



Quarterly Report to Congress

# Financial Status of the Mutual Mortgage Insurance Fund

Fiscal Year 2023, Quarter Two



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 Q2  
Data as of March 31, 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 Second 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 January 1, 2023, through March 31, 2023.

Through the second quarter of FY 2023, FHA served 211,441 first-time homebuyers, representing 82 percent of FHA's forward purchase mortgage endorsements. FHA also served 78,475 households of color with purchase mortgages and 8,447 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 to assist in ensuring that homeowners in need are aware of the loss mitigation tools available to them.

A number of FHA borrowers continued to face COVID-19 related hardships in the second quarter of FY 2023. 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 11.61 percent at the end of the same quarter of FY 2021 to 4.53 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 2.43 percent through the current quarter. This is still above average relative to historical results and continues to vacillate at elevated 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. 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.

Errata:

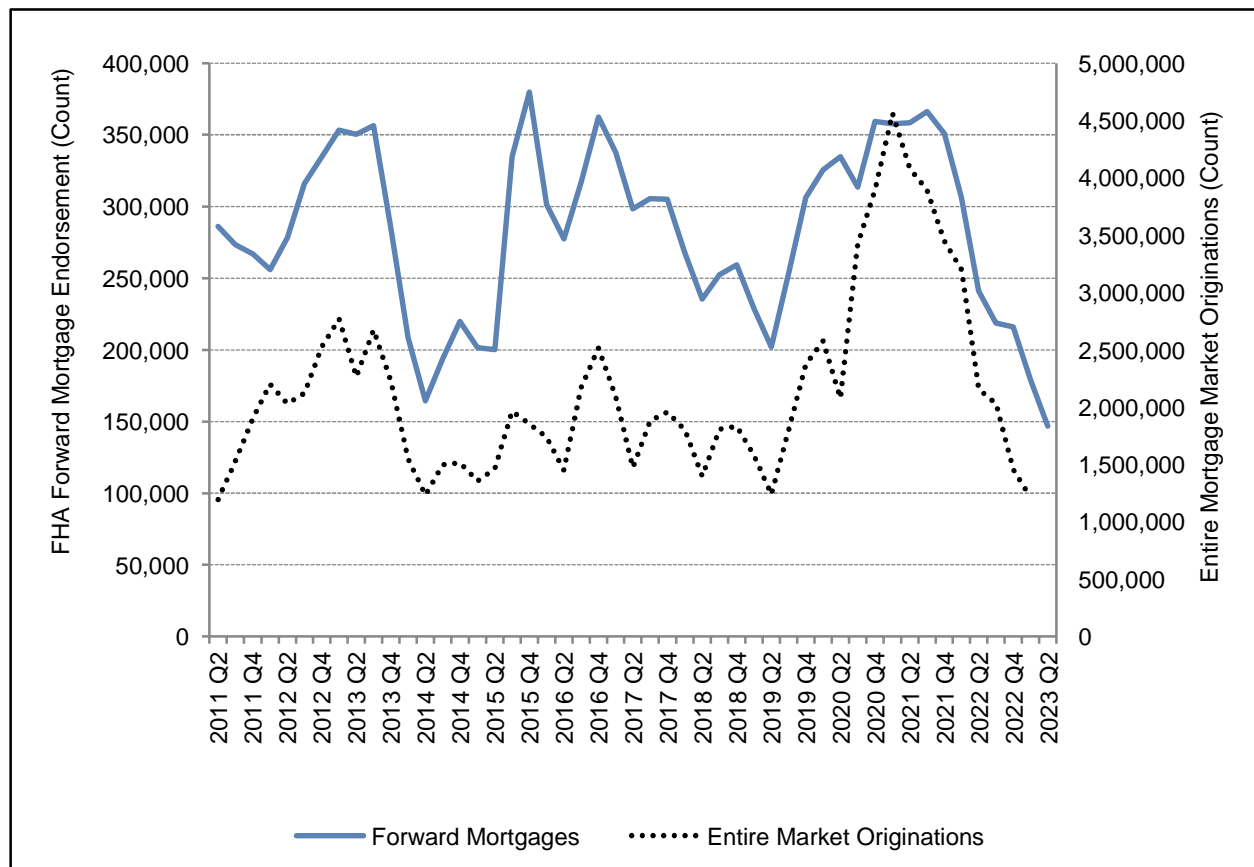
Note: Figure 9 within the enclosed report has been updated to reflect corrections made to current quarter activities. Specifically, collections data were updated to reflect correct premium revenue received, resulting in a corrected positive net operations cash flow for the quarter of \$1,440 million rather than the previously reported negative \$651 million.

## Endorsement Activity

During the second quarter of fiscal year (FY) 2023, FHA endorsed 146,735 forward mortgages for insurance, a decrease of 18.10 percent from the prior quarter (Figure 1a). This decrease is due to a decline in both purchase and refinancing activity primarily driven by interest rates that remain at levels not seen since prior to the Great Recession. During the quarter, the dollar volume of purchase endorsements was down 15.85 percent or \$6.39 billion from the previous quarter while refinance endorsements (Conventional to FHA, FHA to FHA) of \$6.89 billion in the quarter were down \$1.89 billion, or 21.53 percent, from the previous quarter. The dollar volume of all forward mortgage endorsements of \$40.79 billion decreased 16.87 percent (Exhibit A-2).

FHA purchase activity by loan count was down 17.28 percent from the previous quarter, from 140,890 mortgages to 116,549 mortgages. FHA-to-FHA refinance endorsements decreased by 25.29 percent from the previous quarter, from 18,492 to 13,815, mostly due to the persistently higher interest rates in recent quarters. Conventional to FHA refinance mortgages also decreased but to a lesser extent, down 17.21 percent, from 19,773 to 16,371 mortgages. Cash out refinance mortgages made up 94 percent of all refinance mortgage endorsements for the quarter, up from 61 percent in FY 2022 and 19 percent in FY 2021.

