ rate quickly rose from 4.04 percent in April 2020 to 11.90 percent by November 2020. However, the SDQ rate has since significantly improved and declined to 3.93 percent by the end of FY 2023, comparable to pre-pandemic levels (Figure 11 and Exhibit A-12).

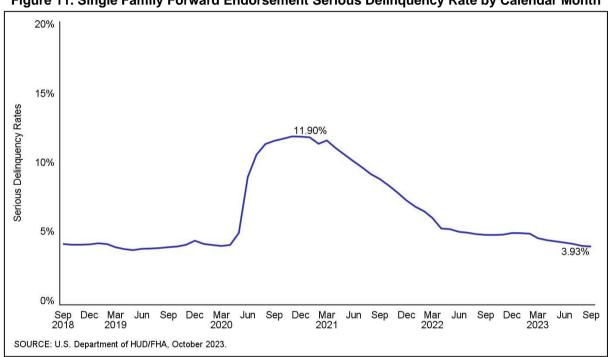


Figure 11. Single Family Forward Endorsement Serious Delinquency Rate by Calendar Month

Since the start of the pandemic, FHA has helped more than 2 million borrowers with FHA-insured mortgages through COVID-19 forbearance and COVID-19 loss mitigation home retention options. Approximately 2.4 million FHA borrowers entered into a forbearance or became seriously delinquent from April 1, 2020, through September 30, 2023. Among this population, as of the end of this quarter, nearly 1.2 million borrowers had entered, or were in the process of entering, a loss mitigation plan that would enable them to remain in their homes. Of those that had successfully entered a loss mitigation plan, the vast majority remained current or had paid off their mortgages by the end of this quarter, while approximately 227,000 had become delinquent again.

Of the \$2.4 million FHA borrowers referenced above, 772,000 borrowers had cured or paid off their mortgages without need for a loss mitigation plan, and approximately 76,000 borrowers remained in forbearance. However, 251,000 borrowers, who had not sought assistance from servicers nor completed a loss mitigation home retention option, remained behind on their mortgage payments. It is this remaining population that FHA will continue to focus on reaching and assisting through loss-mitigation home retention options.

Note that borrowers may move from one status category to another, thus the number of borrowers in any status category is likely to shift from quarter to quarter.

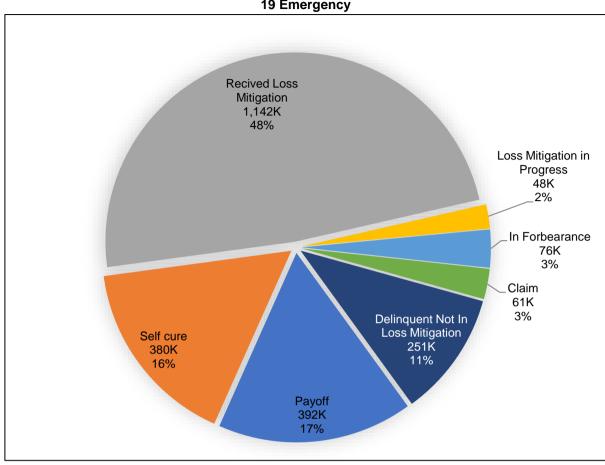


Figure 12. Status of Borrowers Who Received Forbearance or Were Seriously Delinquent During the COVID-19 Emergency

SOURCE: U.S. Department of HUD/FHA, October 2023.

Note: Of the 1,142K mortgages entering loss mitigation, 707K are current, 208K paid off, and 227K re-defaulted.

APPENDIX

Exhibit A-1. Forward and HECM Endorsement Counts

		Reverse Mortgages			
	Home Purchase	Conventional Refinance	FHA-to-FHA Refinance	All Forward Loans	HECM ¹
Fiscal Year	Home Fulchase	Reililance	Reilliance	All Folward Loans	HECIVI.
2014	594,998	55,354	136,000	786,352	51,616
2015	753,387	80,014	282,829	1,116,230	57,990
2016	879,512	107,464	271,072	1,258,048	48,868
2017	882,077	126,877	237,480	1,246,434	55,290
2017	776,275	109,455	128,871	1,014,601	48,329
2019	743,278	103,949	143,198	990,425	31,272
2019	817,833	94,554	420,764	1,333,151	41,835
2020	846,243	84,573	502,048	1,432,864	
2021					49,195
	692,842	90,794	198,560	982,196	64,457
2023 Fiscal Year	581,725	83,344	67,250	732,319	32,963
2014 Q1	152,965	14,611	40,910	208,486	13,094
2014 Q1 2014 Q2	119,833	13,456	31,202	164,491	14,826
2014 Q2 2014 Q3	148,017	13,456	31,202	193,633	12,590
	†				
2014 Q4	174,183	13,713	31,846	219,742	11,106
2015 Q1	154,806	15,826	30,966	201,598	14,199
2015 Q2	132,529	15,430	52,179	200,138	14,288
2015 Q3	198,802	21,486	114,367	334,655	14,058
2015 Q4	267,250	27,272	85,317	379,839	15,445
2016 Q1	210,550	27,164	63,471	301,185	12,578
2016 Q2	187,069	26,110	64,246	277,425	13,002
2016 Q3	225,132	26,059	65,903	317,094	11,643
2016 Q4	256,761	28,131	77,452	362,344	11,645
2017 Q1	220,353	30,153	87,011	337,517	12,453
2017 Q2	195,485	35,489	67,318	298,292	14,351
2017 Q3	230,475	31,055	44,003	305,533	14,720
2017 Q4	235,764	30,180	39,148	305,092	13,766
2018 Q1	195,513	30,093	42,032	267,638	14,024
2018 Q2	166,640	28,814	40,000	235,454	15,802
2018 Q3	202,746	25,313	24,270	252,329	9,529
2018 Q4	211,376	25,235	22,569	259,180	8,974
2019 Q1	179,590	26,195	22,932	228,717	7,386
2019 Q2	153,566	23,759	24,631	201,956	8,222
2019 Q3	192,032	25,430	35,872	253,334	8,139
2019 Q4	218,090	28,565	59,763	306,418	7,525
2020 Q1	197,376	32,834	95,300	325,510	8,587
2020 Q2	194,069	28,596	112,158	334,823	10,208
2020 Q3	191,924	18,979	102,696	313,599	10,843
2020 Q4	234,464	14,145	110,610	359,219	12,197
2021 Q1	228,155	15,761	113,690	357,606	11,398
2021 Q2	193,522	22,014	142,845	358,381	12,814
2021 Q3	203,986	23,173	138,953	366,112	12,694
2021 Q4	220,580	23,625	106,560	350,765	12,289
2022 Q1	201,819	23,235	81,422	306,476	15,195
2022 Q2	161,697	22,185	57,083	240,965	17,421
2022 Q3	161,078	23,250	34,391	218,719	17,967
2022 Q4	168,248	22,124	25,664	216,036	13,874

