



Quarterly Report to Congress

# Financial Status of the Mutual Mortgage Insurance Fund

Fiscal Year 2022, Quarter Four



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 2022 Q4  
Data as of September 30, 2022

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) 2022 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, 2022, through September 30, 2022.

Through the fourth quarter of FY 2022, FHA served 578,675 first-time homebuyers, representing 84 percent of FHA's forward purchase mortgage endorsements. FHA also served 196,114 households of color with purchase mortgages and 64,437 seniors were able to access their home equity using FHA's Home Equity Conversion Mortgage Program (HECM). During the same period, 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, ensuring loss mitigation tools needed to manage delinquent forward and reverse mortgage loans are available to reach homeowners in need.

A number of FHA borrowers continued to face COVID-19 related hardships in the fourth quarter of FY 2022. Seriously delinquent mortgages (those past due 90 or more days) are still elevated from the pre-pandemic period, although the portfolio experienced a decline in delinquencies from 8.81 percent to 4.77 percent compared to the same quarter end of FY 2021. In addition, early payment defaults (defaults within six months of endorsement) declined from a peak of approximately nine percent in early 2020 to less than two percent through the current quarter. This is still above average relative to historical results but is an improving trend. 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. 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. 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*

Mia N. Pittman  
Deputy Assistant Secretary Office of Risk  
Management and Regulatory Affairs

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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.

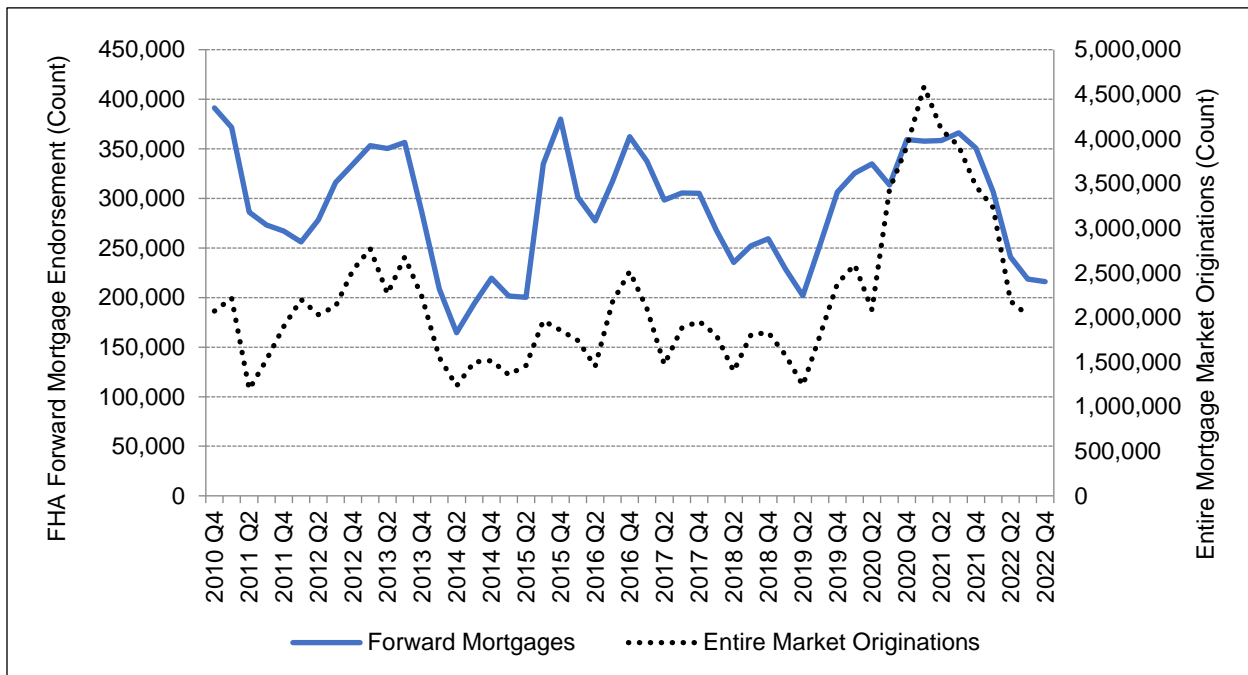


## Endorsement Activity

During the fourth quarter of fiscal year (FY) 2022, FHA endorsed 216,036 forward mortgages for insurance, a decrease of 1.23 percent from the prior quarter (Figure 1a). This decrease is due to a decline in refinancing activity driven by the rise of interest rates. During the quarter, the dollar volume of purchase endorsements was up 7.33 percent or \$3.29 billion from the previous quarter while refinance endorsements (Conventional to FHA, FHA to FHA) of \$11.28 billion in the quarter were down \$2.31 billion, or 17.01 percent, from the previous quarter. The dollar volume of all forward mortgage endorsements of \$59.45 billion increased 1.67 percent (Exhibit A-2).

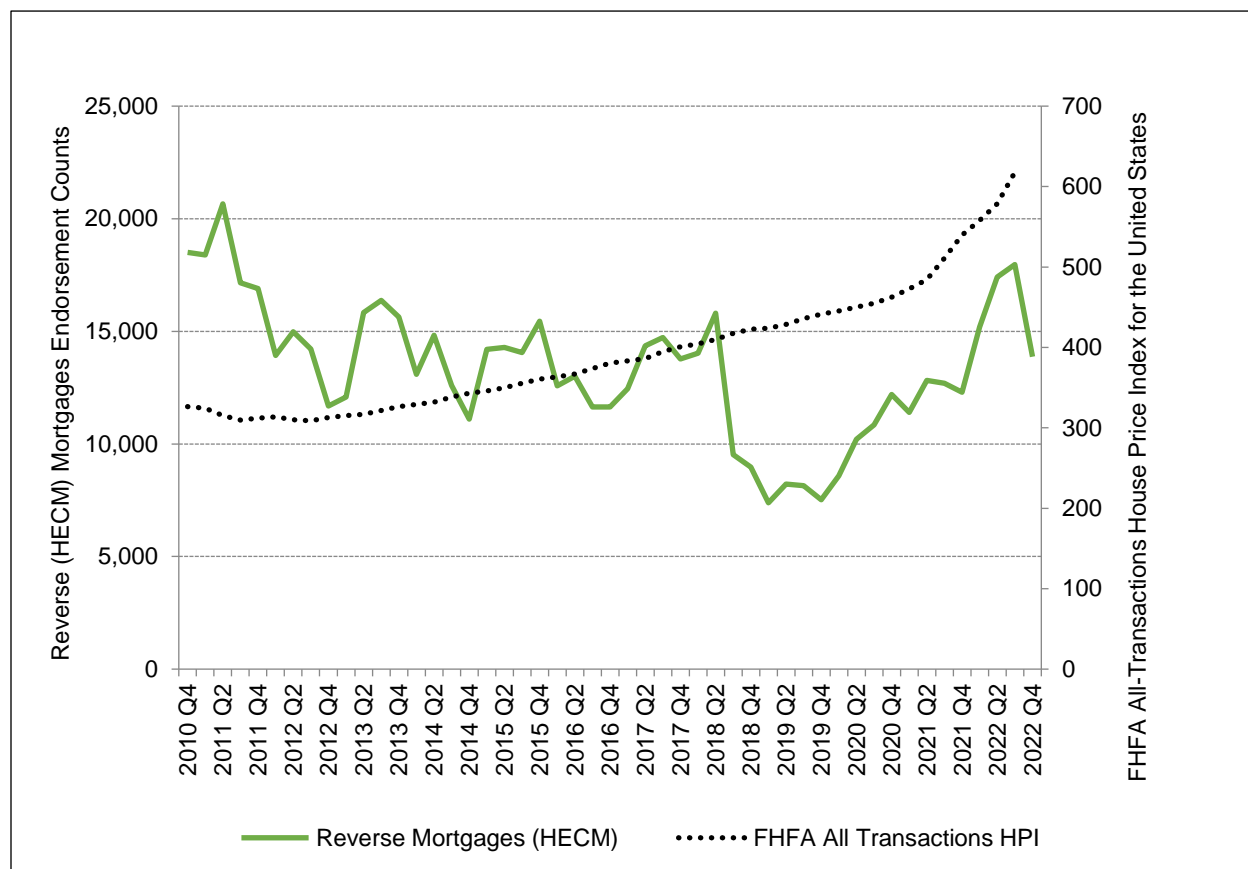
FHA purchase activity by loan count was up 4.45 percent from the previous quarter, from 161,080 mortgages to 168,250 mortgages. FHA-to-FHA refinance endorsements decreased by 25.38 percent from the previous quarter, from 34,393 to 25,663, mostly due to the recent rise in interest rates. Conventional to FHA refinance mortgages also decreased by a lesser percent, by 4.84 percent, from 23,249 to 22,123 mortgages.

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



SOURCE: U.S. Department of HUD/FHA, October 2022.

HECM endorsement volume, \$7.20 billion for the fourth quarter of FY 2022, decreased 22.78 percent from the previous quarter. The decline in HECM endorsements is likely attributable to an increase in market interest rates which outpaced any increase in home values. HECM endorsement counts during the fourth quarter of 13,867 similarly decreased by 22.79 percent from last quarter. Figure 1b shows FHA HECM endorsements relative to the Federal Housing Finance Agency (FHFA) Quarterly United States House Price Index.

**Figure 1b. HECM Endorsement Counts by Fiscal Year and Quarter**


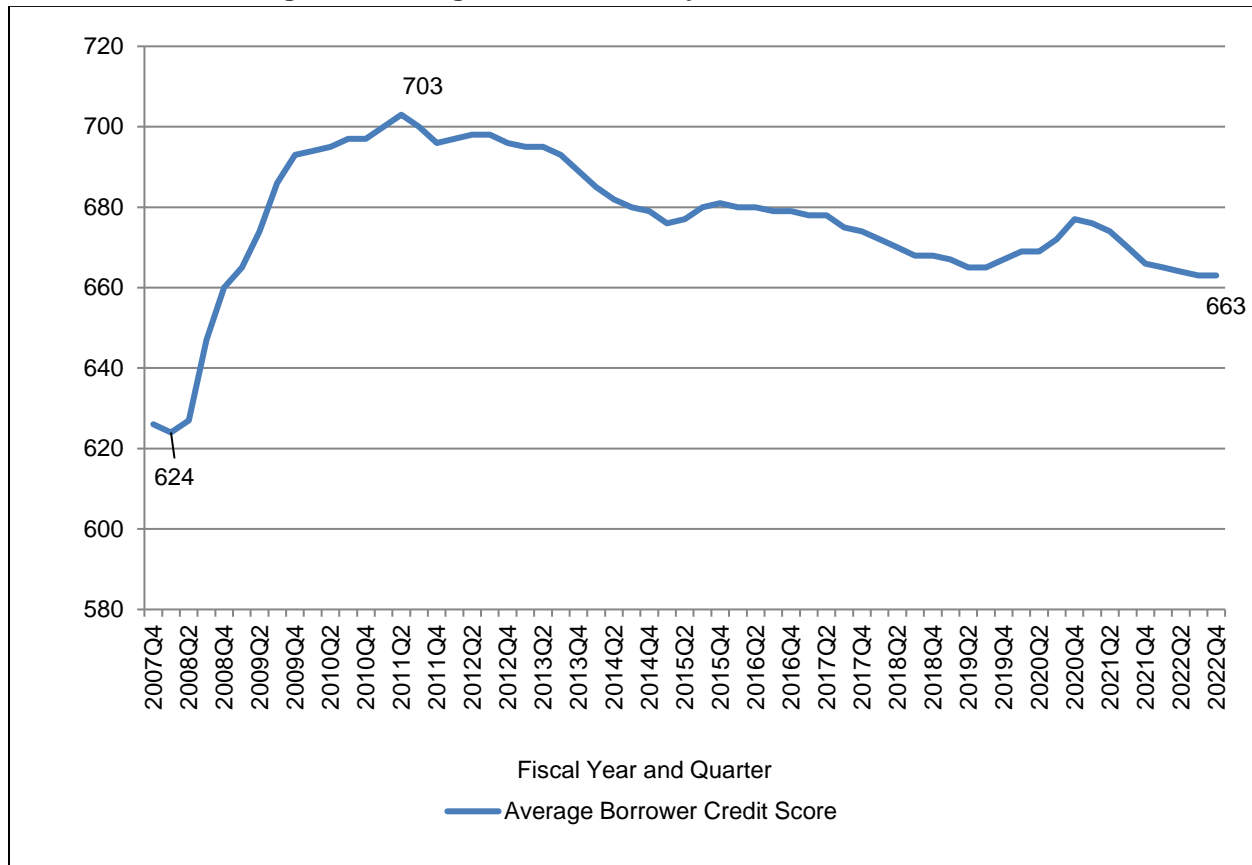
SOURCE: U.S. Department of HUD/FHA, October 2022, U.S. Federal Housing Finance Agency, All-Transactions House Price Index for the United States [USSTHPI], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/USSTHPI>, November 1, 2022.