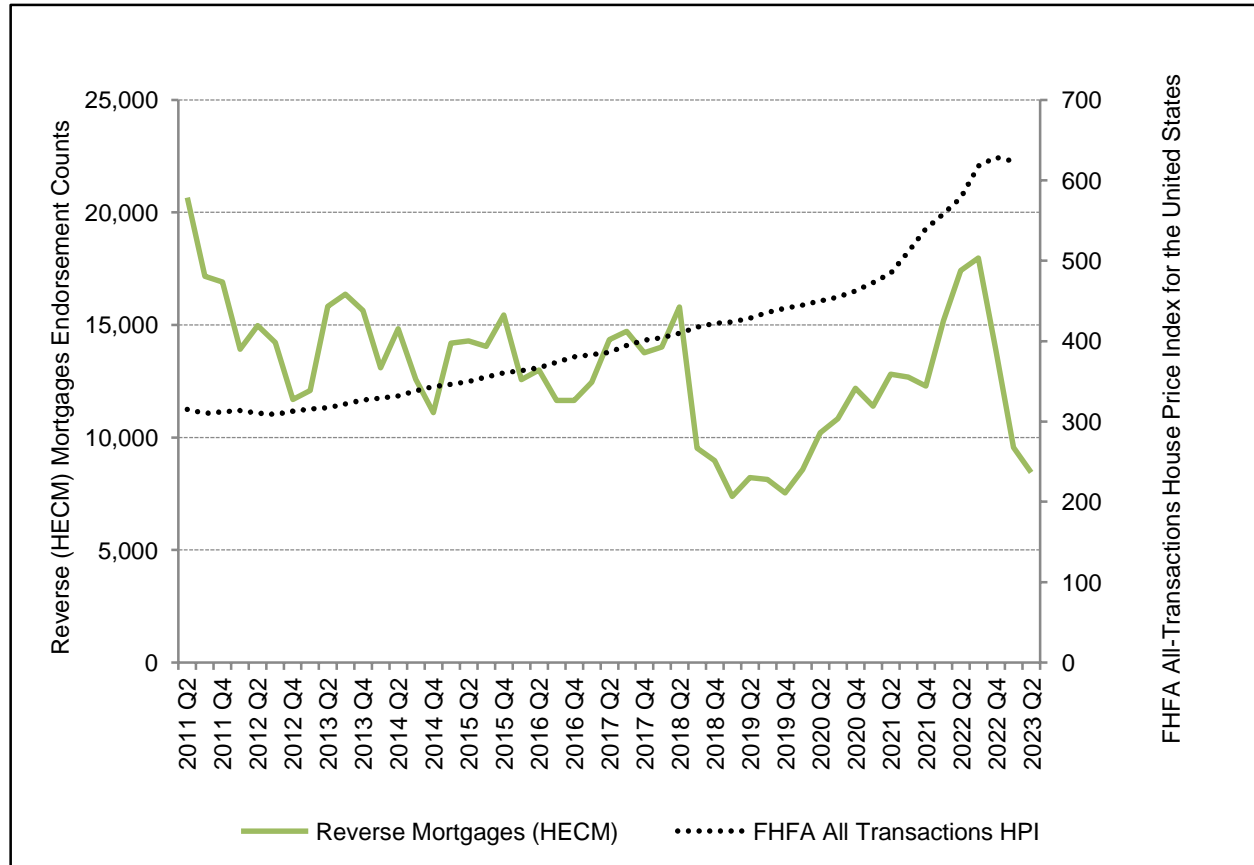
**Figure 1a. Forward Endorsement Counts by Fiscal Year and Quarter**



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

HECM endorsement volume was \$4.01 billion for the second quarter of FY 2023, a decrease of 15.63 percent from the previous quarter. The decline in HECM endorsements is likely attributable to higher interest rates, which reduced the amount of equity a homeowner could draw via a HECM loan. HECM endorsement counts during the second quarter of 8,447 were a decrease of 11.59 percent from the prior 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**



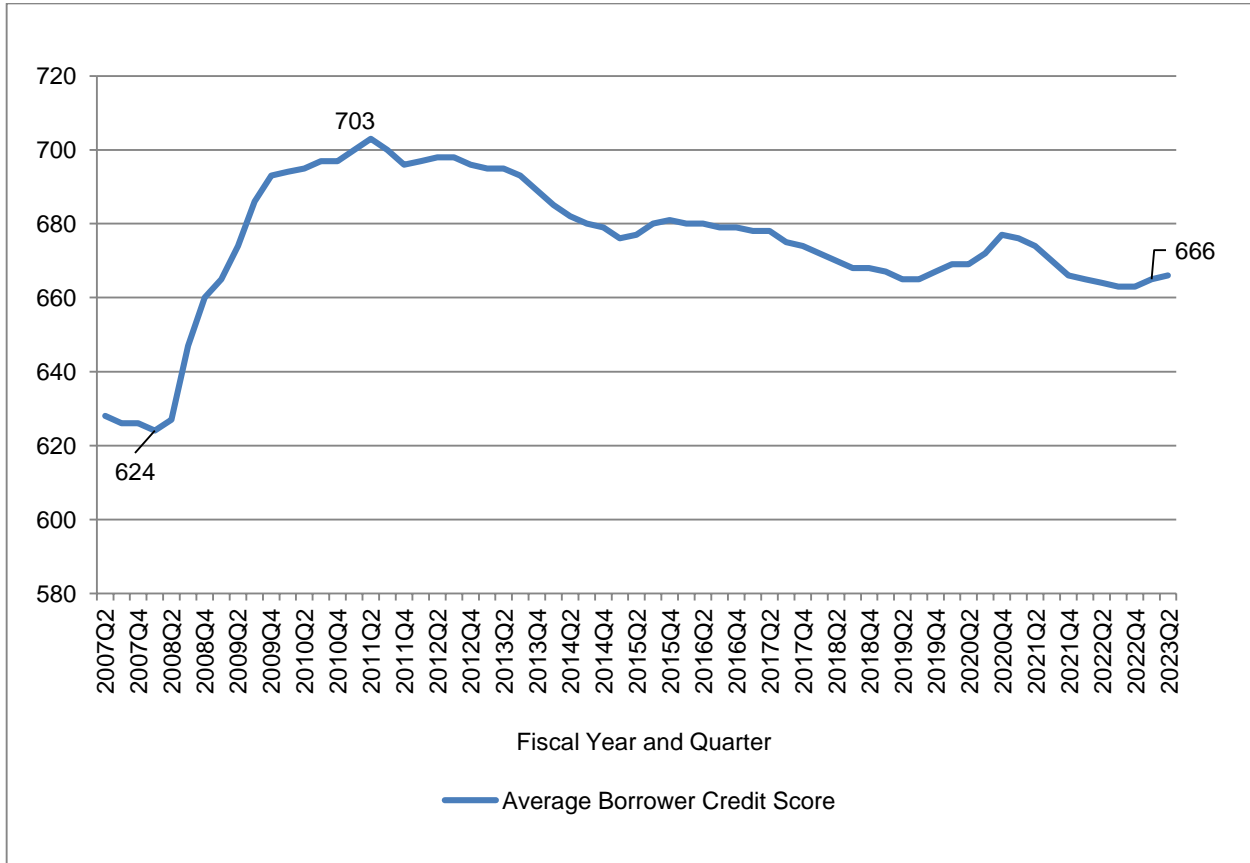
SOURCE: U.S. Department of HUD/FHA, April 2023, U.S. Federal Housing Finance Agency, All-Transactions House Price Index for the United States [USSTHPI], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/USSTHPI>, April 25, 2023.