2023 Q1	140,888	19,770	18,494	179,152	9,554
2023 Q2	116,548	16,371	13,814	146,733	8,448
2023 Q3	155,426	22,033	16,274	193,733	6,571
2023 Q4	168,863	25,170	18,668	212,701	8,390

¹ The FHA reverse-mortgage insurance program is called Home Equity Conversion Mortgage (HECM). Starting in FY 2009 (2008 Q4), all new HECM endorsements are now in the Mutual Mortgage Insurance Fund. Previous endorsements, by law, remain in the General and Special Risk Insurance Fund.

Exhibit A-2. Forward and HECM Endorsement Volumes (\$ million)

	Reverse				
			Mortgages		Mortgages
	Home Purchase	Conventional Refinance	FHA-to-FHA Refinance	All Forward Loans	HECM ²
Fiscal Year					
2014	105,721	9,410	20,085	135,216	13,521
2015	140,262	14,428	58,431	213,121	16,130
2016	171,632	20,550	53,223	245,405	14,660
2017	178,621	25,303	47,031	250,955	17,691
2018	160,894	21,678	26,477	209,050	16,190
2019	159,367	21,281	33,973	214,621	10,859
2020	188,214	20,591	101,516	310,321	16,289
2021	209,986	18,274	114,563	342,823	21,350
2022	189,524	20,164	45,816	255,505	32,113
2023	173,597	19,003	16,128	208,728	16,165
Fiscal Year					
2014 Q1	27,346	2,577	5,903	35,825	3,434
2014 Q2	21,424	2,316	4,560	28,300	3,997
2014 Q3	25,849	2,212	4,755	32,816	3,202
2014 Q4	31,102	2,305	4,868	38,275	2,887
2015 Q1	27,596	2,604	4,975	35,175	3,802
2015 Q2	23,975	2,658	10,561	37,195	3,916
2015 Q3	36,989	4,012	25,064	66,065	3,871
2015 Q4	51,702	5,154	17,831	74,687	4,540
2016 Q1	40,563	5,038	12,480	58,081	3,625
2016 Q2	36,486	5,035	12,008	53,529	3,906
2016 Q3	43,525	4,975	13,038	61,538	3,527
2016 Q4	51,059	5,502	15,696	72,257	3,603
2017 Q1	44,120	6,027	18,149	68,296	3,892
2017 Q2	39,558	7,137	13,048	59,742	4,548
2017 Q3	46,441	6,146	8,251	60,838	4,801
2017 Q4	48,502	5,992	7,583	62,077	4,450
2018 Q1	40,239	5,939	8,508	54,686	4,584
2018 Q2	34,803	5,782	8,374	48,959	5,388
2018 Q3	41,677	5,007	4,915	51,599	3,183
2018 Q4	44,176	4,949	4,681	53,806	3,034
2019 Q1	37,651	5,106	4,790	47,548	2,481
2019 Q2	32,423	4,722	5,420	42,565	2,801
2019 Q3	40,947	5,263	8,573	54,783	2,884
2019 Q4	48,346	6,190	15,189	69,725	2,693
2020 Q1	44,462	7,133	23,762	75,357	3,135
2020 Q1 2020 Q2	44,412	6,117	27,286	77,815	3,870
2020 Q2 2020 Q3	44,232	4,234	24,724	73,190	4,228
2020 Q3 2020 Q4					· · · · · · · · · · · · · · · · · · ·
	55,108	3,108	25,744	83,960	5,057
2021 Q1	55,010 47,586	3,421	26,245	84,676 85,538	4,715
2021 Q2	47,586 50,647	4,730	33,222	·	5,319
2021 Q3	50,647	4,981	31,331	86,958	5,603
2021 Q4	56,744	5,142	23,764	85,650	5,713
2022 Q1	52,893	5,014	17,972	75,880	7,193
2022 Q2	43,595	4,934	13,179	61,708	8,397
2022 Q3	44,873	5,242	8,354	58,470	9,324
2022 Q4	48,162	4,974	6,311	59,448	7,200

2023 Q1	40,288	4,367	4,410	49,065	4,747
2023 Q2	33,902	3,641	3,246	40,789	4,006
2023 Q3	47,047	5,113	3,948	56,108	3,347
2023 Q4	52,361	5,881	4,525	62,766	4,064

SOURCE: U.S. Department of HUD/FHA, October 2023.

Exhibit A-3. Credit Score Distribution on New Endorsements (%)