## FHA Loan Credit Characteristics

Average credit scores remained at 663 in the fourth quarter of FY 2022. While this average is lower than the peak of 703 in the second quarter of FY 2011, it remains well above the low of 624 during the first quarter of FY 2008 (Figure 2, Exhibit A-4).

**Figure 2. Average Credit Scores by Fiscal Year and Quarter**



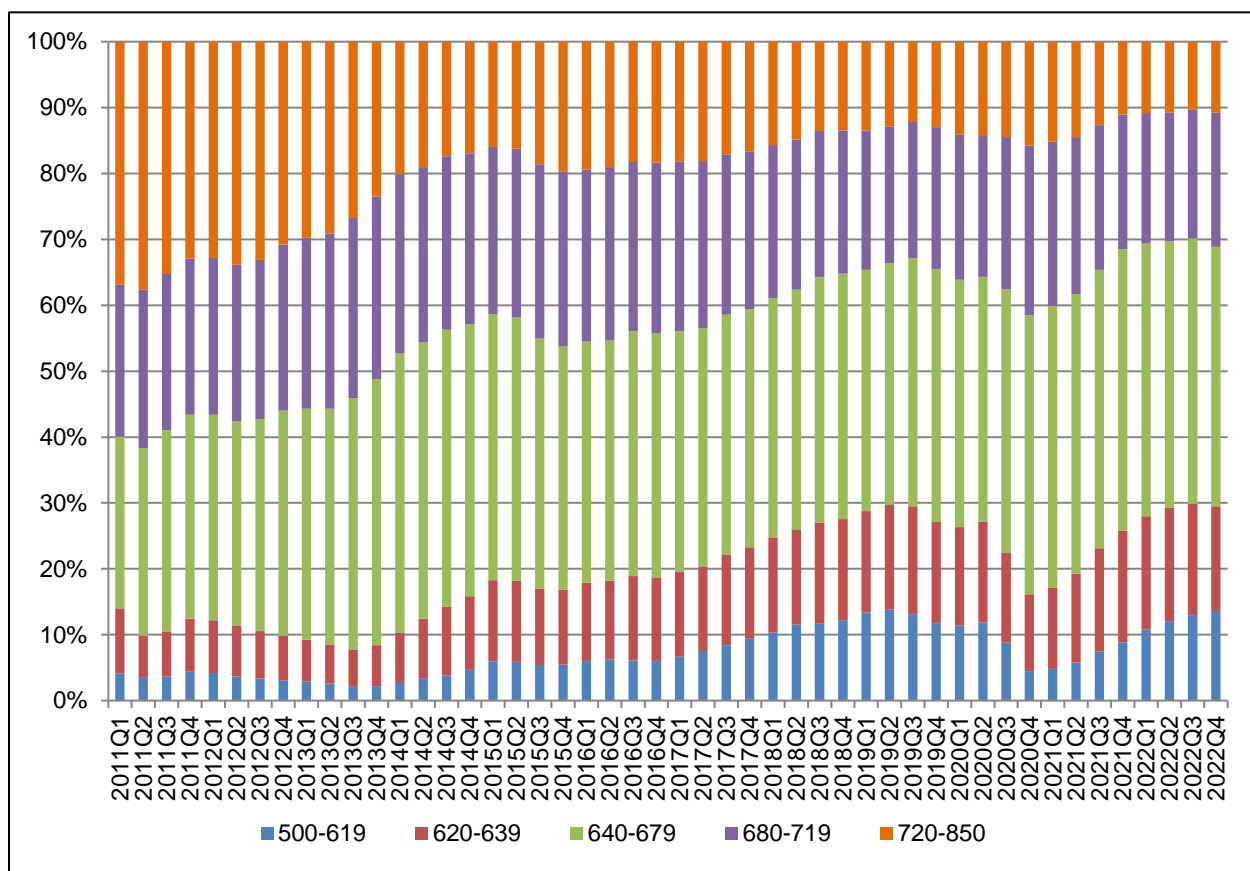
NOTE: Excludes streamline refinance and HECM endorsements.

SOURCE: U.S. Department of HUD/FHA, October 2022

As shown in Figure 3a, the distribution of credit scores on FHA loans has gradually shifted over the past few years. The core of the distribution continues to be in the 640–679 range (39.41 percent). In the fourth quarter of FY 2022, the share of 720+ credit scores increased by 0.41 percentage points from the quarter prior. (Figure 3a, Exhibit A-3).

Figure 3a shows FHA’s credit risk profile shifting from nearly 36 percent of mortgages with 680 and greater credit scores in the third quarter of FY 2021 to about 31 percent currently. At the same time, the share of mortgages with less than 640 credit scores increased to near 30 percent from 23 percent a year ago. This shift likely reflects FHA lenders easing the more stringent underwriting standards that were enforced at the start of the pandemic.

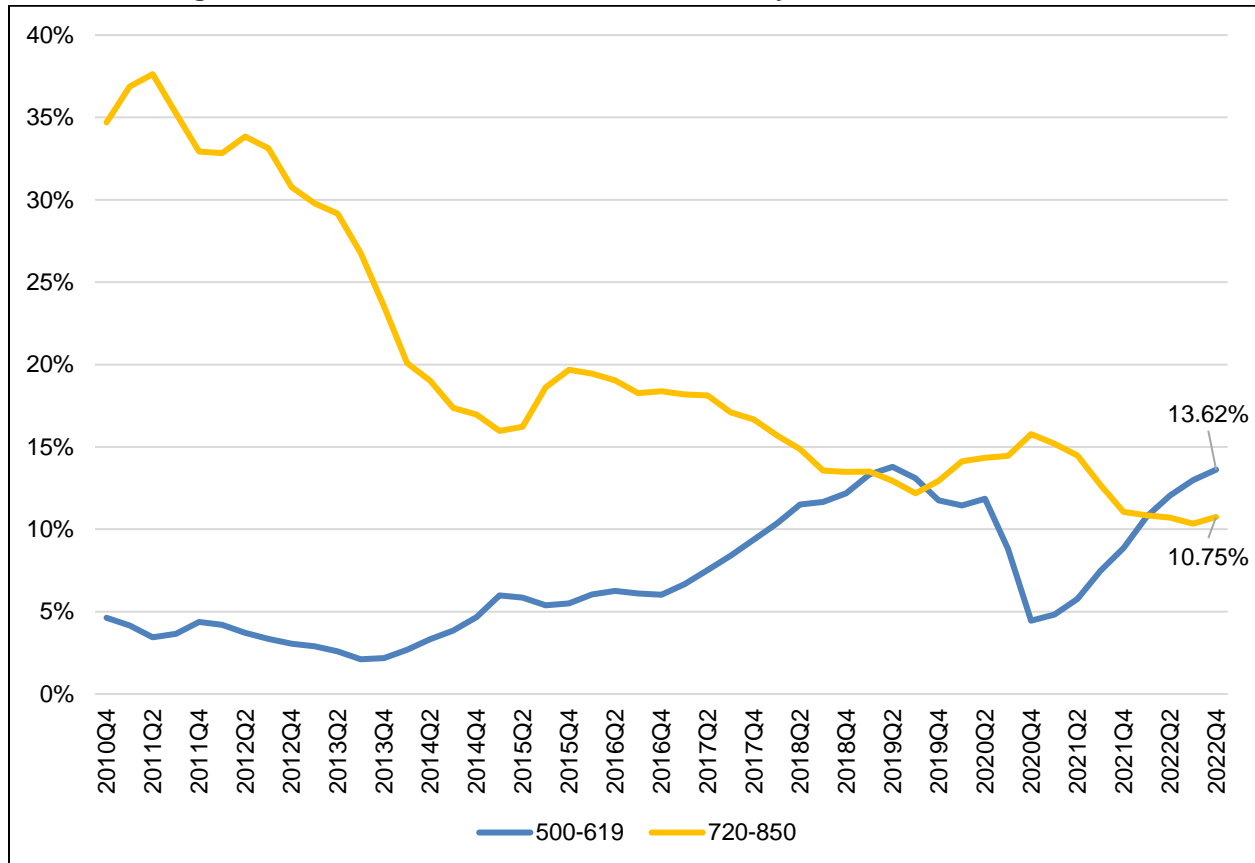
**Figure 3a. Distribution of Credit Scores by Fiscal Year and Quarter**



NOTE: Excludes streamline refinance and HECM activity.  
SOURCE: U.S. Department of HUD/FHA, October 2022.

Figure 3b shows another perspective of the shift in FHA's credit profile with loans endorsed with greater than 720 credit scores increasing to 10.75 percent in the fourth quarter of FY 2022 from 10.34 percent in the prior quarter and loans endorsed with less than 620 credit scores increasing from 12.98 percent in the second quarter of FY 2022 to 13.62 percent this quarter.