## FHA Loan Credit Characteristics

Average credit scores increased slightly from 665 to 666 in the second quarter of FY 2023. 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).

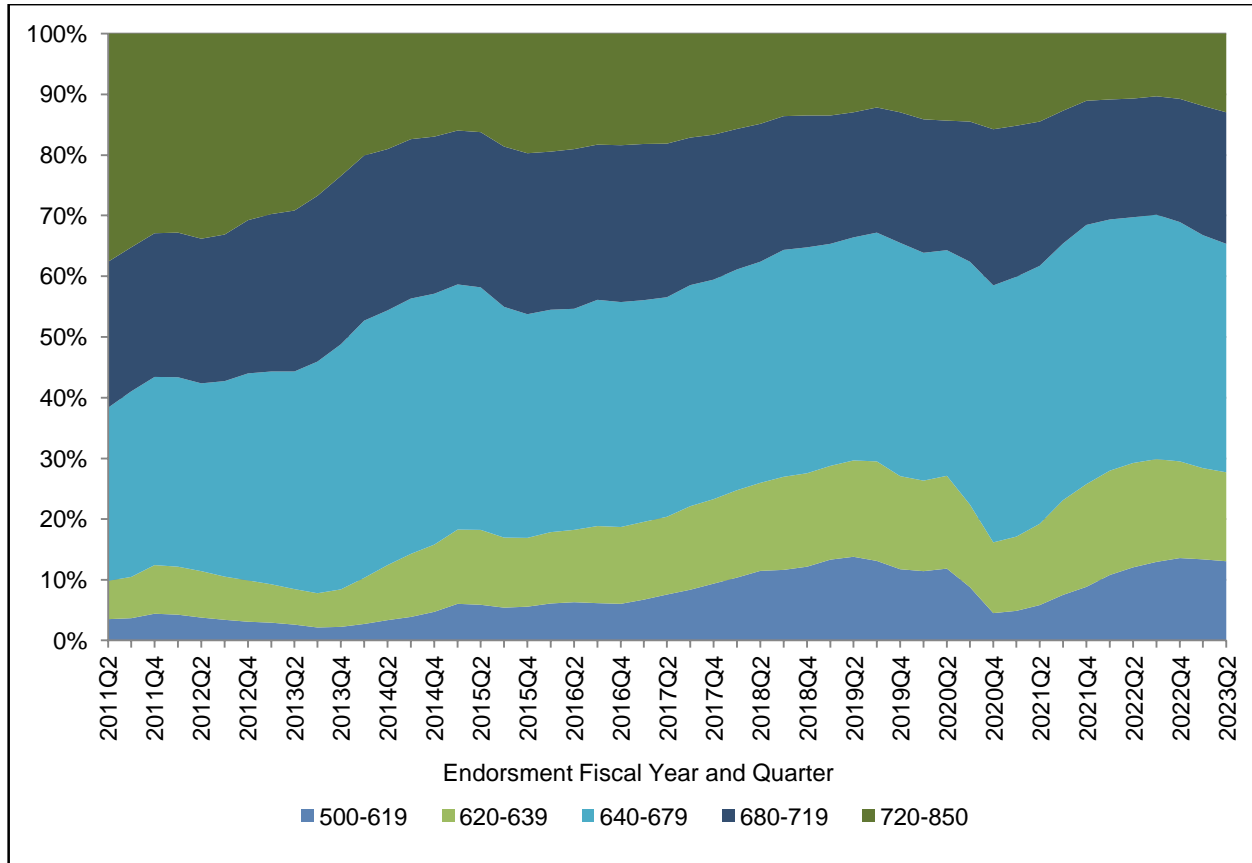
**Figure 2. Average Credit Scores by Fiscal Year and Quarter**



NOTE: Excludes streamline refinance and HECM endorsements.  
 SOURCE: U.S. Department of HUD/FHA, April 2023

As shown in Figure 3a, the distribution of credit scores for FHA loans has gradually shifted over the past few years. The core of the distribution continues to be in the 640–679 range (37.65 percent). In the second quarter of FY 2023, the share of 720+ credit scores increased by 1.06 percentage points from the quarter prior. (Figure 3a, Exhibit A-3).

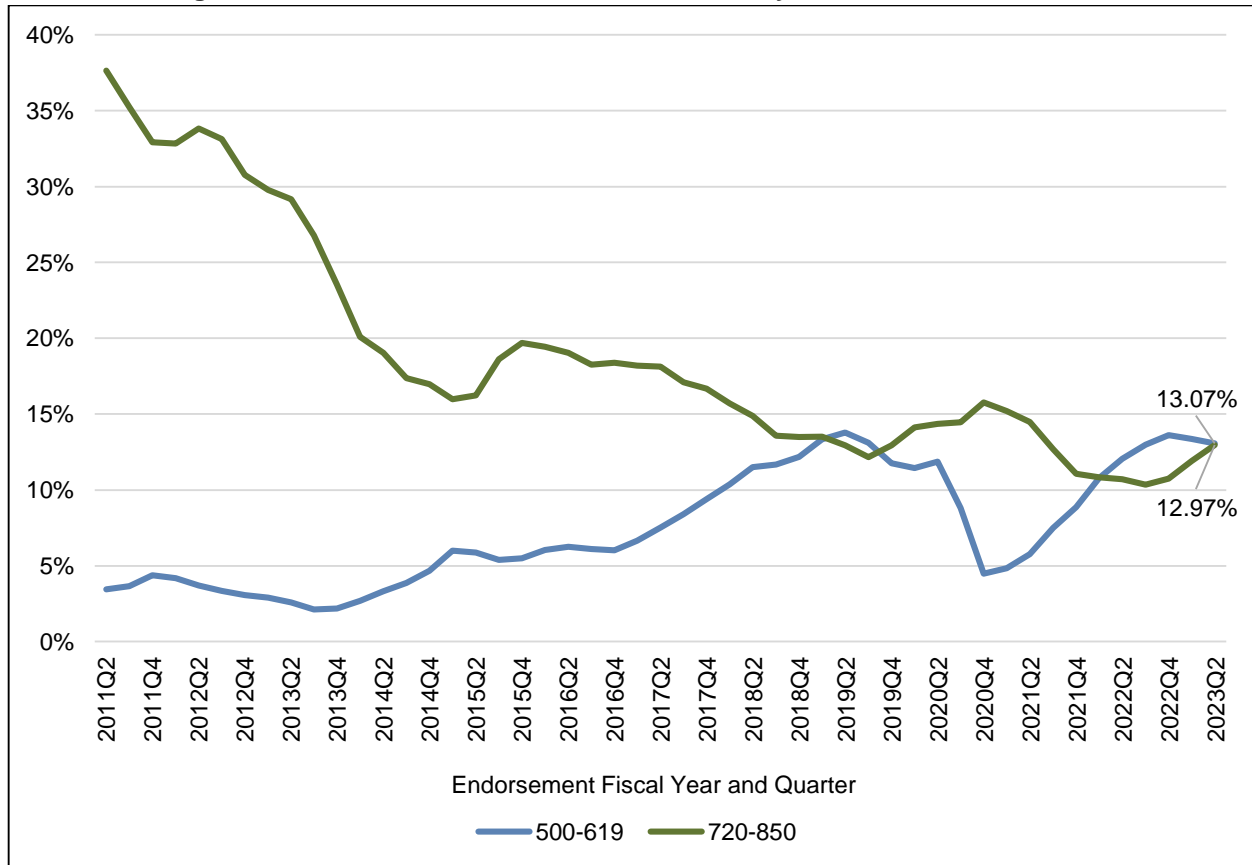
**Figure 3a. Distribution of Credit Scores by Fiscal Year and Quarter**