Endorsement	ement Credit Score Distribution on New Endorsements (%)						
Fiscal							
Year/Quarter	Not Available	619 or lower	620–639	640–679	680–719	720 or higher	
2014 Q1	0.41	2.29	7.66	42.34	27.22	20.09	
2014 Q2	0.40	2.94	9.10	41.93	26.59	19.03	
2014 Q3	0.37	3.50	10.42	42.02	26.31	17.37	
2014 Q4	0.36	4.31	11.15	41.29	25.92	16.96	
2015 Q1	0.39	5.62	12.29	40.36	25.37	15.97	
2015 Q2	0.39	5.49	12.34	39.94	25.61	16.22	
2015 Q3	0.35	5.05	11.56	37.99	26.43	18.61	
2015 Q4	0.32	5.20	11.37	36.84	26.59	19.68	
2016 Q1	0.31	5.75	11.83	36.61	26.06	19.44	
2016 Q2	0.33	5.95	11.97	36.40	26.33	19.03	
2016 Q3	0.30	5.82	12.77	37.21	25.64	18.26	
2016 Q4	0.33	5.72	12.69	36.99	25.90	18.37	
2017 Q1	0.35	6.33	12.86	36.54	25.74	18.18	
2017 Q2	0.24	7.29	12.83	36.18	25.33	18.12	
2017 Q3	0.27	8.14	13.71	36.43	24.35	17.10	
2017 Q4	0.26	9.13	13.88	36.14	23.92	16.67	
2018 Q1	0.24	10.13	14.40	36.33	23.19	15.70	
2018 Q2	0.27	11.25	14.49	36.37	22.75	14.86	
2018 Q3	0.23	11.45	15.29	37.36	22.11	13.56	
2018 Q4	0.22	11.97	15.36	37.23	21.73	13.49	
2019 Q1	0.21	13.14	15.41	36.61	21.13	13.51	
2019 Q2	0.20	13.60	15.87	36.73	20.66	12.94	
2019 Q3	0.21	12.90	16.38	37.68	20.65	12.17	
2019 Q4	0.17	11.59	15.34	38.38	21.57	12.95	
2020 Q1	0.19	11.27	14.89	37.51	22.03	14.11	
2020 Q2	0.18	11.68	15.29	37.16	21.34	14.34	
2020 Q3	0.14	8.69	13.57	40.02	23.13	14.45	
2020 Q4	0.11	4.39	11.68	42.33	25.71	15.77	
2021 Q1	0.13	4.74	12.27	42.77	24.90	15.19	
2021 Q2	0.13	5.68	13.46	42.42	23.83	14.47	
2021 Q3	0.12	7.41	15.63	42.24	21.92	12.68	
2021 Q4	0.11	8.78	16.88	42.71	20.47	11.06	
2022 Q1	0.13	10.69	17.18	41.35	19.81	10.84	
2022 Q2	0.13	11.95	17.16	40.45	19.59	10.71	
2022 Q3	0.11	12.89	16.90	40.25	19.52	10.34	
2022 Q4	0.17	13.46	15.86	39.41	20.36	10.75	
2023 Q1	0.18	13.19	15.03	38.39	21.30	11.91	
2023 Q2	0.24	12.83	14.63	37.65	21.68	12.97	
2023 Q3	0.21	11.33	13.56	35.78	22.86	16.25	
2023 Q4	0.18	10.94	12.72	34.80	23.65	17.72	

SOURCE: U.S. Department of HUD/FHA, October 2023.

NOTE: Shares are based on loan counts. Excludes streamline refinances. Credit scores are cobranded between the three major credit repositories (Equifax, Experian, TransUnion) and Fair Isaac Corporation (FICO). Values can range from 300 to 850. FHA policy permits credit scores of 580 and above, except for loans with equity positions of 10 percent or more which may have credit scores as low as 500. Streamline refinance loans do not require full underwriting; therefore, they are not represented here.

Exhibit A-4. Average Credit Scores on New Endorsements

Endorsement		Mortgage Purpose		
Fiscal		Conventional	FHA-to-FHA	
Year/Quarter	Home Purchase	Refinance	Refinance	All
2014 Q1	686	677	680	685
2014 Q2	684	675	675	683
2014 Q3	681	672	673	680
2014 Q4	680	671	671	679
2015 Q1	678	669	669	677
2015 Q2	678	673	675	677
2015 Q3	681	678	679	681
2015 Q4	683	677	674	682
2016 Q1	682	676	673	681
2016 Q2	681	676	672	680
2016 Q3	680	677	673	679
2016 Q4	680	677	673	679
2017 Q1	679	677	673	679
2017 Q2	679	675	669	678
2017 Q3	677	672	666	675
2017 Q4	676	670	664	674
2018 Q1	674	668	663	672
2018 Q2	672	666	661	670
2018 Q3	670	664	660	668
2018 Q4	669	663	658	668
2019 Q1	669	662	657	667
2019 Q2	667	660	656	665
2019 Q3	666	663	659	665
2019 Q4	668	667	663	667
2020 Q1	670	667	666	669
2020 Q2	671	661	662	669
2020 Q3	673	664	667	672
2020 Q4	678	674	674	677
2021 Q1	677	673	672	676
2021 Q2	675	671	670	674
2021 Q3	671	666	663	670
2021 Q4	669	659	656	666
2022 Q1	668	654	651	665
2022 Q2	668	652	649	664
2022 Q3	668	650	646	663
2022 Q4	669	646	642	663
2023 Q1	671	647	642	665
2023 Q2	672	649	643	666
2023 Q3	676	656	649	671
2023 Q4	679	656	648	674

SOURCE: U.S. Department of HUD/FHA, October 2023.

NOTE: Shares are based on loan counts. Excludes streamline refinances. Credit scores are cobranded between the three major credit repositories (Equifax, Experian, TransUnion) and Fair Isaac Corporation (FICO). Values can range from 300 to 850. FHA policy permits credit scores of 580 and above, except for loans with equity positions of 10 percent or more which may have credit scores as low as 500. Streamline refinance loans do not require full underwriting; therefore, they are not represented here.

Exhibit A-5. Loan-to-Value Ratio Distribution on New Endorsements (%)