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



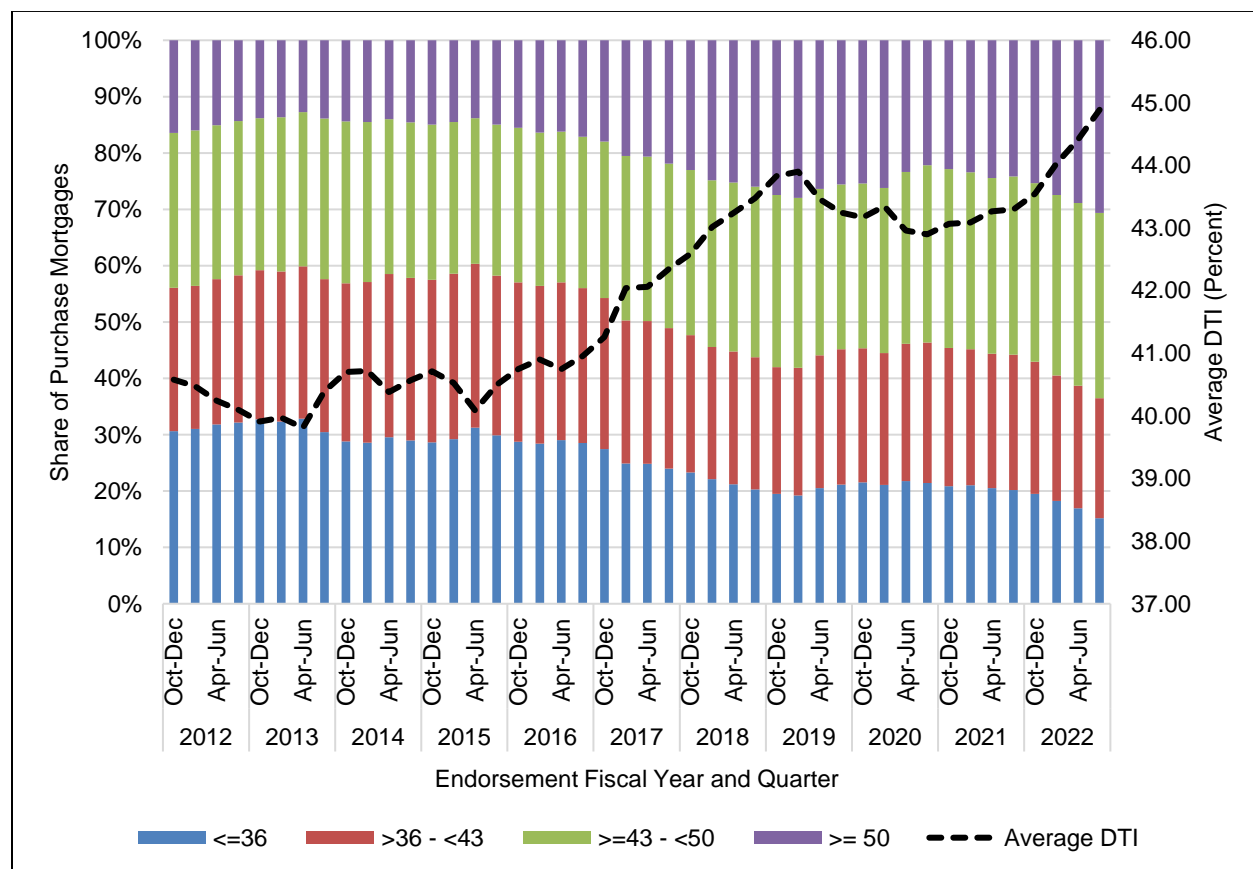
NOTE: Excludes streamline refinance and HECM activity.

SOURCE: U.S. Department of HUD/FHA, October 2022.

## Debt-to-Income (DTI)

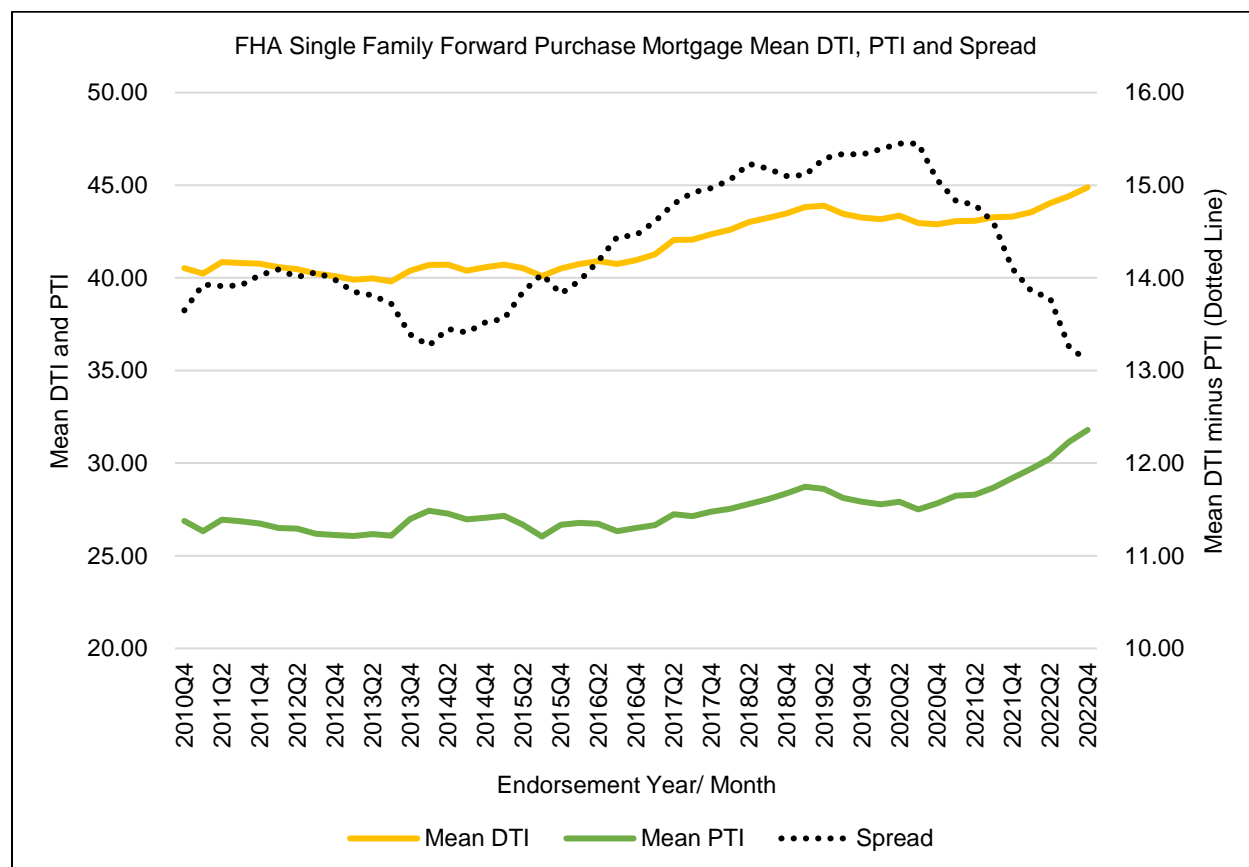
Nearly 31 percent of all FHA-insured forward mortgage purchase transactions in the fourth quarter of FY 2022 are comprised of mortgages with DTI ratios 50 percent or greater. This is up from approximately 29 percent last quarter, and higher by five percentage points prior to the pandemic. The average DTI for all endorsements during this quarter increased to 44.89 percent, compared with 44.42 percent the previous quarter. The distribution changes and historical average DTI are shown in Figure 4a below. In addition, Figure 4b reflects the median DTI, mean payment-to-income ratio (PTI) as well as the spread between those two ratios for endorsed FHA forward mortgages. The decrease in the spread between ratios may indicate that borrowers are spending a larger percentage of their incomes on housing expenses, likely due at least in part to decreasing housing affordability resulting from rising home prices seen in recent years.

**Figure 4a. Debt-to-Income Ratios on New Purchase Endorsements by Fiscal Year and Quarter**



NOTE: FHA Single Family purchase mortgages only.  
SOURCE: U.S. Department of HUD/FHA, October 2022.

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

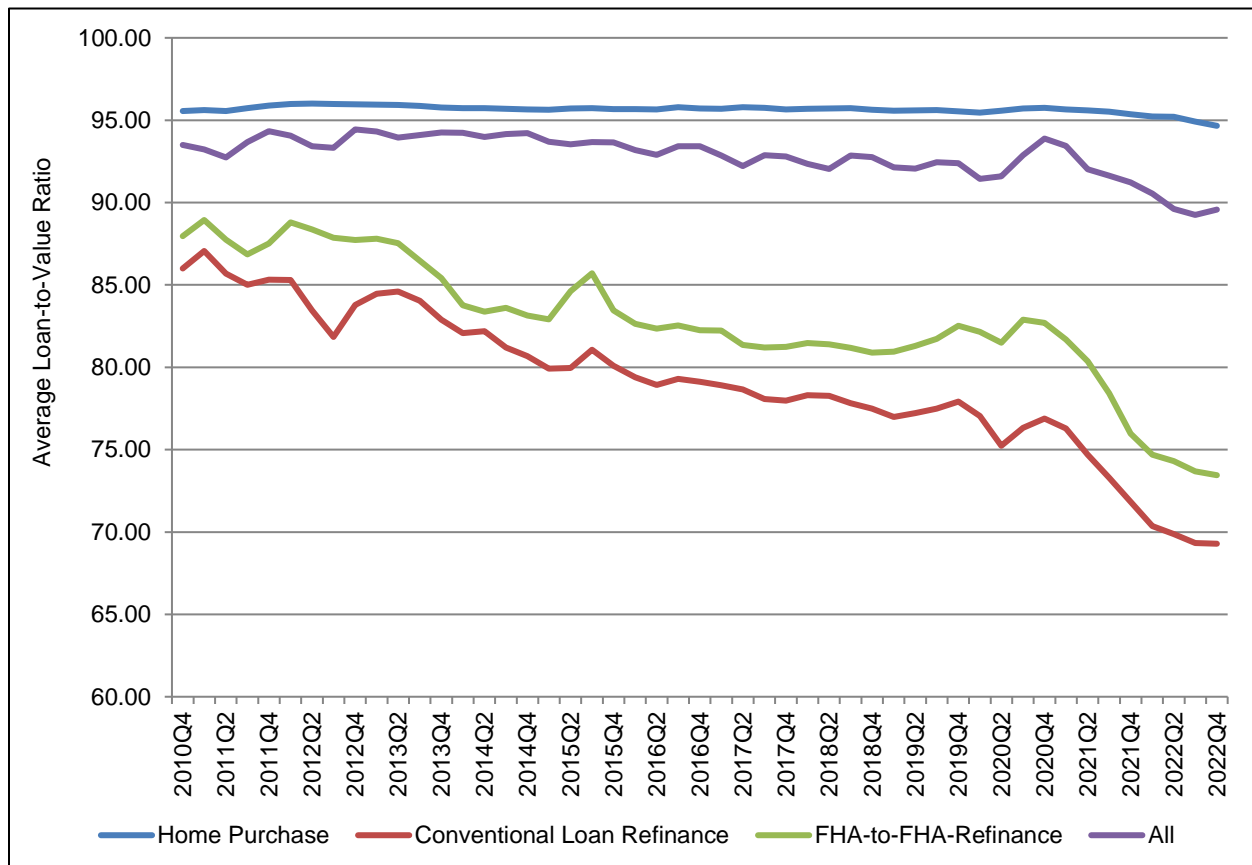


NOTE: FHA Single Family purchase mortgages only.  
SOURCE: U.S. Department of HUD/FHA, October 2022.

## Average Loan-to-Value (LTV)

The average overall LTV ratio for purchase and refinance loans increased from 89.25 percent to 89.57 percent for all FHA mortgages combined. This is due to a decline in the number of refinance endorsements, which usually have lower LTVs. Typically, LTV ratios of refinance mortgages are lower than home purchase mortgages. (Figure 5, Exhibit A-5, Exhibit A-6).<sup>1</sup>

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



NOTE: Excludes streamline refinance and HECM activity.

SOURCE: U.S. Department of HUD/FHA, October 2022.