NOTE: Excludes streamline refinance and HECM activity.  
 SOURCE: U.S. Department of HUD/FHA, April 2023.

Figure 3b shows another perspective of the shift in FHA’s credit profile, with loans endorsed with greater than 720 credit scores increasing to 11.91 percent in the second quarter of FY 2023 from 10.75 percent in the prior quarter. Loans endorsed with less than 620 credit scores declined from 13.62 percent in the fourth quarter of FY 2022 to 13.37 percent this quarter.

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

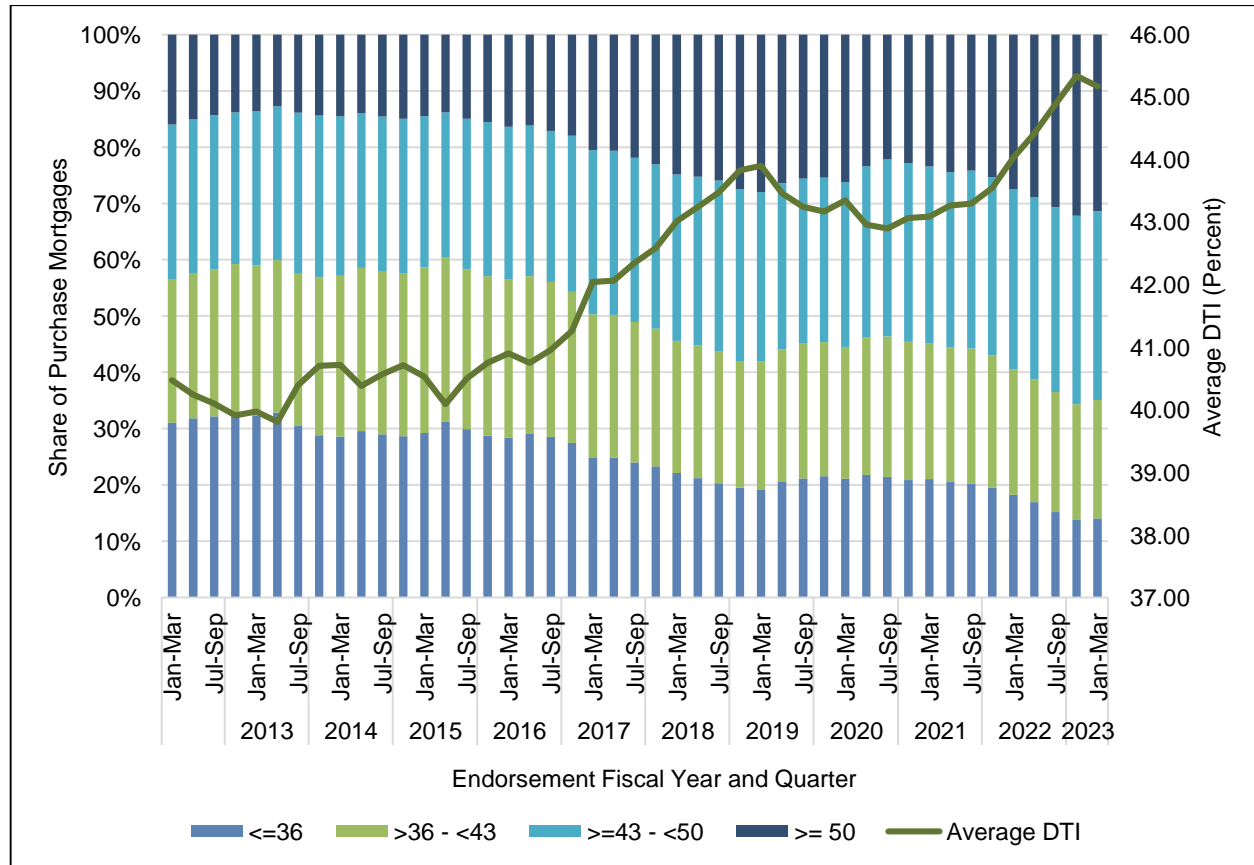


NOTE: Excludes streamline refinance and HECM activity.  
 SOURCE: U.S. Department of HUD/FHA, April 2023.