Endorsement Fiscal			LTV Range	27. 22	
Year/Quarter	80 or lower	>80 to 90	>90 to 95	>95 to 98	Over 98
2014 Q1	5.39	9.64	8.77	73.69	2.50
2014 Q2	5.89	10.55	9.13	71.90	2.54
2014 Q3	5.44	9.28	8.81	74.45	2.02
2014 Q4	5.30	9.15	8.87	74.81	1.87
2015 Q1	6.53	10.46	8.67	72.35	2.00
2015 Q2	6.91	11.31	8.69	70.93	2.15
2015 Q3	6.00	11.30	8.54	72.56	1.60
2015 Q4	6.30	10.84	8.12	73.13	1.62
2016 Q1	7.40	12.23	8.04	70.57	1.77
2016 Q2	7.92	12.93	8.00	69.41	1.73
2016 Q3	6.66	11.43	7.48	72.96	1.45
2016 Q4	6.68	11.66	7.56	72.63	1.47
2017 Q1	7.88	13.61	7.48	69.50	1.53
2017 Q2	9.46	15.58	7.39	65.81	1.76
2017 Q3	7.86	13.46	7.33	69.83	1.53
2017 Q4	7.84	14.11	7.28	69.38	1.39
2018 Q1	8.70	16.09	7.19	66.60	1.42
2018 Q2	9.39	17.29	6.82	65.02	1.48
2018 Q3	7.72	14.12	6.67	70.19	1.29
2018 Q4	7.86	14.59	6.92	69.36	1.27
2019 Q1	9.18	16.47	6.86	66.22	1.27
2019 Q2	9.17	17.24	6.64	65.64	1.31
2019 Q3	8.24	16.00	6.61	68.11	1.03
2019 Q4	8.34	16.57	6.95	67.22	0.92
2020 Q1	13.82	14.54	7.39	63.41	0.84
2020 Q2	17.47	7.89	7.90	65.77	0.97
2020 Q3	12.53	6.71	7.78	72.23	0.75
2020 Q4	8.51	5.86	7.43	77.62	0.58
2021 Q1	10.11	6.48	7.75	75.10	0.57
2021 Q2	15.07	7.50	7.76	69.10	0.57
2021 Q3	16.37	7.25	7.26	68.62	0.51
2021 Q4	18.50	6.52	7.09	67.38	0.51
2022 Q1	21.13	6.08	6.88	65.41	0.50
2022 Q2	25.10	5.72	6.66	61.93	0.59
2022 Q3	26.32	5.71	6.86	60.64	0.46
2022 Q4	24.84	6.18	7.94	60.56	0.49
2023 Q1	24.34	6.58	8.29	60.26	0.53
2023 Q2	23.25	6.20	8.24	61.75	0.56
2023 Q3	22.12	6.22	8.03	63.13	0.50
2023 Q4	23.04	6.57	8.51	61.38	0.50

SOURCE: U.S. Department of HUD/FHA, October 2023.

NOTE: Shares are based on loan counts, excluding streamline refinances. In accordance with statutory requirements for determining eligibility of loans for FHA insurance, HUD measures LTV ratio without including any financed insurance premium in the loan balance.

Exhibit A-6. Average Loan-to-Value Ratios on New Endorsements (%)

		Mortgage Purpose		10 (70)
Endorsement Fiscal Year/Quarter	Home Purchase	Conventional Refinance	FHA-to-FHA Refinance	All
2014 Q1	95.74	82.08	83.77	94.24
2014 Q2	95.73	82.19	83.37	93.98
2014 Q3	95.70	81.21	83.60	94.15
2014 Q4	95.66	80.68	83.15	94.21
2015 Q1	95.63	79.91	82.91	93.70
2015 Q2	95.72	79.96	84.61	93.53
2015 Q3	95.73	81.06	85.71	93.68
2015 Q4	95.67	80.10	83.45	93.66
2016 Q1	95.68	79.39	82.64	93.18
2016 Q2	95.65	78.93	82.34	92.90
2016 Q3	95.79	79.29	82.54	93.42
2016 Q4	95.72	79.12	82.25	93.42
2017 Q1	95.70	78.91	82.23	92.86
2017 Q2	95.78	78.65	81.35	92.21
2017 Q3	95.75	78.07	81.21	92.87
2017 Q4	95.65	77.98	81.24	92.80
2018 Q1	95.70	78.31	81.48	92.36
2018 Q2	95.72	78.26	81.40	92.04
2018 Q3	95.73	77.82	81.19	92.86
2018 Q4	95.64	77.50	80.89	92.76
2019 Q1	95.57	76.98	80.94	92.13
2019 Q2	95.60	77.21	81.30	92.05
2019 Q3	95.61	77.50	81.72	92.44
2019 Q4	95.54	77.92	82.52	92.39
2020 Q1	95.46	77.05	82.16	91.44
2020 Q2	95.57	75.24	81.49	91.60
2020 Q3	95.71	76.33	82.90	92.87
2020 Q4	95.76	76.89	82.69	93.89
2021 Q1	95.66	76.29	81.69	93.43
2021 Q2	95.60	74.69	80.36	92.02
2021 Q3	95.52	73.29	78.42	91.64
2021 Q4	95.36	71.84	75.98	91.22
2022 Q1	95.23	70.37	74.69	90.55
2022 Q2	95.20	69.88	74.30	89.62
2022 Q3	94.92	69.33	73.68	89.25
2022 Q4	94.66	69.29	73.45	89.57
2023 Q1	94.57	68.26	73.22	89.48
2023 Q2	94.73	68.44	73.34	89.79
2023 Q3	94.79	68.33	73.63	90.03
2023 Q4	94.65	68.28	73.33	89.70

SOURCE: U.S. Department of HUD/FHA, October 2023.

NOTE: Shares are based on loan counts, excluding streamline refinances. In accordance with statutory requirements for determining eligibility of loans for FHA insurance, HUD measures LTV ratio without including any financed insurance premium in the loan balance.