<sup>1</sup> 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 the fourth quarter of FY 2022 are presented in Figure 6. Prepayment speeds remain higher than predicted, primarily due to refinancing activity which occurred in the lower interest rate environment that existed in the first and second quarters of FY 2022. However, prepayment speeds have slowed considerably due to higher mortgage rates during the latter two quarters of the year. Claims were still below predicted levels due to policy decisions regarding eviction moratoria, forbearance, and loss mitigation options. However, the foreclosure moratorium ended in FY 2021 Q4, and we anticipate the number of actual claims to rise in the coming months. Through the fourth quarter of FY 2022, the number of actual claims was 13,159 or 75.37 percent less than the predicted 53,416. While there were significantly fewer claims than predicted, those loans that resulted in claims had typically been delinquent longer, had more missed payments, and were in worse condition at foreclosure, thus resulting in a 6.74 percentage point deviation between predicted and actual loss rates.

**Figure 6. Termination and Claim Loss Experience Compared to Forecasts<sup>1</sup>**

As of September, 2022	Year to Date Predicted <sup>1</sup>	Year to Date Actual	Deviation (Actual Minus Predicted)	Percentage Deviation (Actual Versus Predicted)
Prepayments (number)	885,436	1,205,356	319,920	36.13
Claims (number) <sup>2</sup>	53,416	13,159	(40,257)	(75.37)
Claims (\$ millions) <sup>3</sup>	4,129	797	(3,332)	(80.70)
Net Loss on Claims (%) <sup>4</sup>	25.49	32.23	6.74	26.43

na = not applicable.

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.

<sup>1</sup> 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.

<sup>2</sup> Projections of prepayment counts, claim counts, and claim dollars are modeled for the FY 2021 and FY 2022 FHA financial statements. All projections shown here use quarterly forecasts and thus reflect cyclical trends throughout the year.

<sup>3</sup> 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.

<sup>4</sup> 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 Fund.

SOURCE: U.S. Department of HUD/FHA, October 2022

## Budget Execution Credit Subsidy Rates

The budget execution subsidy rate for forward mortgages for FY 2022 was -2.69 percent. The subsidy rate for HECM mortgages was -2.54 percent for FY 2022 (Figure 7).

**Figure 7. Budget Execution Credit Subsidy Rates, FY 2022 Q4**

Type of Mortgage	Rate (%) <sup>1</sup>
Forward Mortgages	-2.69
Reverse Mortgages (HECM)	-2.54

<sup>1</sup> 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-2022-BUD/pdf/BUDGET-2022-BUD.pdf>  
SOURCE: U.S. Department of HUD/FHA, October 2022.

## MMI Fund Cash and Investments

As Figure 8 shows, the total cash and investments of the MMI Fund decreased to \$131.60 billion in the fourth quarter of FY 2022, with \$10.00 billion held in the Financing account and \$121.60 billion held in the Capital Reserve account. MMIF 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 2014 – FY 2022**

Fiscal Year	Quarter	Capital Reserve Account <sup>1</sup> (\$ billions)	Financing Account <sup>2</sup> (\$ billions)	Total <sup>3,4</sup> (\$ billions)
2014	Oct–Dec	2.61	44.48	47.10
	Jan–Mar	2.16	43.64	45.80
	Apr–Jun	4.87	40.43	45.31
	Jul–Sep	7.33	38.88	46.21
2015	Oct–Dec	10.43	35.76	46.20
	Jan–Mar	12.87	33.46	46.33
	Apr–Jun	11.97	34.52	46.49
	Jul–Sep	15.99	29.64	45.63
2016	Oct–Dec	18.17	27.34	45.51
	Jan–Mar	20.21	25.33	45.55
	Apr–Jun	34.44	16.55	50.99
	Jul–Sep	37.24	12.59	49.83
2017	Oct–Dec	40.32	9.58	49.90
	Jan–Mar	43.05	7.42	50.46
	Apr–Jun	28.82	22.83	51.65
	Jul–Sep	31.64	18.47	50.11
2018	Oct–Dec	33.49	17.34	50.83
	Jan–Mar	35.14	16.47	51.61
	Apr–Jun	25.35	27.08	52.42
	Jul–Sep	27.22	23.00	50.22
2019	Oct–Dec	28.89	20.63	49.52
	Jan–Mar	30.41	19.47	49.87
	Apr–Jun	48.41	10.43	58.84
	Jul–Sep	51.01	4.28	55.29
2020	Oct–Dec	52.90	3.76	56.66
	Jan–Mar	54.90	17.51	72.41
	Apr–Jun	67.63	6.68	74.31
	Jul–Sep	69.57	10.28	79.86
2021	Oct–Dec	72.65	9.62	82.27
	Jan–Mar	77.03	7.76	84.79
	Apr–Jun	82.41	4.95	87.36
	Jul–Sep	97.79	4.56	102.34
2022	Oct–Dec	97.25	7.59	104.83
	Jan–Mar	98.83	6.00	104.83
	Apr–Jun	119.55	18.46	138.01
	Jul–Sep	121.60	10.00	131.60

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

<sup>1</sup> 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.

<sup>2</sup> This is a series of off-budget cash accounts used to manage insurance operation collections and disbursements.

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

<sup>4</sup> Capital Reserve Account and Financing Account may not always add to total because of rounding.

SOURCE: U.S. Department of HUD/FHA, October 2022.

## Cash Flows from Business Operations

Fourth quarter FY 2022 net cash flow increased to \$1,105 million compared to second quarter FY 2022 net cash flow of \$295 million, due to lower claims expenses. Claims cost for forward endorsements decreased by 11 percent this quarter, down significantly from a large increase during the last quarter (Figure 9). HUD has been proactive in reducing average losses per claim through a more diversified asset disposition strategy, which includes the promotion of third-party sales at foreclosure auctions through its Claims Without Conveyance of Title (CWCOT) program, expanded eligibility for pre-foreclosure (short) and note sales. Overall, claim costs (as measured by loss rates) have decreased from a high of 55 percent in 2014 to less than 36 percent over the last four quarters (see Exhibit A-7).

**Figure 9. Business Operations Cash Flows, FY 2022 Q1 – FY 2022 Q4 (\$ millions)**

	FY 2022 Q1	FY 2022 Q2	FY 2022 Q3	FY 2022 Q4	Past 4 Quarters
<b>Collections:</b>					
Premiums	3,494	3,162	3,297	3,290	13,243
Property Sale Receipts	103	138	148	119	508
Note Sale Proceeds <sup>1</sup>	36	68	32	111	247
Notes Collections <sup>2</sup>	1,271	1,496	1,682	1,309	5,758
Other (includes Settlements & Debt collections)	36	10	12	11	69
<b>Total</b>	<b>4,940</b>	<b>4,874</b>	<b>5,171</b>	<b>4,840</b>	<b>19,825</b>
<b>Disbursements:</b>					
Claims <sup>3</sup>	(2,949)	(4,532)	(4,020)	(2,714)	(14,215)
Property Maintenance	(9)	(13)	(15)	(13)	(50)
Note Disbursements	(28)	(30)	(29)	(29)	(116)
Other	(10)	(4)	(2)	2	(14)
<b>Total</b>	<b>(2,996)</b>	<b>(4,579)</b>	<b>(4,066)</b>	<b>(2,754)</b>	<b>(14,395)</b>
<b>Net Operations Cash Flow</b>	<b>1,944</b>	<b>295</b>	<b>1,105</b>	<b>2,086</b>	<b>5,430</b>

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.

<sup>1</sup> Note Sale Proceeds are the Cash Receipts from Note Sales.

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

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

SOURCE: U.S. Department of HUD/FHA, October 2022.

## Early-Payment Default Rates

The overall Early-Payment Default (EPD) rate remains elevated compared to pre-pandemic levels. FHA saw a large jump in EPD rates at the beginning of the pandemic which continued through mid-2020. The EPD rate, which remains elevated from pre-pandemic norms, has decreased in the fourth quarter of FY 2022 to 1.63 percent compared to the previous quarter at 1.87 percent.

**Figure 10. Early Payment Default Rates**

Fiscal Year	Origination Quarter	Mortgage Type/Purpose		
		Purchase	Refinance	All <sup>1</sup>
2014	Oct-Dec	0.32	0.29	0.31
	Jan-Mar	0.37	0.33	0.36
	Apr-Jun	0.46	0.37	0.44
	Jul-Sep	0.45	0.34	0.43
2015	Oct-Dec	0.36	0.27	0.34
	Jan-Mar	0.42	0.24	0.35
	Apr-Jun	0.43	0.28	0.37
	Jul-Sep	0.42	0.34	0.40
2016	Oct-Dec	0.33	0.31	0.33
	Jan-Mar	0.40	0.26	0.35
	Apr-Jun	0.47	0.35	0.43
	Jul-Sep	0.49	0.38	0.46
2017	Oct-Dec	0.37	0.27	0.34
	Jan-Mar	0.43	0.27	0.38
	Apr-Jun	1.13	0.68	1.02
	Jul-Sep	1.41	1.12	1.34
2018	Oct-Dec	0.53	0.43	0.50
	Jan-Mar	0.60	0.32	0.52
	Apr-Jun	0.80	0.43	0.73
	Jul-Sep	0.96	0.50	0.87
2019	Oct-Dec	0.82	0.47	0.74
	Jan-Mar	0.77	0.40	0.68
	Apr-Jun	0.98	0.46	0.85
	Jul-Sep	0.92	0.46	0.79
2020	Oct-Dec	2.80	2.43	2.66
	Jan-Mar	8.89	9.25	9.04
	Apr-Jun	4.38	5.75	4.91
	Jul-Sep	2.51	2.39	2.47
2021	Oct-Dec	1.91	1.25	1.67
	Jan-Mar	1.46	0.72	1.12
	Apr-Jun	1.78	0.88	1.38
	Jul-Sep	2.31	1.14	1.88
2022	Oct-Dec	2.11	1.01	1.74
	Jan-Mar*	1.96	0.96	1.63

<sup>1</sup> Percent of mortgages originated in each quarter for FHA insurance that experience a three-month delinquency in the first six payment cycle.