## Debt-to-Income (DTI)

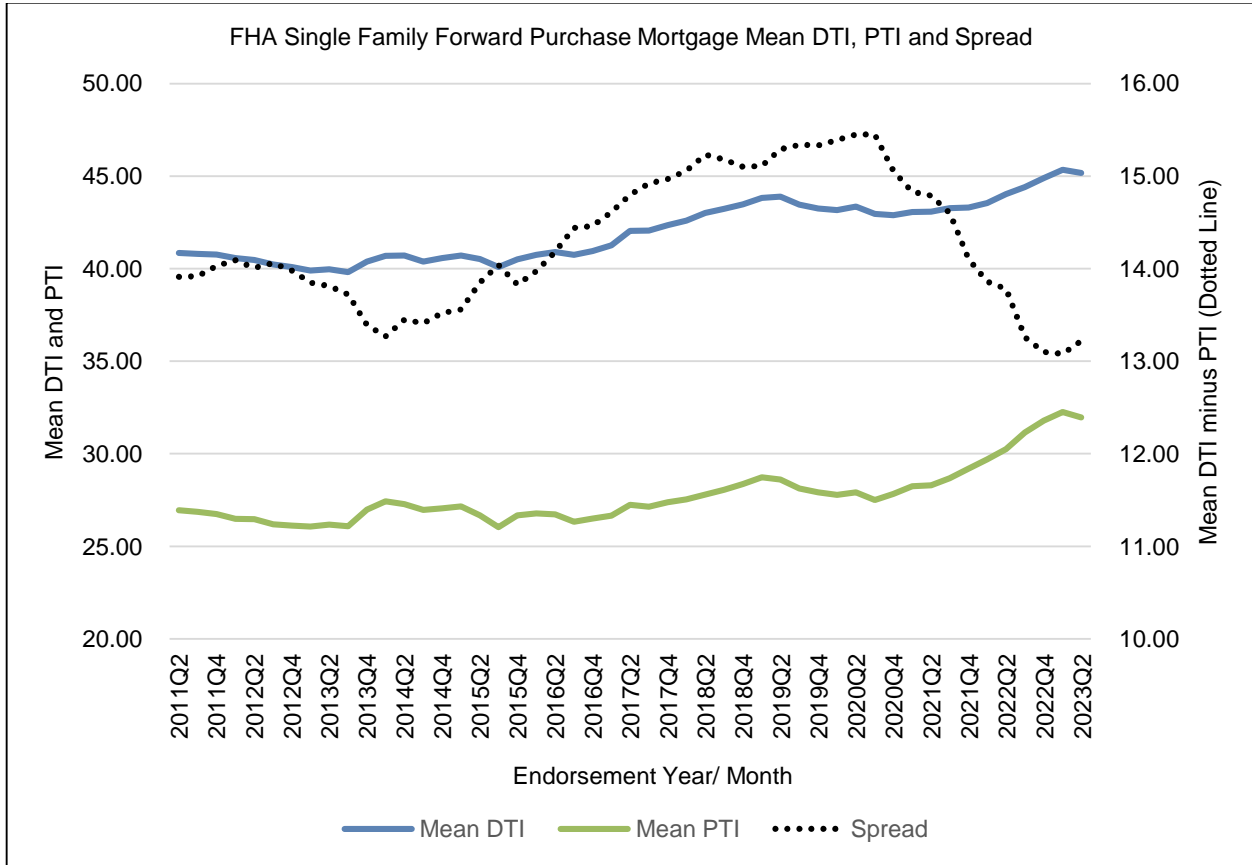
Approximately 31 percent of all FHA-insured forward mortgage purchase endorsements in the second quarter of FY 2023 were for mortgages with DTI ratios of 50 percent or greater. This is down slightly from approximately 32 percent last quarter, but higher by nearly 5 percentage points than the level seen prior to the pandemic. The average DTI for all endorsements during this quarter decreased to 45.17 percent, compared with 45.34 percent the previous quarter. The distribution changes and historical average DTI are shown in Figure 4a below. In addition, Figure 4b reflects the mean 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 suggests that borrowers are spending a larger percentage of their incomes on housing expenses, likely due at least in part to declining affordability resulting from rising home prices seen in recent years, along with recent increases in market interest rates.

**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, April 2023.

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

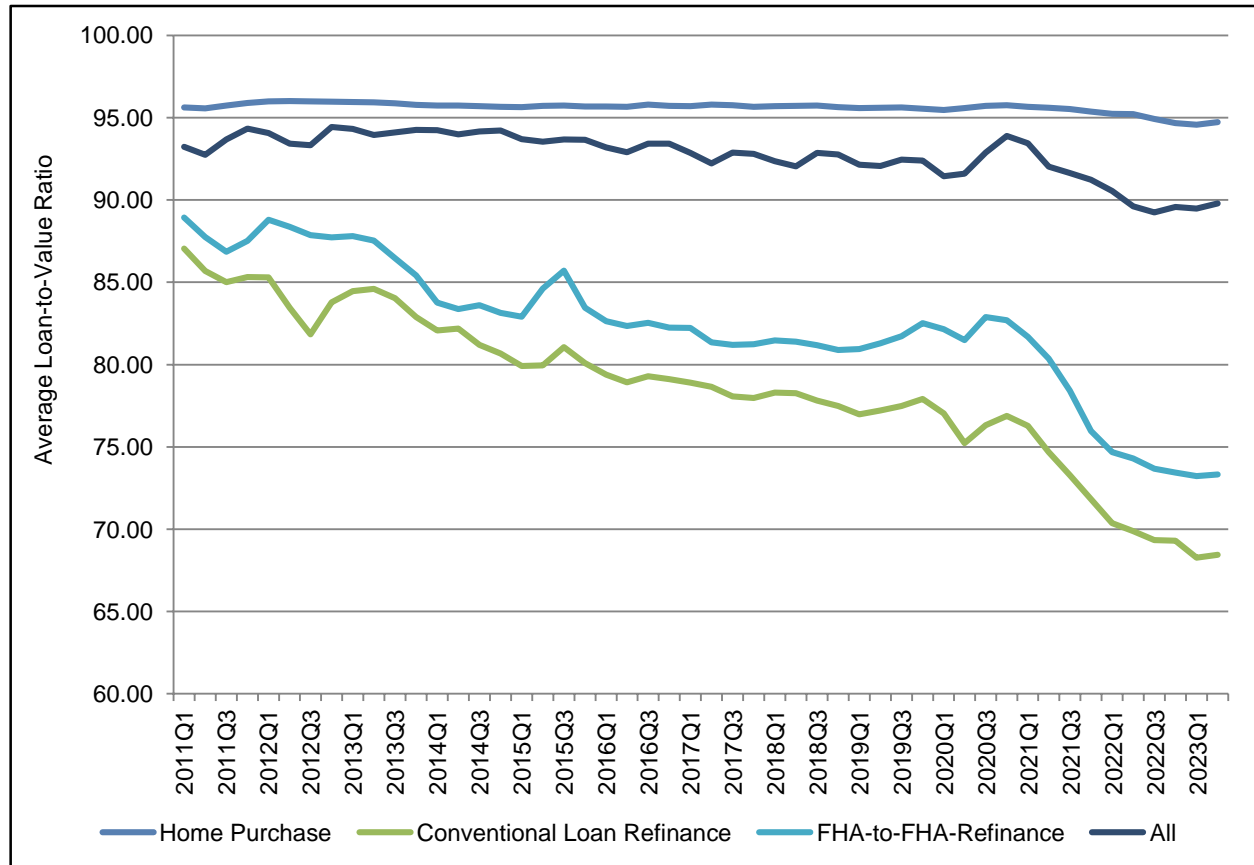


NOTE: FHA Single Family purchase mortgages only.  
 SOURCE: U.S. Department of HUD/FHA, April 2023.

## Average Loan-to-Value (LTV)

The average overall LTV ratio for purchase and refinance loans increased from 89.48 percent to 89.79 percent for all FHA mortgages combined. LTV ratios increased across all endorsement types for the second quarter of fiscal year 2023. 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, April 2023.