Exhibit A-7. Termination Claim Type and Loss Severity Rates

			Diagnosition Counts				
	LOS	ss Rates (% UF	'B)	וט	isposition Coun	ts	REO Alternative
Fiscal		REO			REO		Share of
Year/Quarter	REO	Alternative ²	Overall	REO	Alternative ²	Total	Dispositions
2014 Q1	61.34	47.13	53.88	24,750	21,006	45,756	45.91
2014 Q2	62.96	50.33	54.79	20,424	26,245	46,669	56.24
2014 Q3	59.18	44.57	50.47	16,318	18,438	34,756	53.05
2014 Q4	57.63	46.60	49.57	13,163	26,582	39,745	66.88
2015 Q1	59.64	44.25	49.58	13,269	20,026	33,295	60.15
2015 Q2	61.39	43.26	52.65	14,200	10,371	24,571	42.21
2015 Q3	59.74	41.00	51.69	16,185	10,010	26,195	38.21
2015 Q4	60.63	46.40	52.86	17,105	15,587	32,692	47.68
2016 Q1	62.94	47.41	54.70	16,704	15,121	31,825	47.51
2016 Q2	63.37	45.97	54.32	15,134	13,323	28,457	46.82
2016 Q3	60.38	47.15	53.11	13,421	13,213	26,634	49.61
2016 Q4	59.99	50.29	54.03	13,031	16,427	29,458	55.76
2017 Q1	61.03	49.87	53.98	13,086	18,311	31,397	58.32
2017 Q2	62.23	40.15	51.11	12,024	10,876	22,900	47.49
2017 Q3	59.51	40.77	48.45	10,923	14,167	25,090	56.46
2017 Q4	59.28	40.24	46.38	8,125	15,765	23,890	65.99
2018 Q1	59.18	38.64	45.15	7,072	14,402	21,474	67.07
2018 Q2	59.74	41.93	47.80	7,333	13,313	20,646	64.48
2018 Q3	57.59	40.46	45.43	6,561	14,286	20,847	68.53
2018 Q4	56.74	38.38	43.47	5,352	12,443	17,795	69.92
2019 Q1	57.82	41.65	45.61	4,691	12,646	17,337	72.94
2019 Q2	57.87	37.42	42.51	4,391	12,040	16,431	73.28
2019 Q3	54.86	34.39	39.28	3,908	10,887	14,795	73.59
2019 Q4	53.70	31.84	37.13	3,579	9,769	13,348	73.19
2020 Q1	55.18	33.04	38.85	3,814	9,126	12,940	70.53
2020 Q2	56.46	31.29	38.96	4,493	8,544	13,037	65.54
2020 Q3	54.17	32.06	40.66	4,595	6,174	10,769	57.33
2020 Q4	53.10	31.58	40.72	3,814	4,466	8,280	53.94
2021 Q1	50.24	31.99	38.13	2,366	4,093	6,459	63.37
2021 Q2	49.87	34.24	38.40	1,725	4,165	5,890	70.71
2021 Q3	43.52	33.19	35.49	1,199	3,708	4,907	75.57
2021 Q4	37.58	31.97	32.59	403	3,116	3,519	88.55
2022 Q1	38.62	28.36	30.18	591	2,669	3,260	81.87
2022 Q2	31.84	27.16	28.10	802	3,074	3,876	79.31
2022 Q3	27.93	26.17	26.45	784	4,305	5,089	84.59
2022 Q4	32.11	25.08	26.06	648	4,252	4,900	86.78
2023 Q1	32.02	26.08	27.20	756	3,504	4,260	82.25
2023 Q2	32.45	25.33	26.69	789	3,544	4,333	81.79
2023 Q3	27.66	21.29	22.67	974	4,102	5,076	80.81
2023 Q4 ¹	21.66	22.65	22.44	944	3,861	4,805	80.35

SOURCE: U.S. Department of HUD/FHA, October 2023.
NOTE: For Single Family forward loans only; Real Estate Owned (REO) refers to properties that HUD has assumed ownership of through the conveyance of title.

¹ First two months of the quarter only.
² REO alternatives comprise short sales, claims without conveyance of title (CWCOT), and note sales. Short sales refer to the sale of property where the defaulted borrower sells his/her home and uses the net sale proceeds to satisfy the mortgage debt even though the proceeds are less than the amount owed. In the FHA single family program, short sales are referred to as pre-foreclosure sales (PFS). CWCOT is a program approved under Section 426 of the Housing and Urban-Rural Recovery Act of 1983. It is designed to reduce the number of single-family mortgages owned by HUD by authorizing the payment of claims to mortgagees without conveying (transferring) the title of the property to HUD. Note Sale refers to the sale of defaulted mortgage notes. Note Sales are conducted through the Single-Family Asset Sales

Exhibit A-8. Share of Forward Endorsements by Loan Type

	Exhibit A-8. Share of Forward Endorsements by Loan Type						
Endorsement		Ctus suslins	Camurantianal	Communication	□110 to □110		Tatal
Fiscal Year /Quarter	Purchase	Streamline Refinance	Conventional Cash-out	Conventional No Cash-out	FHA-to-FHA Cash-out	FHA-to-FHA No Cash-out	Total Count
2014 Q1	73.37	17.22	3.23	3.78	1.32	1.08	208,486
2014 Q2	72.85	16.05	3.56	4.62	1.70	1.21	164,491
2014 Q3	76.44	13.88	3.19	3.82	1.54	1.13	193,633
2014 Q3	79.27	11.76	3.11	3.13	1.69	1.13	219,742
2015 Q1	76.79	11.67	3.99	3.86	2.26	1.43	201,598
2015 Q1 2015 Q2	66.22	21.49	3.85	3.86	2.21	2.38	201,398
2015 Q2 2015 Q3	59.41	29.09	3.03	3.30	2.21	2.99	334,655
2015 Q3 2015 Q4	70.36	18.15	3.79	3.39	2.09	1.94	379,839
	69.91	16.13	5.13	3.89	2.37	1.94	· ·
2016 Q1	1	•					301,185
2016 Q2	67.43	18.05	5.64	3.77	3.18	1.93	277,425
2016 Q3	71.00	16.01	4.99	3.23	2.91	1.87	317,094
2016 Q4	70.86	16.72	4.92	2.84	3.02	1.63	362,344
2017 Q1	65.29	20.09	5.78	3.16	3.74	1.96	337,517
2017 Q2	65.53	15.91	7.74	4.15	4.85	1.80	298,292
2017 Q3	75.43	8.67	6.94	3.23	4.54	1.20	305,533
2017 Q4	77.28	6.42	7.16	2.73	5.27	1.15	305,092
2018 Q1	73.05	7.81	8.30	2.94	6.60	1.29	267,638
2018 Q2	70.77	8.33	9.21	3.03	7.32	1.33	235,454
2018 Q3	80.35	2.76	7.69	2.34	6.07	0.79	252,329
2018 Q4	81.56	1.45	7.80	1.93	6.61	0.65	259,180
2019 Q1	78.52	1.41	9.42	2.03	7.84	0.78	228,717
2019 Q2	76.04	3.33	9.71	2.05	7.99	0.88	201,956
2019 Q3	75.80	5.74	8.27	1.77	7.19	1.23	253,334
2019 Q4	71.17	10.42	7.76	1.56	7.08	2.01	306,418
2020 Q1	60.64	18.69	8.01	2.08	7.01	3.58	325,510
2020 Q2	57.96	24.60	6.15	2.39	4.80	4.09	334,823
2020 Q3	61.20	25.35	3.96	2.10	3.19	4.21	313,599
2020 Q4	65.27	25.85	2.45	1.48	2.03	2.91	359,219
2021 Q1	63.80	26.14	2.82	1.58	2.51	3.14	357,606
2021 Q2	54.00	32.38	3.97	2.17	3.42	4.06	358,381
2021 Q3	55.72	30.41	4.22	2.11	4.11	3.44	366,112
2021 Q4	62.89	21.87	4.92	1.82	5.83	2.67	350,765
2022 Q1	65.85	16.78	5.96	1.63	7.68	2.11	306,476
2022 Q2	67.10	11.14	7.58	1.63	10.69	1.86	240,965
2022 Q3	73.65	2.49	9.26	1.37	12.32	0.91	218,719
2022 Q4	77.88	0.13	9.35	0.89	11.40	0.35	216,036
2023 Q1	78.64	0.08	10.16	0.87	9.98	0.26	179,152
2023 Q2	79.43	0.03	10.31	0.85	9.13	0.26	146,733
2023 Q3	80.23	0.13	10.53	0.85	7.95	0.31	193,733
2023 Q4	79.39	0.28	11.02	0.81	8.22	0.28	212,701