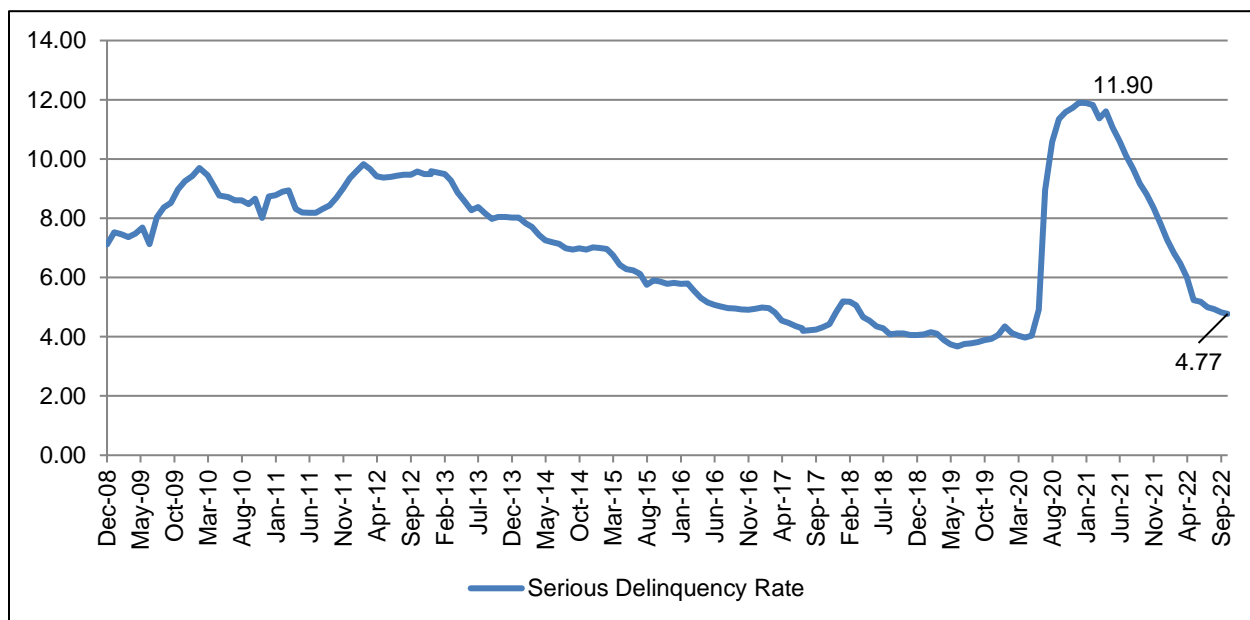
\*Data for January and February only. There is a 7-month lag. Due to late reporting by a large servicer, the EPD rates in repayment FY 2020 Q4 are likely understated.

SOURCE: U.S. Department of HUD/FHA, October 2022.

## Serious Delinquency Rates

The pandemic and its impact to the health and economic condition of citizens has been a major factor for the increase in serious delinquency (SDQ) rates compared to FHA's pre-pandemic rate. 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 FY 2020, as seen in Figure 11 below. However, the SDQ rate improved throughout the year and the portfolio experienced a decline to 4.77 percent at the end of the fourth quarter of FY 2022 from 5.00 percent at the prior quarter, likely attributed to continued success in transitioning seriously delinquent borrowers into loss mitigation plans.

**Figure 11. Serious Delinquency Rates, All Single-Family Forward Endorsements**



SOURCE: U.S. Department of HUD/FHA, October 2022.

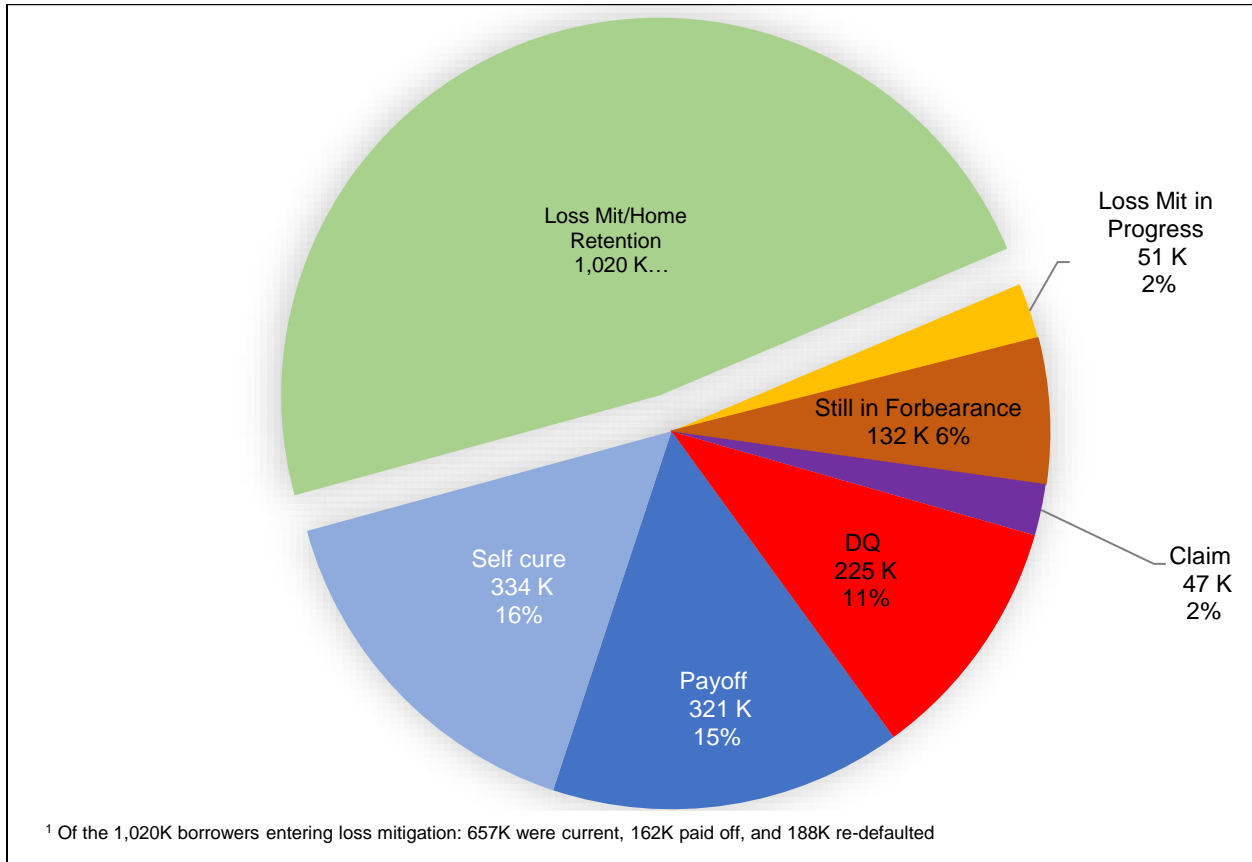
Since the start of the pandemic, FHA has helped more than 2 million borrowers with FHA-insured mortgages through COVID-19 forbearance and COVID-19 loss mitigation home retention options. Of those 2 million borrowers, as of September 30, 2022, over 1.8 million FHA borrowers received a forbearance due to a hardship created or exacerbated by COVID-19. Over 1 million of these borrowers have subsequently transitioned into a loss mitigation plan that would enable the borrower to remain in the home through a home retention option or are in process of doing so. Another 655,000 have cured or paid off their mortgage without need of a loss mitigation plan. Of those that successfully transitioned into a loss mitigation plan, the vast majority remained current or had paid off their loans while approximately 188,000 had become delinquent again.

While 132,000 of the total SDQ population remains in forbearance, another 225,000 families with FHA-insured mortgages who have not sought assistance from their mortgage servicer or have not



completed a loss mitigation home retention option remain behind on their mortgage payments. It is this remaining population in particular that FHA will continue to focus on reaching and assisting through FHA loss-mitigation home retention options.

**Figure 12. Status of Borrowers Who Were Delinquent During the COVID-19 Emergency**



SOURCE: U.S. Department of HUD/FHA, October 2022.

## **APPENDIX**

**Exhibit A-1. Forward & HECM Endorsement Counts**

	Forward Mortgages				Reverse Mortgages (HECM) <sup>1</sup>
	Home Purchase	Conventional Loan Refinance	FHA-to-FHA Refinance	All Forward Loans	
Fiscal Year					
2010	1,109,582	305,530	252,498	1,667,610	79,058
2011	777,426	195,559	224,824	1,197,809	73,112
2012	733,864	129,221	321,655	1,184,740	54,812
2013	702,415	91,500	550,931	1,344,846	59,924
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
2018	776,275	109,455	128,871	1,014,601	48,329
2019	743,278	103,948	143,199	990,425	31,272
2020	817,834	94,555	420,762	1,333,151	41,835
2021	846,243	84,575	502,048	1,432,866	49,195
2022	692,846	90,795	198,561	982,202	64,437
Fiscal Year and Quarter					
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	28,564	59,764	306,418	7,525
2020 Q1	197,376	32,834	95,300	325,510	8,587
2020 Q2	194,069	28,596	112,157	334,822	10,208
2020 Q3	191,925	18,980	102,695	313,600	10,843
2020 Q4	234,464	14,145	110,610	359,219	12,197
2021 Q1	228,155	15,761	113,691	357,607	11,398
2021 Q2	193,522	22,015	142,845	358,382	12,814
2021 Q3	203,986	23,173	138,953	366,112	12,694
2021 Q4	220,580	23,626	106,559	350,765	12,289
2022 Q1	201,819	23,235	81,423	306,477	15,195
2022 Q2	161,697	22,188	57,082	240,967	17,415
2022 Q3	161,080	23,249	34,393	218,722	17,960
2022 Q4	168,250	22,123	25,663	216,036	13,867

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

SOURCE: U.S. Department of HUD/FHA, October 2022.

**Exhibit A-2. Endorsement Volumes**

	Volumes (\$ Millions)				
	Forward Mortgages				Reverse Mortgages (HECM) <sup>1</sup>
	Home Purchase	Conventional Loan Refinance	FHA-to-FHA Refinance	All Forward Loans	
Fiscal Year					
2010	191,658	56,470	49,475	297,603	21,074
2011	134,397	36,963	46,449	217,809	18,215
2012	124,475	23,478	65,352	213,304	13,162
2013	124,934	16,932	98,250	240,116	14,681
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	20,592	101,515	310,321	16,290
2021	209,986	18,274	114,563	342,823	21,350
2022	189,526	20,164	45,817	255,507	32,104
Fiscal Year and Quarter					
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 Q2	44,412	6,117	27,286	77,815	3,870
2020 Q3	44,233	4,234	24,723	73,190	4,228
2020 Q4	55,108	3,108	25,744	83,960	5,057
2021 Q1	55,010	3,421	26,246	84,676	4,715
2021 Q2	47,586	4,730	33,222	85,539	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	4,935	13,179	61,709	8,393
2022 Q3	44,874	5,242	8,355	58,470	9,320
2022 Q4	48,163	4,973	6,311	59,448	7,197

<sup>1</sup> 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. SOURCE: U.S. Department of HUD/FHA, October 2022.