<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 second quarter of FY 2023 are presented in Figure 6. Claims were still below predicted levels due to prior year policy decisions regarding eviction moratoria, forbearance, and loss mitigation options. Through the second quarter of FY 2023, the number of actual claims was 7,118 or 65.54 percent less than the predicted 20,656. 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 March 2023                    | Year to Date Predicted <sup>1</sup> | Year to Date Actual | Deviation (Actual Minus Predicted) | Percentage Deviation (Actual Versus Predicted) |
|-------------------------------------|-------------------------------------|---------------------|------------------------------------|--|
| Prepayments (number)                | 346,279                             | 224,036             | (122,243)                          | (35.30)  |
| Claims (number) <sup>2</sup>        | 20,656                              | 7,118               | (13,538)                           | (65.54)  |
| Claims (\$ millions) <sup>3</sup>   | 1,577                               | 483                 | (1,095)                            | (69.40)  |
| Net Loss on Claims (%) <sup>4</sup> | 25.14                               | 31.88               | 6.74                               | 26.82  |

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 2022 and FY 2023 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, April 2023

## Budget Execution Credit Subsidy Rates

The budget execution subsidy rate for forward mortgages for FY 2023 is -3.05 percent. The subsidy rate for HECM mortgages is -4.19 percent for FY 2023 (Figure 7).

**Figure 7. Budget Execution Credit Subsidy Rates, FY 2023 Q2**

| Type of Mortgage         | Rate (%) <sup>1</sup> |
|--------------------------|-----------------------|
| Forward Mortgages        | -3.05                 |
| Reverse Mortgages (HECM) | -4.19                 |

<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-2023-BUD/pdf/BUDGET-2023-BUD.pdf>  
SOURCE: U.S. Department of HUD/FHA, April 2023.



## MMI Fund Cash and Investments

As Figure 8 shows, the total cash and investments of the MMI Fund increased to \$135.98 billion in the second quarter of FY 2023, with \$10.38 billion held in the Financing account and \$125.60 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 2015 – FY 2023**

| Fiscal Year | Quarter | Capital Reserve Account <sup>1</sup><br>(\$ billions) | Financing Account <sup>2</sup><br>(\$ billions) | Total <sup>3,4</sup><br>(\$ billions) |
|-------------|---------|---|---|---------------------------------------|
| 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 | 121.61  | 10.03   | 131.65                                |
| 2023        | Oct–Dec | 123.24  | 10.23   | 133.47                                |
|             | Jan–Mar | 125.60  | 10.38   | 135.98                                |

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, April 2023.

## Cash Flows from Business Operations

Second quarter FY 2023 net cash flow decreased to \$1,440 million compared to first quarter FY 2023 net cash flow of \$1,889 million, due to lower premiums as a result of decreased volumes compared to the prior quarter. In addition to lower premium collections, claims cost increased by 16 percent this 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 and expanded use of 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 around 31 percent over the last four quarters (see Exhibit A-7).

**Figure 9. Business Operations Cash Flows, FY 2022 Q3 – FY 2023 Q2 (\$ millions)**

|   | FY 2022 Q3     | FY 2022 Q4     | FY 2023 Q1     | FY 2023 Q2     | Past 4 Quarters |
|---|----------------|----------------|----------------|----------------|-----------------|
| <b>Collections:</b>                             |                |                |                |                |                 |
| Premiums  | 3,297          | 3,290          | 3,153          | 3,072          | 12,812          |
| Property Sale Receipts                          | 148            | 119            | 128            | 139            | 534             |
| Note Sale Proceeds <sup>1</sup>                 | 32             | 111            | 0              | 0              | 143             |
| Notes Collections <sup>2</sup>                  | 1,682          | 1,309          | 888            | 842            | 4,721           |
| Other (includes Settlements & Debt collections) | 12             | 11             | 10             | 45             | 78              |
| <b>Total</b>                                    | <b>5,171</b>   | <b>4,840</b>   | <b>4,179</b>   | <b>4,098</b>   | <b>18,288</b>   |
| <b>Disbursements:</b>                           |                |                |                |                |                 |
| Claims <sup>3</sup>                             | (4,020)        | (2,714)        | (2,247)        | (2,611)        | (11,592)        |
| Property Maintenance                            | (15)           | (13)           | (12)           | (13)           | (53)            |
| Note Disbursements                              | (29)           | (29)           | (28)           | (29)           | (115)           |
| Other   | (2)            | 2              | (3)            | (5)            | (8)             |
| <b>Total</b>                                    | <b>(4,066)</b> | <b>(2,754)</b> | <b>(2,290)</b> | <b>(2,658)</b> | <b>(11,768)</b> |
| <b>Net Operations Cash Flow</b>                 | <b>1,105</b>   | <b>2,086</b>   | <b>1,889</b>   | <b>1,440</b>   | <b>6,520</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, April 2023.

## 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 increased in the second quarter of FY 2023 to 2.43 percent compared to the previous quarter's rate of 2.26 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             | 0.31                  | 0.27      | 0.30             |
|             | Jan-Mar             | 0.37                  | 0.23      | 0.32             |
|             | Apr-Jun             | 0.46                  | 0.34      | 0.42             |
|             | Jul-Sep             | 0.45                  | 0.32      | 0.41             |
| 2017        | Oct-Dec             | 0.31                  | 0.22      | 0.28             |
|             | Jan-Mar             | 0.41                  | 0.24      | 0.35             |
|             | Apr-Jun             | 1.14                  | 0.65      | 1.02             |
|             | Jul-Sep             | 1.44                  | 1.17      | 1.38             |
| 2018        | Oct-Dec             | 0.48                  | 0.35      | 0.44             |
|             | Jan-Mar             | 0.57                  | 0.30      | 0.49             |
|             | Apr-Jun             | 0.85                  | 0.45      | 0.77             |
|             | Jul-Sep             | 0.96                  | 0.47      | 0.87             |
| 2019        | Oct-Dec             | 0.79                  | 0.47      | 0.72             |
|             | Jan-Mar             | 0.77                  | 0.42      | 0.68             |
|             | Apr-Jun             | 1.00                  | 0.46      | 0.87             |
|             | Jul-Sep             | 0.85                  | 0.41      | 0.72             |
| 2020        | Oct-Dec             | 2.61                  | 2.35      | 2.51             |
|             | Jan-Mar             | 8.71                  | 9.17      | 8.91             |
|             | Apr-Jun             | 4.68                  | 5.98      | 5.18             |
|             | Jul-Sep             | 2.57                  | 2.55      | 2.57             |
| 2021        | Oct-Dec             | 1.93                  | 1.36      | 1.73             |
|             | Jan-Mar             | 1.43                  | 0.76      | 1.11             |
|             | Apr-Jun             | 1.87                  | 0.89      | 1.43             |
|             | Jul-Sep             | 2.38                  | 1.22      | 1.96             |
| 2022        | Oct-Dec             | 2.20                  | 1.08      | 1.81             |
|             | Jan-Mar             | 2.04                  | 0.99      | 1.69             |
|             | Apr-Jun             | 2.68                  | 1.14      | 2.26             |
|             | Jul-Sep*            | 2.70                  | 1.43      | 2.43             |

<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.