Exhibit A-9. Share of Endorsement Purchase Count by Debt-to-Income Bucket (%)

Exhibit A-9. Share of Endorsement Purchase Count by Debt-to-Income Bucket (%) Endorsement DTI Bucket Average						
Fiscal Year/Quarter	36 or lower	>36 to 43	>43 to 50	Over 50	DTI	
2014 Q1	28.80	28.06	28.72	14.42	40.70	
2014 Q2	28.59	28.53	28.39	14.49	40.72	
2014 Q3	29.57	28.96	27.48	13.99	40.38	
2014 Q4	28.97	28.86	27.61	14.56	40.57	
2015 Q1	28.63	28.87	27.53	14.96	40.71	
2015 Q2	29.22	29.34	26.91	14.53	40.53	
2015 Q3	31.28	29.05	25.86	13.81	40.09	
2015 Q4	29.90	28.35	26.79	14.95	40.50	
2016 Q1	28.74	28.31	27.41	15.54	40.75	
2016 Q2	28.44	27.96	27.25	16.36	40.90	
2016 Q3	29.05	27.97	26.80	16.18	40.75	
2016 Q4	28.55	27.50	26.86	17.10	40.96	
2017 Q1	27.45	26.80	27.75	18.00	41.26	
2017 Q2	24.87	25.42	29.16	20.55	42.04	
2017 Q3	24.85	25.32	29.17	20.66	42.06	
2017 Q4	23.99	24.90	29.20	21.91	42.35	
2018 Q1	23.32	24.38	29.26	23.05	42.59	
2018 Q2	22.12	23.44	29.58	24.87	43.02	
2018 Q3	21.21	23.55	29.99	25.25	43.24	
2018 Q4	20.30	23.43	30.31	25.95	43.48	
2019 Q1	19.47	22.52	30.56	27.45	43.83	
2019 Q2	19.23	22.67	30.13	27.98	43.90	
2019 Q3	20.50	23.60	29.54	26.35	43.46	
2019 Q4	21.17	23.98	29.25	25.60	43.25	
2020 Q1	21.57	23.79	29.24	25.40	43.17	
2020 Q2	21.11	23.35	29.33	26.21	43.35	
2020 Q3	21.79	24.34	30.48	23.39	42.96	
2020 Q4	21.43	24.93	31.46	22.17	42.90	
2021 Q1	20.87	24.49	31.76	22.87	43.07	
2021 Q2	21.04	24.12	31.40	23.44	43.09	
2021 Q3	20.54	23.82	31.19	24.45	43.27	
2021 Q4	20.20	24.00	31.65	24.15	43.30	
2022 Q1	19.48	23.45	31.68	25.38	43.55	
2022 Q2	18.26	22.23	32.04	27.46	44.03	
2022 Q3	16.93	21.73	32.47	28.87	44.42	
2022 Q4	15.20	21.29	32.90	30.61	44.89	
2023 Q1	13.85	20.44	33.56	32.15	45.34	
2023 Q2	14.05	21.01	33.55	31.38	45.17	
2023 Q3	15.56	21.88	32.86	29.70	44.72	
2023 Q4	14.28	20.92	33.39	31.41	45.19	

Exhibit A-10. Source of Down Payment Assistance (DPA)

Government Relative Non-Government/Relative No DPA							ΡΔ	
Endorsement	DPA Rate	SDQ Rate						
Fiscal Year/Quarter	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
2014 Q1	7.19	8.82	26.24	6.34	0.40	6.23	66.17	5.07
2014 Q2	8.60	8.88	26.47	6.35	0.51	6.25	64.43	5.04
2014 Q3	8.77	8.29	23.96	6.38	0.69	5.16	66.58	5.17
2014 Q4	8.90	8.45	25.72	6.50	0.96	6.99	64.41	5.14
2015 Q1	9.61	8.50	27.51	6.95	1.13	6.47	61.75	5.27
2015 Q2	10.34	8.31	27.09	7.12	1.33	5.56	61.23	5.48
2015 Q3	9.62	8.28	24.34	6.95	1.60	5.49	64.44	5.39
2015 Q4	10.00	7.43	25.57	6.62	1.82	5.93	62.61	4.88
2016 Q1	10.94	7.51	27.26	6.60	2.15	5.69	59.65	4.87
2016 Q2	10.58	7.16	26.62	6.50	2.18	5.41	60.61	4.89
2016 Q3	9.86	7.34	25.10	6.89	1.63	6.46	63.42	5.30
2016 Q4	9.85	7.12	26.43	7.00	1.58	6.82	62.14	5.12
2017 Q1	10.34	7.06	26.86	6.84	1.77	6.94	61.03	5.00
2017 Q2	10.52	7.16	26.88	6.78	2.01	6.32	60.59	4.87
2017 Q3	10.38	7.60	24.76	6.81	1.64	6.92	63.22	5.07
2017 Q4	10.96	7.70	26.06	6.97	1.44	7.32	61.54	5.22
2018 Q1	11.77	8.21	26.45	6.96	1.26	7.25	60.52	5.24
2018 Q2	11.34	8.56	26.79	7.24	1.20	7.47	60.67	5.34
2018 Q3	10.77	8.91	25.29	7.16	1.25	7.69	62.69	5.58
2018 Q4	11.71	8.63	26.23	7.03	1.23	8.05	60.83	5.09
2019 Q1	12.25	8.83	26.74	6.59	1.08	7.75	59.94	4.85
2019 Q2	13.18	8.14	26.27	6.26	1.04	6.84	59.51	4.69
2019 Q3	13.05	8.29	24.03	6.42	1.04	7.39	61.88	4.81
2019 Q4	13.16	7.68	24.92	6.03	0.94	6.91	60.98	4.34
2020 Q1	14.47	6.58	25.15	5.45	0.88	6.15	59.50	4.11
2020 Q2	15.49	6.45	24.42	5.10	0.93	4.93	59.16	3.92
2020 Q3	15.96	5.91	21.90	4.80	0.92	5.63	61.23	3.69
2020 Q4	15.76	5.34	22.43	4.76	0.99	4.09	60.81	3.47
2021 Q1	16.12	5.20	23.72	4.84	0.88	4.73	59.28	3.50
2021 Q2	15.39	4.91	23.58	4.94	0.91	4.88	60.12	3.71
2021 Q3	14.30	5.56	22.01	5.63	1.07	5.29	62.62	4.29
2021 Q4	14.50	5.88	23.80	6.05	1.03	6.19	60.67	4.56
2022 Q1	15.43	6.14	23.95	5.91	1.14	7.24	59.48	4.42
2022 Q2	15.14	5.96	24.84	5.73	1.16	7.38	58.86	4.34
2022 Q3	12.08	5.88	26.40	5.63	1.09	5.92	60.43	4.26
2022 Q4	11.58	4.91	26.55	4.88	1.10	6.11	60.76	3.59
2023 Q1	13.34	3.83	25.44	3.84	1.08	5.69	60.13	2.67
2023 Q2	13.81	2.38	23.71	2.51	1.09	2.92	61.40	1.56
2023 Q3	14.98	0.57	22.46	0.71	1.16	0.77	61.40	0.43
2023 Q4	17.15	0.01	22.36	0.02	1.24	0.00	59.25	0.01