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

Fiscal Year	Quarter	Credit Score Range				
		500–619	620–639	640–679	680–719	720–850
2013	Oct–Dec	2.88	6.35	35.06	25.91	29.78
	Jan–Mar	2.57	5.87	35.87	26.54	29.16
	Apr–Jun	2.10	5.65	38.17	27.30	26.78
	Jul–Sep	2.17	6.23	40.40	27.68	23.53
2014	Oct–Dec	2.67	7.66	42.35	27.22	20.10
	Jan–Mar	3.32	9.10	41.95	26.60	19.03
	Apr–Jun	3.85	10.42	42.03	26.32	17.38
	Jul–Sep	4.66	11.15	41.30	25.92	16.97
2015	Oct–Dec	5.99	12.29	40.37	25.37	15.97
	Jan–Mar	5.86	12.34	39.95	25.62	16.23
	Apr–Jun	5.38	11.56	38.00	26.44	18.62
	Jul–Sep	5.50	11.38	36.84	26.60	19.68
2016	Oct–Dec	6.04	11.83	36.62	26.06	19.44
	Jan–Mar	6.25	11.97	36.41	26.33	19.04
	Apr–Jun	6.10	12.78	37.21	25.64	18.27
	Jul–Sep	6.02	12.69	37.00	25.91	18.38
2017	Oct–Dec	6.66	12.86	36.55	25.74	18.18
	Jan–Mar	7.52	12.84	36.18	25.34	18.12
	Apr–Jun	8.40	13.72	36.44	24.35	17.10
	Jul–Sep	9.37	13.88	36.15	23.92	16.68
2018	Oct–Dec	10.36	14.41	36.34	23.20	15.70
	Jan–Mar	11.50	14.49	36.38	22.75	14.87
	Apr–Jun	11.66	15.29	37.36	22.12	13.57
	Jul–Sep	12.18	15.36	37.24	21.73	13.49
2019	Oct–Dec	13.34	15.41	36.62	21.13	13.51
	Jan–Mar	13.79	15.87	36.74	20.67	12.94
	Apr–Jun	13.10	16.38	37.69	20.66	12.18
	Jul–Sep	11.75	15.34	38.38	21.57	12.95
2020	Oct–Dec	11.44	14.89	37.52	22.03	14.12
	Jan–Mar	11.85	15.30	37.16	21.35	14.35
	Apr–Jun	8.81	13.57	40.03	23.13	14.46
	Jul–Sep	4.46	11.69	42.35	25.72	15.78
2021	Oct–Dec	4.83	12.28	42.79	24.91	15.19
	Jan–Mar	5.77	13.47	42.44	23.84	14.48
	Apr–Jun	7.49	15.64	42.26	21.93	12.68
	Jul–Sep	8.86	16.88	42.72	20.47	11.06
2022	Oct–Dec	10.78	17.19	41.36	19.82	10.84
	Jan–Mar	12.05	17.17	40.46	19.60	10.71
	Apr–Jun	12.98	16.91	40.25	19.53	10.34
	Jul–Sep	13.62	15.87	39.41	20.36	10.75

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.

SOURCE: U.S. Department of HUD/FHA, October 2022.

**Exhibit A-4. Average Credit Scores on New Endorsements**

Fiscal Year	Quarter	Mortgage Purpose			
		Home Purchase	Conventional Loan Refinance	FHA-to-FHA Refinance	All
2013	Oct–Dec	694	696	703	695
	Jan–Mar	694	697	703	695
	Apr–Jun	692	694	699	693
	Jul–Sep	689	685	690	689
2014	Oct–Dec	685	677	679	685
	Jan–Mar	684	674	675	682
	Apr–Jun	681	672	673	680
	Jul–Sep	680	671	671	679
2015	Oct–Dec	677	669	669	676
	Jan–Mar	678	673	675	677
	Apr–Jun	681	678	679	680
	Jul–Sep	682	677	674	681
2016	Oct–Dec	682	676	673	680
	Jan–Mar	681	676	672	680
	Apr–Jun	679	677	673	679
	Jul–Sep	680	677	672	679
2017	Oct–Dec	679	677	673	678
	Jan–Mar	679	675	669	678
	Apr–Jun	676	672	666	675
	Jul–Sep	676	669	664	674
2018	Oct–Dec	674	668	663	672
	Jan–Mar	672	666	661	670
	Apr–Jun	669	664	660	668
	Jul–Sep	669	663	658	668
2019	Oct–Dec	668	662	657	667
	Jan–Mar	667	660	656	665
	Apr–Jun	666	663	659	665
	Jul–Sep	668	667	663	667
2020	Oct–Dec	670	667	666	669
	Jan–Mar	671	661	662	669
	Apr–Jun	673	664	667	672
	Jul–Sep	677	674	674	677
2021	Oct–Dec	676	673	672	676
	Jan–Mar	675	671	670	674
	Apr–Jun	671	665	663	670
	Jul–Sep	669	659	656	666
2022	Oct–Dec	668	654	651	665
	Jan–Mar	668	652	649	664
	Apr–Jun	667	650	646	663
	Jul–Sep	669	646	642	663

NOTE: 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.

SOURCE: U.S. Department of HUD/FHA, October 2022.



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

Loan-to-Value (LTV) Ratio <sup>1</sup> Distribution on New Endorsements By Fiscal Year and Quarter					
Fiscal Year	Quarter	LTV Categories (Shares in each row add up to 100%)			
		Up to 80	81-90	91-95	96-98
2013	Oct-Dec	5.18	9.98	10.14	74.70
	Jan-Mar	5.98	11.52	10.78	71.73
	Apr-Jun	5.64	10.26	9.75	74.35
	Jul-Sep	5.26	9.71	8.94	76.09
2014	Oct-Dec	5.59	9.94	9.00	75.47
	Jan-Mar	6.09	10.91	9.41	73.59
	Apr-Jun	5.63	9.61	9.04	75.72
	Jul-Sep	5.46	9.46	9.14	75.95
2015	Oct-Dec	6.71	10.79	8.93	73.57
	Jan-Mar	7.10	11.65	8.97	72.28
	Apr-Jun	6.14	11.58	8.76	73.52
	Jul-Sep	6.44	11.13	8.35	74.08
2016	Oct-Dec	7.55	12.57	8.26	71.62
	Jan-Mar	8.13	13.31	8.26	70.30
	Apr-Jun	6.84	11.76	7.72	73.69
	Jul-Sep	6.86	12.02	7.80	73.32
2017	Oct-Dec	8.06	13.98	7.73	70.23
	Jan-Mar	9.67	16.02	7.66	66.64
	Apr-Jun	8.03	13.82	7.57	70.58
	Jul-Sep	7.99	14.45	7.50	70.06
2018	Oct-Dec	8.84	16.41	7.42	67.34
	Jan-Mar	9.57	17.64	7.04	65.75
	Apr-Jun	7.88	14.44	6.88	70.81
	Jul-Sep	8.00	14.88	7.13	70.00
2019	Oct-Dec	9.31	16.79	7.06	66.83
	Jan-Mar	9.30	17.60	6.84	66.26
	Apr-Jun	8.34	16.28	6.80	68.59
	Jul-Sep	8.43	16.81	7.10	67.67
2020	Oct-Dec	13.88	14.76	7.54	63.82
	Jan-Mar	17.57	8.13	8.06	66.24
	Apr-Jun	12.62	6.87	7.90	72.61
	Jul-Sep	8.57	6.02	7.51	77.91
2021	Oct-Dec	10.16	6.60	7.85	75.39
	Jan-Mar	15.11	7.64	7.85	69.40
	Apr-Jun	16.38	7.37	7.35	68.90
	Jul-Sep	18.51	6.65	7.17	67.66
2022	Oct-Dec	21.13	6.22	6.97	65.68
	Jan-Mar	25.10	5.91	6.75	62.24
	Apr-Jun	26.30	5.87	6.94	60.89
	Jul-Sep	24.81	6.37	8.03	60.80

NOTE: Shares are based on loan counts. Excludes streamline refinances.

<sup>1</sup>In accordance with statutory requirements for determining eligibility of loans for FHA insurance, HUD measures loan-to-values (LTV) ratio without including any financed insurance premium in the loan balance.

SOURCE: U.S. Department of HUD/FHA, October 2022.

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

Fiscal Year	Quarter	Mortgage Purpose			All <sup>1</sup>
		Home Purchase	Conventional Mortgage Refinance	FHA-to-FHA Refinance <sup>1</sup>	
2013	Oct–Dec	95.95	84.46	87.80	94.32
	Jan–Mar	95.93	84.60	87.53	93.95
	Apr–Jun	95.87	84.03	86.47	94.09
	Jul–Sep	95.77	82.89	85.41	94.26
2014	Oct–Dec	95.74	82.08	83.77	94.24
	Jan–Mar	95.73	82.19	83.37	93.98
	Apr–Jun	95.70	81.21	83.60	94.15
	Jul–Sep	95.66	80.68	83.15	94.21
2015	Oct–Dec	95.63	79.91	82.91	93.70
	Jan–Mar	95.72	79.96	84.61	93.53
	Apr–Jun	95.73	81.06	85.71	93.68
	Jul–Sep	95.67	80.10	83.45	93.66
2016	Oct–Dec	95.68	79.39	82.64	93.18
	Jan–Mar	95.65	78.93	82.34	92.90
	Apr–Jun	95.79	79.29	82.54	93.42
	Jul–Sep	95.72	79.12	82.25	93.42
2017	Oct–Dec	95.70	78.91	82.23	92.86
	Jan–Mar	95.78	78.65	81.35	92.21
	Apr–Jun	95.75	78.07	81.21	92.87
	Jul–Sep	95.65	77.98	81.24	92.80
2018	Oct–Dec	95.70	78.31	81.48	92.36
	Jan–Mar	95.72	78.26	81.40	92.04
	Apr–Jun	95.73	77.82	81.19	92.86
	Jul–Sep	95.64	77.50	80.89	92.76
2019	Oct–Dec	95.57	76.98	80.94	92.13
	Jan–Mar	95.60	77.21	81.30	92.05
	Apr–Jun	95.61	77.50	81.72	92.44
	Jul–Sep	95.54	77.92	82.52	92.39
2020	Oct–Dec	95.46	77.05	82.16	91.44
	Jan–Mar	95.57	75.24	81.49	91.60
	Apr–Jun	95.71	76.33	82.90	92.87
	Jul–Sep	95.76	76.89	82.69	93.89
2021	Oct–Dec	95.66	76.29	81.69	93.43
	Jan–Mar	95.60	74.69	80.36	92.02
	Apr–Jun	95.52	73.29	78.42	91.64
	Jul–Sep	95.36	71.84	75.98	91.22
2022	Oct–Dec	95.23	70.37	74.69	90.55
	Jan–Mar	95.20	69.88	74.30	89.62
	Apr–Jun	94.92	69.33	73.68	89.25
	Jul–Sep	94.66	69.29	73.45	89.57

NOTE: In accordance with statutory requirements for determining eligibility of loans for FHA insurance, HUD measures loan-to-value (LTV) without including any mortgage insurance premium financed in the loan balance.

<sup>1</sup> These include only fully underwritten loans and exclude streamline refinancing.