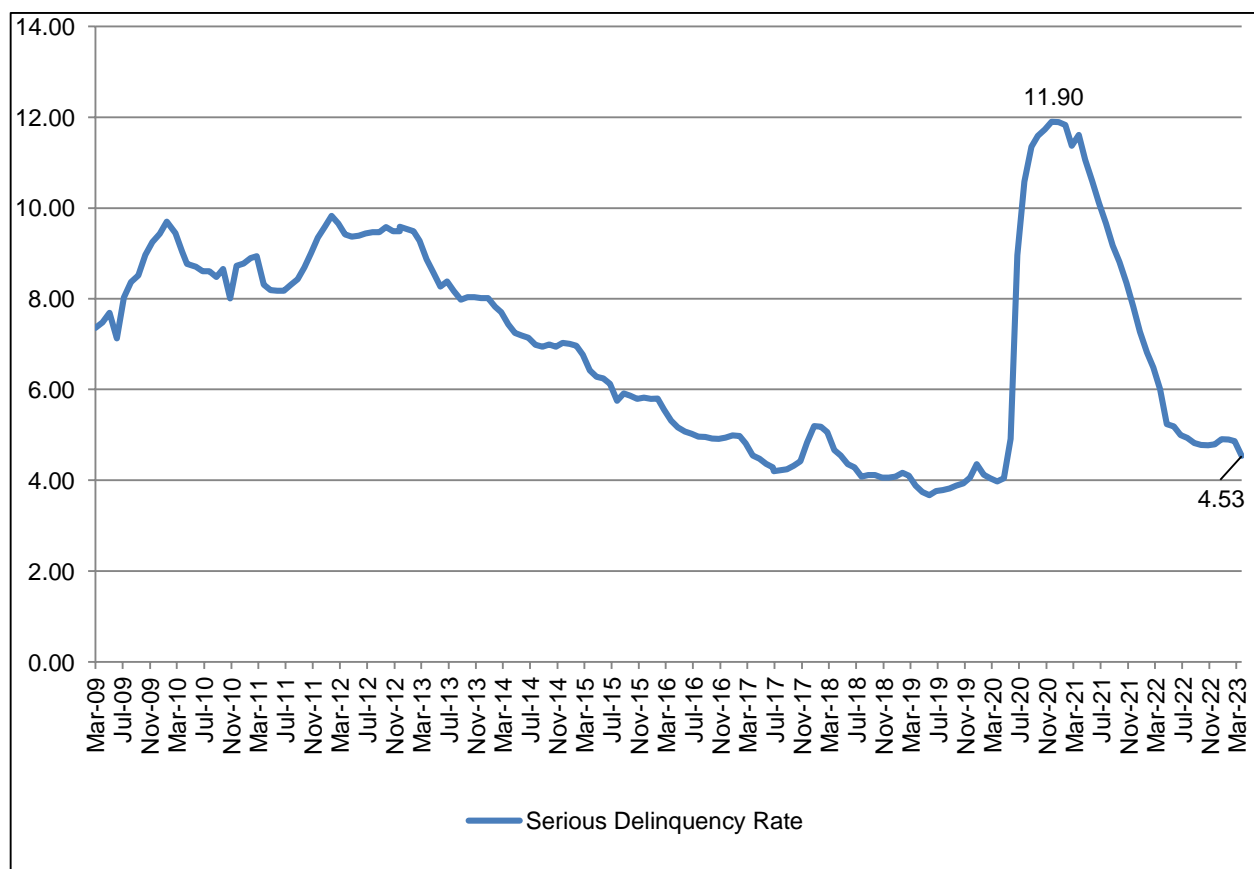
\*Data for July and August only. There is a 7-month lag. Due to late reporting by a large servicer, the EPD rates in FY 2020 Q4 are likely understated.

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

## 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 has since significantly improved, and the portfolio experienced a decline to 4.53 percent at the end of the second quarter of FY 2023.

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



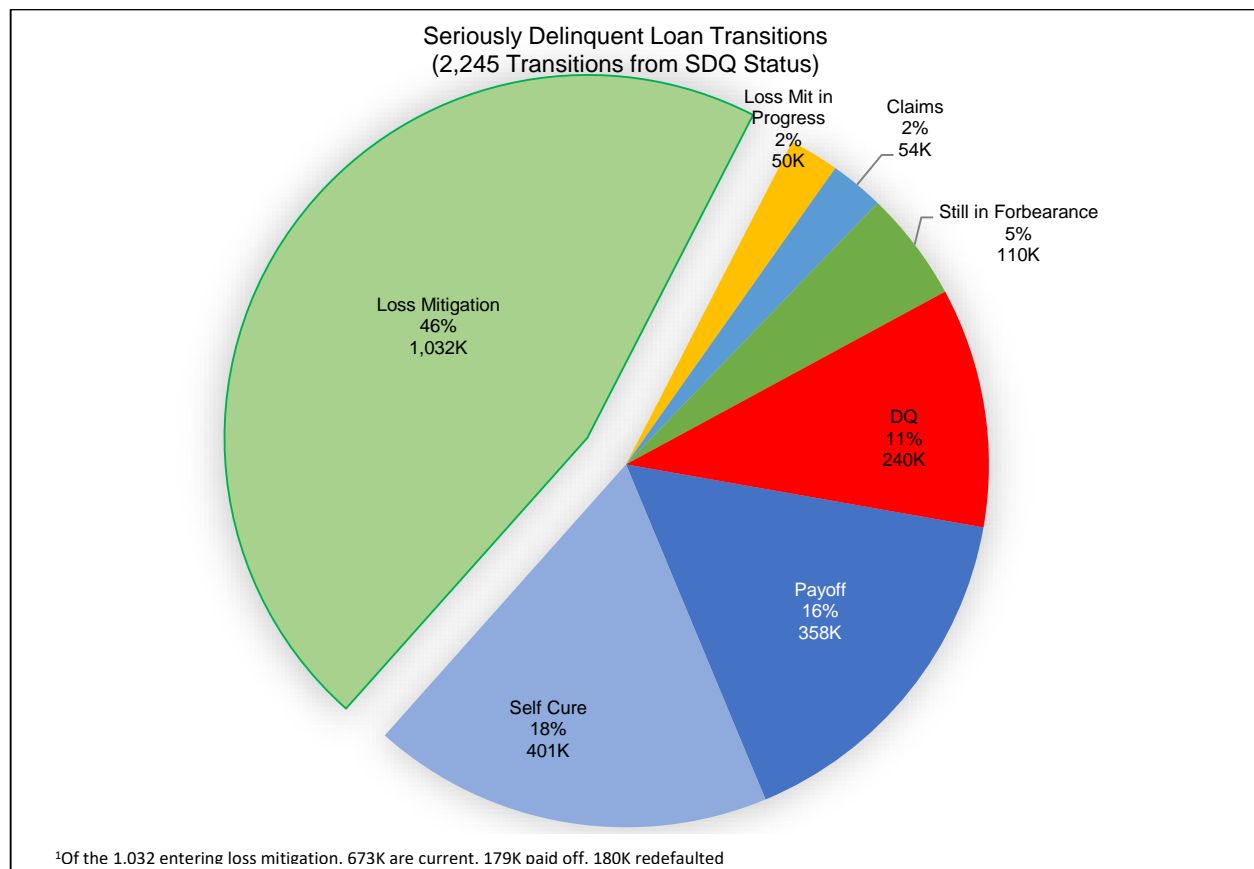
SOURCE: U.S. Department of HUD/FHA, April 2023.