Exhibit A-11. Reverse Mortgage Program (HECM) Claim by Type

	Fiscal Claim Type 1 Claim Type 2 Supplemental								
	Quarter	Count	Claim Paid \$	Count	Claim Paid \$	Count	Claim Paid \$	Total Count	Total Claim Paid \$1
2014	Q1	3,032	236,708,768	1,337	306,952,073	76	165,275	4,445	543,826,117
	Q2	2,977	243,464,207	1,827	396,681,617	49	112,194	4,853	640,258,017
	Q3	3,445	283,383,650	2,090	477,264,963	172	815,079	5,707	761,463,691
	Q4	2,819	226,894,442	1,874	423,459,523	429	1,061,179	5,122	651,415,144
	Total	12,273	990,451,066	7,128	1,604,358,176	726	2,153,727	20,127	2,596,962,969
2015	Q1	12,516	977,456,146	1,701	392,204,512	1,125	1,688,735	15,342	1,371,349,394
	Q2	7,142	574,998,013	1,880	453,417,423	4,259	8,666,375	13,281	1,037,081,812
	Q3	8,386	669,193,871	3,919	996,343,546	2,982	8,950,540	15,287	1,674,487,957
	Q4	6,222	517,499,053	3,810	969,598,335	3,953	14,192,066	13,985	1,501,289,453
	Total	34,266	2,739,147,083	11,310	2,811,563,817	12,319	33,497,716	57,895	5,584,208,616
2016	Q1	5,366	447,345,205	3,923	986,113,498	8,886	23,146,161	18,175	1,456,604,864
	Q2	5,854	455,189,374	3,874	972,917,814	11,526	24,824,881	21,254	1,452,932,070
	Q3	6,602	515,946,786	4,810	1,196,548,865	12,081	32,022,466	23,493	1,744,518,117
	Q4	6,021	467,520,045	5,941	1,450,894,509	18,517	76,463,822	30,479	1,994,878,376
	Total	23,843	1,886,001,410	18,548	4,606,474,686	51,010	156,457,331	93,401	6,648,933,427
2017	Q1	6,144	477,712,116	6,204	1,504,458,822	7,823	29,702,312	20,171	2,011,873,250
	Q2	7,203	581,198,659	5,783	1,401,927,594	6,623	18,908,074	19,609	2,002,034,327
	Q3	6,006	456,986,742	4,640	1,096,454,022	6,348	20,055,437	16,994	1,573,496,202
	Q4	4,739	361,379,418	5,653	1,309,239,889	5,811	14,970,627	16,203	1,685,589,934
	Total	24,092	1,877,276,936	22,280	5,312,080,328	26,605	83,636,449	72,977	7,272,993,713
2018	Q1	4,918	364,732,308	6,375	1,466,323,543	5,644	15,300,518	16,937	1,846,356,370
	Q2	4,702	365,552,817	5,424	1,241,859,664	5,496	18,069,817	15,622	1,625,482,297
	Q3	3,918	299,989,422	7,985	1,864,583,912	4,464	24,670,362	16,367	2,189,243,696
	Q4	4,076	312,957,811	8,110	1,866,905,224	3,910	21,055,093	16,096	2,200,918,128
	Total	17,614	1,343,232,358	27,894	6,439,672,343	19,514	79,095,791	65,022	7,862,000,491
2019	Q1	3,598	276,743,900	15,734	3,584,137,917	4,389	20,085,976	23,721	3,880,967,793
	Q2	3,864	298,948,014	10,105	2,339,723,175	4,268	18,247,891	18,237	2,656,919,079
	Q3	4,246	328,961,241	10,529	2,413,434,227	3,555	15,980,017	18,330	2,758,375,485
	Q4	4,222	344,916,187	10,605	2,475,623,023	3,681	14,470,082	18,508	2,835,009,291
	Total	15,930	1,249,569,341	46,973	10,812,918,34	15,893	68,783,965	78,796	12,131,271,647
2020	Q1	3,674	295,971,269	9,380	2,198,948,676	3,709	12,817,402	16,763	2,507,737,348
	Q2	3,920	319,079,247	9,130	2,108,615,349	3,625	15,549,381	16,675	2,443,243,977
	Q3	2,799	228,369,975	7,665	1,817,705,062	3,205	11,785,928	13,669	2,057,860,965
	Q4	1,986	163,464,606	6,744	1,608,636,339	3,142	11,939,726	11,872	1,784,040,671
2221	Total	12,379	1,006,885,098	32,919	7,733,905,427	13,681	52,092,437	58,979	8,792,882,961
2021	Q1	1,551	120,001,165	5,637	1,352,031,861	2,084	7,782,229	9,272	1,479,815,255
	Q2	1,433	104,303,451	4,187	1,014,074,174	1,375	5,973,238	6,995	1,124,350,864
	Q3	1,501	110,839,731	4,743	1,122,296,618	1,437	5,554,638	7,681	1,238,690,987
	Q4	1,140	78,084,893	3,598	888,122,611	1,414	5,400,947	6,152	971,608,451
2022	Total	5,625	413,229,240	18,165	4,376,525,265	6,310	24,711,052	30,100	4,814,465,556
2022	Q1	955	67,471,421	3,099	740,497,719	1,174	4,770,139	5,228	812,739,279
	Q2	1,144	81,957,770	2,525	589,585,783	878	4,104,791	4,547	675,648,344
	Q3	1,381	92,512,978	3,554	854,674,190	677	3,831,818	5,612	951,018,987
	Q4	1,574	104,148,615	3,032	741,426,578	960	5,541,210	5,566	851,116,403
2023	Total	5,054	346,090,784	12,210	2,926,184,271	3,689	18,247,957	20,953	3,290,523,012
2023	Q1	1,627	117,415,592	3,678	908,497,929	1,095	6,173,660	6,400	1,032,087,181
	Q2	2,054	160,383,700	8,297	2,011,913,701	1,500	11,085,314	11,851	2,183,382,715
	Q3	2,184	168,013,173	13,624	3,368,497,013	1,756	16,920,727	17,564	3,553,430,913
	Q4	1,669	127,671,974	11,635	2,899,681,189	1,966	22,757,114	15,270	3,050,110,278
	Total	7,534	573,484,439	37,234	9,188,589,832	6,317	56,936,815	51,085	9,819,011,086