SOURCE: U.S. Department of HUD/FHA, October 2022

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

Fiscal Year	Quarter	Loss Rates (% Unpaid Principal Balance)			Disposition Counts			REO Alternatives Share of Dispositions
		REO Loss Rate	REO Alternatives Loss Rate	Overall Loss Rate	REO Dispositions	REO Alternatives Dispositions <sup>2</sup>	Total Dispositions	
2014	Oct-Dec	61.34	47.13	53.88	24,749	21,006	45,755	45.91
	Jan-Mar	62.96	50.33	54.79	20,424	26,245	46,669	56.24
	Apr-Jun	59.16	44.57	50.47	16,317	18,438	34,755	53.05
	Jul-Sep	57.63	46.60	49.57	13,163	26,582	39,745	66.88
2015	Oct-Dec	59.63	44.25	49.58	13,269	20,026	33,295	60.15
	Jan-Mar	61.37	43.25	52.64	14,199	10,372	24,571	42.21
	Apr-June	59.72	41.00	51.68	16,185	10,010	26,195	38.21
	Jul-Sep	60.62	46.40	52.85	17,105	15,587	32,692	47.68
2016	Oct-Dec	62.92	47.41	54.68	16,704	15,121	31,825	47.51
	Jan-Mar	63.35	45.97	54.31	15,134	13,323	28,457	46.82
	Apr-Jun	60.35	47.15	53.09	13,421	13,213	26,634	49.61
	Jul-Sep	59.97	50.29	54.02	13,031	16,428	29,459	55.77
2017	Oct-Dec	60.99	49.87	53.96	13,085	18,311	31,396	58.32
	Jan-Mar	62.21	40.15	51.10	12,024	10,877	22,901	47.50
	Apr-Jun	59.41	40.77	48.41	10,923	14,168	25,091	56.47
	Jul-Sep	59.13	40.24	46.33	8,125	15,766	23,891	65.99
2018	Oct-Dec	58.71	38.63	45.00	7,072	14,405	21,477	67.07
	Jan-Mar	59.25	41.93	47.63	7,332	13,313	20,645	64.49
	Apr-Jun	57.28	40.44	45.33	6,561	14,289	20,850	68.53
	Jul-Sep	56.47	38.37	43.39	5,351	12,442	17,793	69.93
2019	Oct-Dec	57.22	41.61	45.43	4,691	12,648	17,339	72.95
	Jan-Mar	57.41	37.34	42.34	4,391	12,040	16,431	73.28
	Apr-Jun	54.45	34.25	39.08	3,908	10,886	14,794	73.58
	Jul-Sep	52.56	31.62	36.69	3,579	9,765	13,344	73.18
2020	Oct-Dec	54.05	32.76	38.34	3,814	9,128	12,942	70.53
	Jan-Mar	55.33	31.06	38.45	4,493	8,547	13,040	65.54
	Apr-Jun	52.77	31.71	39.90	4,595	6,178	10,773	57.35
	Jul-Sep	50.51	30.95	39.25	3,814	4,472	8,286	53.97
2021	Oct-Dec	49.37	33.48	38.99	2,366	4,092	6,458	63.36
	Jan-Mar	48.71	36.14	39.63	1,725	4,165	5,890	70.71
	Apr-Jun	41.88	35.28	36.82	1,199	3,709	4,908	75.57
	Jul-Sep	37.11	34.15	34.50	402	3,122	3,524	88.59
2022	Oct-Dec	36.59	35.11	35.42	591	2,669	3,260	81.87
	Jan-Mar	29.63	33.13	32.30	802	3,074	3,876	79.31
	Apr-Jun	25.01	32.01	30.68	784	4,305	5,089	84.59
	Jul-Sep <sup>1</sup>	25.30	30.93	29.99	631	4,250	4,881	87.07

NOTE: Real Estate Owned (REO) refers to properties that HUD has assumed ownership of through the conveyance of title.

<sup>1</sup> July and August 2022 only

<sup>2</sup> 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 sale (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 to the property to HUD. Note Sale refers to the sale of defaulted mortgage notes. Note Sales are conducted through the Single Family Asset Sales program.

SOURCE: U.S. Department of HUD/FHA, October 2022.

**Exhibit A-8. Forward Share of Endorsements by Loan type**

Fiscal Year	Quarter	Conventional Cash-Out	FHA Cash-Out	Conventional No Cash-Out	FHA No Cash-Out	Streamline	Purchase	Total
2013	Oct-Dec	2.31	0.66	4.14	2.22	40.32	50.37	353,126
	Jan-Mar	2.48	0.73	4.78	2.54	44.53	44.94	350,354
	Apr-Jun	2.36	0.79	4.42	2.17	39.39	50.87	356,381
	Jul-Sep	2.63	0.91	4.08	1.52	25.65	65.21	284,985
2014	Oct-Dec	3.08	1.27	3.93	1.13	17.22	73.37	208,486
	Jan-Mar	3.44	1.66	4.74	1.26	16.05	72.85	164,491
	Apr-Jun	3.10	1.51	3.91	1.15	13.88	76.44	193,633
	Jul-Sep	3.01	1.66	3.23	1.07	11.76	79.27	219,742
2015	Oct-Dec	3.87	2.22	3.98	1.47	11.67	76.79	201,598
	Jan-Mar	3.75	2.16	3.96	2.42	21.49	66.22	200,138
	Apr-Jun	3.03	2.02	3.39	3.06	29.09	59.41	334,655
	Jul-Sep	3.69	2.30	3.49	2.01	18.15	70.36	379,839
2016	Oct-Dec	4.93	2.83	4.08	1.91	16.33	69.91	301,185
	Jan-Mar	5.42	3.07	4.00	2.04	18.05	67.43	277,425
	Apr-Jun	4.83	2.80	3.38	1.97	16.01	71.00	317,094
	Jul-Sep	4.75	2.92	3.01	1.73	16.72	70.86	362,344
2017	Oct-Dec	5.64	3.64	3.29	2.05	20.09	65.29	337,517
	Jan-Mar	7.74	4.85	4.15	1.80	15.91	65.53	298,292
	Apr-Jun	6.94	4.54	3.23	1.20	8.67	75.43	305,533
	Jul-Sep	7.16	5.27	2.73	1.15	6.42	77.28	305,092
2018	Oct-Dec	8.30	6.60	2.94	1.29	7.81	73.05	267,638
	Jan-Mar	9.21	7.32	3.03	1.33	8.33	70.77	235,454
	Apr-Jun	7.69	6.07	2.34	0.79	2.76	80.35	252,329
	Jul-Sep	7.80	6.61	1.93	0.65	1.45	81.56	259,180
2019	Oct-Dec	9.42	7.84	2.03	0.78	1.41	78.52	228,717
	Jan-Mar	9.71	7.99	2.05	0.88	3.33	76.04	201,956
	Apr-Jun	8.27	7.19	1.77	1.23	5.74	75.80	253,334
	Jul-Sep	7.76	7.08	1.56	2.01	10.42	71.17	306,418
2020	Oct-Dec	8.01	7.01	2.08	3.58	18.69	60.64	325,510
	Jan-Mar	6.15	4.80	2.39	4.09	24.60	57.96	334,822
	Apr-Jun	3.96	3.19	2.10	4.21	25.35	61.20	313,600
	Jul-Sep	2.45	2.03	1.48	2.91	25.85	65.27	359,219
2021	Oct-Dec	2.82	2.51	1.58	3.14	26.14	63.80	357,607
	Jan-Mar	3.97	3.42	2.17	4.06	32.38	54.00	358,382
	Apr-Jun	4.22	4.11	2.11	3.44	30.41	55.72	366,112
	Jul-Sep	4.92	5.83	1.82	2.67	21.87	62.89	350,765
2022	Oct-Dec	5.96	7.68	1.63	2.11	16.78	65.85	306,477
	Jan-Mar	7.58	10.69	1.63	1.86	11.14	67.10	240,967
	Apr-Jun	9.26	12.32	1.37	0.91	2.49	73.65	218,722
	Jul-Sep	9.35	11.40	0.89	0.35	0.13	77.88	216,036

SOURCE: U.S. Department of HUD/FHA, October 2022.

**Exhibit A-9. Debt-to-Income (DTI) Ratio**

Endorsement Fiscal Year	Quarter	Share of FHA Endorsed Purchase Mortgages				
		<=36	>36 - <43	>=43 - <50	>= 50	Average DTI
2013	Oct-Dec	32.75	26.46	26.96	13.83	39.91
	Jan-Mar	32.36	26.62	27.34	13.68	39.97
	Apr-Jun	32.83	27.05	27.35	12.77	39.81
	Jul-Sep	30.46	27.14	28.52	13.88	40.39
2014	Oct-Dec	28.80	28.06	28.72	14.42	40.70
	Jan-Mar	28.59	28.53	28.39	14.49	40.72
	Apr-Jun	29.57	28.96	27.48	13.99	40.38
	Jul-Sep	28.97	28.86	27.61	14.56	40.57
2015	Oct-Dec	28.63	28.87	27.53	14.96	40.71
	Jan-Mar	29.22	29.34	26.91	14.53	40.53
	Apr-Jun	31.28	29.05	25.86	13.81	40.09
	Jul-Sep	29.90	28.35	26.79	14.95	40.50
2016	Oct-Dec	28.74	28.31	27.41	15.54	40.75
	Jan-Mar	28.44	27.96	27.25	16.36	40.90
	Apr-Jun	29.05	27.97	26.80	16.18	40.75
	Jul-Sep	28.55	27.50	26.86	17.10	40.96
2017	Oct-Dec	27.45	26.80	27.75	18.00	41.26
	Jan-Mar	24.87	25.42	29.16	20.55	42.04
	Apr-Jun	24.85	25.32	29.17	20.66	42.06
	Jul-Sep	23.99	24.90	29.20	21.91	42.35
2018	Oct-Dec	23.32	24.38	29.26	23.05	42.59
	Jan-Mar	22.12	23.44	29.58	24.87	43.02
	Apr-Jun	21.21	23.55	29.99	25.25	43.24
	Jul-Sep	20.30	23.43	30.31	25.95	43.48
2019	Oct-Dec	19.47	22.52	30.56	27.45	43.83
	Jan-Mar	19.23	22.67	30.13	27.98	43.90
	Apr-Jun	20.50	23.60	29.54	26.35	43.46
	Jul-Sep	21.17	23.98	29.25	25.60	43.25
2020	Oct-Dec	21.57	23.79	29.24	25.40	43.17
	Jan-Mar	21.11	23.35	29.33	26.21	43.35
	Apr-Jun	21.79	24.34	30.48	23.39	42.96
	Jul-Sep	21.43	24.93	31.46	22.17	42.90
2021	Oct-Dec	20.87	24.49	31.76	22.87	43.07
	Jan-Mar	21.04	24.12	31.40	23.44	43.09
	Apr-Jun	20.54	23.82	31.19	24.45	43.27
	Jul-Sep	20.20	24.00	31.65	24.15	43.30
2022	Oct-Dec	19.48	23.45	31.68	25.38	43.55
	Jan-Mar	18.26	22.23	32.05	27.46	44.03
	Apr-Jun	16.93	21.73	32.47	28.87	44.42
	Jul-Sep	15.20	21.29	32.90	30.61	44.89

SOURCE: US Department of HUD/FHA, October 2022.