SOURCE: U.S. Department of HUD/FHA, October 2023.

NOTE: Claims comprise of Foreclosure, Deed in Lieu of Foreclosure, and Mortgagor's Short Sale. The Claim Type 1 category represents the dollar volume of claims generated when the borrower no longer occupies the home, and the property is sold at a loss, with the mortgage never being assigned to the HUD Secretary. The Claim Type 2 category represents the dollar volume of claims resulting from the assignment of the mortgage to the HUD Secretary when the mortgage reaches 98 percent of the MCA. Supplemental claims are those claims submitted by lenders for other eligible expenses not included on original claims, such as property preservation expenses.

Details may not sum to total due to rounding.

Exhibit A-12. Serious Delinquency Rates¹

Calendar	
Month	SDQ Rate
OCT13	8.04%
NOV13	8.02%
DEC13	8.02%
JAN14	7.83%
FEB14	7.71%
MAR14	7.44%
APR14	7.25%
MAY14	7.19%
JUN14	7.14%
JUL14	6.98%
AUG14	6.94%
SEP14	6.99%
OCT14	6.94%
NOV14	7.02%
DEC14	7.00%
JAN15	6.96%
FEB15	6.76%
MAR15	6.42%
APR15	6.28%
MAY15	6.24%
JUN15	6.12%
JUL15	5.75%
AUG15	5.91%
SEP15	5.86%
OCT15	5.79%
NOV15	5.82%
DEC15	5.79%
JAN16	5.80%
FEB16	5.55%
MAR16	5.31%
APR16	5.16%
MAY16	5.07%
JUN16	5.02%
JUL16	4.96%
AUG16	4.95%
SEP16	4.92%
OCT16	4.91%
NOV16	4.94%
DEC16	4.99%
JAN17	4.97%
FEB17	4.81%
MAR17	4.54%
APR17	4.47%
MAY17	4.36%
JUN17	4.28%
JUL17	4.20%
AUG17	4.24%
	1.2.70

Calendar	0000
Month	SDQ Rate
SEP17	4.32%
OCT17	4.42%
NOV17	4.83%
DEC17	5.19%
JAN18	5.18%
FEB18	5.06%
MAR18	4.66%
APR18	4.54%
MAY18	4.35%
JUN18	4.28%
JUL18	4.08%
AUG18	4.11%
SEP18	4.11%
OCT18	4.06%
NOV18	4.06%
DEC18	4.08%
JAN19	4.16%
FEB19	4.10%
MAR19	3.88%
APR19	3.74%
MAY19	3.67%
JUN19	3.76%
JUL19	3.78%
AUG19	3.82%
SEP19	3.88%
OCT19	3.93%
NOV19	4.06%
DEC19	4.35%
JAN20	4.12%
FEB20	4.04%
MAR20	3.97%
APR20	4.04%
MAY20	4.91%
JUN20	8.96%
JUL20	10.58%
AUG20	11.35%
AUG20	11.35%
SEP20	11.59%
OCT20	11.73%
NOV20	11.90%
DEC20	11.89%
JAN21	11.83%
FEB21	11.37%
MAR21	11.61%
APR21	11.06%
MAY21	10.59%
JUN21	10.11%
JUL21	9.66%
AUG21	9.17%
SEP21	8.81%
OCT21	8.35%
•	

Calendar	
Month	SDQ Rate
NOV21	7.83%
DEC21	7.28%
JAN22	6.81%
FEB22	6.48%
MAR22	6.00%
APR22	5.23%
MAY22	5.19%
JUN22	5.00%
JUL22	4.93%
AUG22	4.82%
SEP22	4.77%
OCT22	4.77%
NOV22	4.79%
DEC22	4.91%
JAN23	4.90%
FEB23	4.86%
MAR23	4.53%
APR23	4.39%
MAY23	4.30%
JUN23	4.21%
JUL23	4.12%
AUG23	3.97%
SEP23	3.93%

SOURCE: U.S. Department of HUD/FHA, October 2023.

¹ Serious delinquency rates are the sum of 90-day delinquencies, plus in-foreclosures and in-bankruptcies.
Due to late reporting by a large servicer, the delinquency rates for February 2021 and February 2022 are likely understated.