**Exhibit A-10. Down Payment Assistance Program (DPA)**

Source of Down Payment Assistance (DPA)									
Endorsement Fiscal Year	Quarter	Government		Relative		Non-Government/ Non-Relative		No DPA	
		Share	SDQ	Share	SDQ	Share	SDQ	Share	SDQ
2013	Oct-Dec	7.72	9.41	22.51	6.55	0.36	7.10	69.41	4.84
	Jan-Mar	8.50	8.70	22.46	6.32	0.45	8.83	68.60	4.90
	Apr-Jun	8.10	8.62	21.01	6.64	0.42	6.40	70.48	5.12
	Jul-Sept	4.34	9.49	23.87	6.31	0.39	7.48	71.41	5.19
2014	Oct-Dec	7.19	9.24	26.24	6.56	0.40	6.39	66.17	5.19
	Jan-Mar	8.60	9.07	26.47	6.59	0.51	6.41	64.43	5.18
	Apr-Jun	8.77	8.65	23.96	6.63	0.70	5.64	66.58	5.33
	Jul-Sept	8.90	8.58	25.73	6.86	0.96	7.22	64.41	5.31
2015	Oct-Dec	9.61	8.56	27.51	7.26	1.13	6.13	61.75	5.41
	Jan-Mar	10.34	8.45	27.09	7.28	1.33	5.22	61.23	5.65
	Apr-Jun	9.62	8.59	24.34	7.07	1.60	5.93	64.44	5.59
	Jul-Sept	10.00	7.65	25.57	6.90	1.82	5.83	62.61	5.12
2016	Oct-Dec	10.94	7.67	27.26	6.84	2.15	5.56	59.65	5.09
	Jan-Mar	10.58	7.34	26.62	6.93	2.18	5.73	60.61	5.06
	Apr-Jun	9.86	7.41	25.10	7.14	1.63	6.63	63.42	5.61
	Jul-Sept	9.85	7.65	26.43	7.38	1.58	6.91	62.14	5.27
2017	Oct-Dec	10.34	7.37	26.86	7.14	1.77	6.92	61.03	5.25
	Jan-Mar	10.52	7.47	26.88	6.99	2.01	6.55	60.59	5.05
	Apr-Jun	10.38	7.79	24.76	7.12	1.64	7.24	63.22	5.23
	Jul-Sept	10.96	8.12	26.06	7.29	1.44	7.50	61.54	5.40
2018	Oct-Dec	11.77	8.57	26.45	7.20	1.26	7.46	60.52	5.51
	Jan-Mar	11.34	8.80	26.79	7.57	1.20	7.47	60.67	5.59
	Apr-Jun	10.77	9.14	25.29	7.59	1.25	8.16	62.69	5.91
	Jul-Sept	11.71	9.02	26.23	7.45	1.24	8.05	60.83	5.44
2019	Oct-Dec	12.25	9.23	26.74	6.95	1.08	7.49	59.94	5.17
	Jan-Mar	13.18	8.76	26.27	6.52	1.04	6.90	59.51	4.94
	Apr-Jun	13.05	8.64	24.03	6.57	1.04	7.04	61.88	5.03
	Jul-Sept	13.16	7.90	24.92	6.17	0.94	7.20	60.98	4.48
2020	Oct-Dec	14.47	6.84	25.15	5.92	0.88	5.98	59.50	4.42
	Jan-Mar	15.49	6.60	24.42	5.43	0.93	5.48	59.16	4.23
	Apr-Jun	15.96	5.87	21.90	5.08	0.92	5.69	61.23	3.95
	Jul-Sept	15.77	5.54	22.43	5.19	0.99	4.18	60.81	3.80
2021	Oct-Dec	16.12	5.28	23.73	5.50	0.88	4.98	59.28	3.96
	Jan-Mar	15.39	5.11	23.58	5.78	0.91	4.77	60.12	4.06
	Apr-Jun	14.31	5.00	22.01	5.91	1.07	5.98	62.62	4.32
	Jul-Sept	14.50	5.03	23.80	6.22	1.03	6.67	60.67	4.21
2022	Oct-Dec	15.43	4.23	23.95	5.20	1.14	5.90	59.48	3.34
	Jan-Mar	15.14	2.58	24.84	3.24	1.16	4.49	58.86	1.99
	Apr-Jun	12.07	0.92	26.40	0.97	1.09	1.08	60.44	0.63
	Jul-Sept	11.57	0.01	26.56	0.01	1.10	0.00	60.77	0.01

SOURCE: US Department of HUD/FHA, October 2022.

**Exhibit A-11. Reverse Mortgage Program (HECM)**Reverse Mortgage Loans (HECM) Claims<sup>1</sup> by Type

Fiscal Year	Quarter	Claim Type 1		Claim Type 2		Supplemental		Total <sup>2</sup>	
		Number	Total Claims Paid \$	Number	Total Claims Paid \$	Number	Total Claims Paid \$	Number	Total Claims Paid \$
2015	Oct-Dec	12,516	977,456,146	1,701	392,204,512	1,125	1,688,735	15,342	1,371,349,394
	Jan-Mar	7,142	574,998,013	1,880	453,417,423	4,259	8,666,375	13,281	1,037,081,812
	Apr-Jun	8,386	669,193,871	3,919	996,343,546	2,982	8,950,540	15,287	1,674,487,957
	July-Sep	6,222	517,499,053	3,810	969,598,335	3,953	14,192,066	13,985	1,501,289,453
2015 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	Oct-Dec	5,366	447,345,205	3,923	986,113,498	8,886	23,146,161	18,175	1,456,604,864
	Jan-Mar	5,854	455,189,374	3,874	972,917,814	11,526	24,824,881	21,254	1,452,932,070
	Apr-Jun	6,602	515,946,786	4,810	1,196,548,865	12,081	32,022,466	23,493	1,744,518,117
	July-Sep	6,021	467,520,045	5,941	1,450,894,509	18,517	76,463,822	30,479	1,994,878,376
2016 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	Oct-Dec	6,144	477,712,116	6,204	1,504,458,822	7,823	29,702,312	20,171	2,011,873,250
	Jan-Mar	7,203	581,198,659	5,783	1,401,927,594	6,623	18,908,074	19,609	2,002,034,327
	Apr-Jun	6,006	456,986,742	4,640	1,096,454,023	6,348	20,055,437	16,994	1,573,496,202
	July-Sep	4,739	361,379,418	5,653	1,309,239,889	5,811	14,970,627	16,203	1,685,589,934
2017 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	Oct-Dec	4,918	364,732,308	6,375	1,466,323,543	5,644	15,300,518	16,937	1,846,356,370
	Jan-Mar	4,702	365,552,817	5,424	1,241,859,664	5,496	18,069,817	15,622	1,625,482,298
	Apr-Jun	3,918	299,989,422	7,985	1,864,583,912	4,464	24,670,362	16,367	2,189,243,697
	July-Sep	4,076	312,957,811	8,110	1,866,905,224	3,910	21,055,093	16,096	2,200,918,128
2018 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	Oct-Dec	3,598	276,743,900	15,734	3,584,137,917	4,389	20,085,976	23,721	3,880,967,793
	Jan-Mar	3,864	298,948,014	10,105	2,339,723,175	4,268	18,247,891	18,237	2,656,919,079
	Apr-Jun	4,246	328,961,241	10,529	2,413,434,227	3,555	15,980,017	18,330	2,758,375,485
	July-Sep	4,222	344,916,187	10,605	2,475,623,023	3,681	14,470,082	18,508	2,835,009,291
2019 Total		15,930	1,249,569,341	46,973	10,812,918,342	15,893	68,783,965	78,796	12,131,271,647
2020	Oct-Dec	3,674	295,971,269	9,380	2,198,948,676	3,709	12,817,402	16,763	2,507,737,348
	Jan-Mar	3,920	319,079,247	9,130	2,108,615,349	3,625	15,549,381	16,675	2,443,243,977
	Apr-Jun	2,799	228,369,975	7,665	1,817,705,062	3,205	11,785,928	13,669	2,057,860,965
	July-Sep	1,986	163,464,606	6,744	1,608,636,339	3,142	11,939,726	11,872	1,784,040,671
2020 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	Oct-Dec	1,551	120,001,165	5,637	1,352,031,861	2,084	7,782,229	9,272	1,479,815,255
	Jan-Mar	1,433	104,303,451	4,187	1,014,074,174	1,375	5,973,238	6,995	1,124,350,864
	Apr-Jun	1,501	110,839,731	4,743	1,122,296,618	1,437	5,554,638	7,681	1,238,690,987
	July-Sep	1,140	78,084,893	3,598	888,122,611	1,414	5,400,947	6,152	971,608,451
2021 Total		5,625	413,229,240	18,165	4,376,525,264	6,310	24,711,052	30,100	4,814,465,557
2022	Oct-Dec	955	67,471,421	3,099	740,497,719	1,174	4,770,139	5,228	812,739,279
	Jan-Mar	1,144	81,957,770	2,525	589,585,783	878	4,104,791	4,547	675,648,344
	Apr-Jun	1,381	92,512,978	3,554	854,674,190	677	3,831,818	5,612	951,018,987
	July-Sep	1,585	104,811,713	3,032	741,426,578	960	5,541,210	5,577	851,779,501
2022 Total		5,065	346,753,882	12,210	2,926,184,271	3,689	18,247,957	20,964	3,291,186,110

1 Claims comprise of Foreclosure, Deed in Lieu of Foreclosure, and Mortgagor's Short Sale.

2 Details may not sum to total due to rounding.

NOTE: 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 D. 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.

SOURCE: US Department of HUD/FHA, October 2022.



**Exhibit A-12. Serious Delinquency Rates**

Month Year	Serious Delinquency Rate <sup>1</sup>				
Feb-12	9.66	Jul-15	5.75	Mar-19	3.88
Mar-12	9.42	Aug-15	5.91	Apr-19	3.74
Apr-12	9.37	Sep-15	5.86	May-19	3.67
May-12	9.39	Oct-15	5.79	Jun-19	3.76
Jun-12	9.44	Nov-15	5.82	Jul-19	3.78
Jul-12	9.47	Dec-15	5.79	Aug-19	3.82
Aug-12	9.47	Jan-16	5.80	Sep-19	3.88
Sep-12	9.58	Feb-16	5.55	Oct-19	3.93
Oct-12	9.49	Mar-16	5.31	Nov-19	4.06
Nov-12	9.49	Apr-16	5.16	Dec-19	4.35
Dec-12	9.59	May-16	5.07	Jan-20	4.12
Jan-13	9.49	Jun-16	5.02	Feb-20	4.04
Feb-13	9.28	Jul-16	4.96	Mar-20	3.97
Mar-13	8.87	Aug-16	4.95	Apr-20	4.04
Apr-13	8.58	Sep-16	4.92	May-20	4.91
May-13	8.27	Oct-16	4.91	Jun-20	8.96
Jun-13	8.38	Nov-16	4.94	Jul-20	10.58
Jul-13	8.17	Dec-16	4.69	Aug-20	11.35
Aug-13	7.98	Jan-17	4.97	Sep-20	11.59
Sep-13	8.04	Feb-17	4.81	Oct-20	11.73
Oct-13	8.04	Mar-17	4.54	Nov-20	11.90
Nov-13	8.02	Apr-17	4.47	Dec-20	11.89
Dec-13	8.02	May-17	4.36	Jan-21	11.83
Jan-14	7.83	Jun-17	4.28	Feb-21	11.37
Feb-14	7.71	Jul-17	4.20	Mar-21	11.61
Mar-14	7.44	Aug-17	4.24	Apr-21	11.06
Apr-14	7.25	Sep-17	4.32	May-21	10.59
May-14	7.19	Oct-17	4.42	Jun-21	10.11
Jun-14	7.14	Nov-17	4.83	Jul-21	9.66
Jul-14	6.98	Dec-17	5.19	Aug-21	9.17
Aug-14	6.94	Jan-18	5.18	Sep-21	8.81
Sep-14	6.99	Feb-18	5.06	Oct-21	8.35
Oct-14	6.94	Mar-18	4.66	Nov-21	7.83
Nov-14	7.02	Apr-18	4.54	Dec-21	7.28
Dec-14	7.00	May-18	4.35	Jan-22	6.81
Jan-15	6.96	Jun-18	4.28	Feb-22	6.48
Feb-15	6.76	Jul-18	4.08	Mar-22	6.00
Mar-15	6.42	Aug-18	4.11	Apr-22	5.23
Apr-15	6.28	Sep-18	4.11	May-22	5.19
May-15	6.24	Oct-18	4.06	Jun-22	5.00
Jun-15	6.12	Nov-18	4.06	Jul-22	4.93
		Dec-18	4.08	Aug-22	4.82
		Jan-19	4.16	Sep-22	4.77
		Feb-19	4.10		

<sup>1</sup> 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.  
 SOURCE: US Department of HUD/FHA, October 2022.