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 March 31, 2023, 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 759,000 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 180,000 had become delinquent again.

While 110,000 of the total SDQ population remains in forbearance, another 240,000 households 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**



## **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 |                                       |
| <b>Fiscal Year</b>             |                   |                             |                      |                   |                                       |
| 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           | 103,949                     | 143,198              | 990,425           | 31,272                                |
| 2020                           | 817,833           | 94,554                      | 420,763              | 1,333,150         | 41,835                                |
| 2021                           | 846,243           | 84,573                      | 502,048              | 1,432,864         | 49,195                                |
| 2022                           | 692,842           | 90,796                      | 198,558              | 982,196           | 64,457                                |
| 2023                           | 257,439           | 36,144                      | 32,307               | 325,890           | 18,001                                |
| <b>Fiscal Year and Quarter</b> |                   |                             |                      |                   |                                       |
| 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                      | 112,157              | 334,822           | 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                      | 113,691              | 357,607           | 11,398                                |
| 2021 Q2                        | 193,522           | 22,014                      | 142,844              | 358,380           | 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           | 22,186                      | 57,082               | 240,965           | 17,422                                |
| 2022 Q3                        | 161,078           | 23,250                      | 34,391               | 218,719           | 17,967                                |
| 2022 Q4                        | 168,248           | 22,125                      | 25,663               | 216,036           | 13,873                                |
| 2023 Q1                        | 140,890           | 19,773                      | 18,492               | 179,155           | 9,554                                 |
| 2023 Q2                        | 116,549           | 16,371                      | 13,815               | 146,735           | 8,447                                 |

<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, April 2023.

## Exhibit A-2. Endorsement Volumes

|                         | Volumes (\$ Millions) |                             |                      |                   |        | Reverse Mortgages (HECM) <sup>1</sup> |
|-------------------------|-----------------------|-----------------------------|----------------------|-------------------|--------|---------------------------------------|
|                         | Forward Mortgages     |                             |                      |                   |        |                                       |
|                         | 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               | 20,591                      | 101,516              | 310,321           | 16,290 |                                       |
| 2021                    | 209,986               | 18,274                      | 114,563              | 342,823           | 21,350 |                                       |
| 2022                    | 189,524               | 20,165                      | 45,816               | 255,505           | 32,113 |                                       |
| 2023                    | 74,190                | 8,010                       | 7,655                | 89,855            | 8,753  |                                       |
| Fiscal Year and Quarter |                       |                             |                      |                   |        |                                       |
| 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                 | 44,232                | 4,234                       | 24,724               | 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               | 85,538            | 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                | 58,469            | 9,324  |                                       |
| 2022 Q4                 | 48,162                | 4,974                       | 6,311                | 59,448            | 7,200  |                                       |
| 2023 Q1                 | 40,288                | 4,368                       | 4,409                | 49,066            | 4,747  |                                       |
| 2023 Q2                 | 33,902                | 3,641                       | 3,246                | 40,789            | 4,006  |                                       |

<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, April 2023.



**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 |
| 2014        | Oct–Dec | 2.69               | 7.66    | 42.34   | 27.22   | 20.10   |
|             | Jan–Mar | 3.33               | 9.10    | 41.94   | 26.60   | 19.03   |
|             | Apr–Jun | 3.87               | 10.42   | 42.02   | 26.31   | 17.37   |
|             | Jul–Sep | 4.67               | 11.15   | 41.30   | 25.92   | 16.96   |
| 2015        | Oct–Dec | 6.00               | 12.29   | 40.37   | 25.37   | 15.97   |
|             | Jan–Mar | 5.87               | 12.34   | 39.95   | 25.62   | 16.23   |
|             | Apr–Jun | 5.39               | 11.56   | 38.00   | 26.44   | 18.62   |
|             | Jul–Sep | 5.51               | 11.38   | 36.84   | 26.59   | 19.68   |
| 2016        | Oct–Dec | 6.04               | 11.83   | 36.62   | 26.06   | 19.44   |
|             | Jan–Mar | 6.26               | 11.97   | 36.40   | 26.33   | 19.04   |
|             | Apr–Jun | 6.11               | 12.78   | 37.21   | 25.64   | 18.26   |
|             | Jul–Sep | 6.03               | 12.69   | 37.00   | 25.90   | 18.37   |
| 2017        | Oct–Dec | 6.67               | 12.86   | 36.55   | 25.74   | 18.18   |
|             | Jan–Mar | 7.53               | 12.84   | 36.18   | 25.33   | 18.12   |
|             | Apr–Jun | 8.40               | 13.71   | 36.44   | 24.35   | 17.10   |
|             | Jul–Sep | 9.39               | 13.88   | 36.14   | 23.92   | 16.67   |
| 2018        | Oct–Dec | 10.36              | 14.41   | 36.34   | 23.20   | 15.70   |
|             | Jan–Mar | 11.51              | 14.49   | 36.38   | 22.75   | 14.87   |
|             | Apr–Jun | 11.67              | 15.29   | 37.36   | 22.12   | 13.57   |
|             | Jul–Sep | 12.18              | 15.36   | 37.23   | 21.73   | 13.49   |
| 2019        | Oct–Dec | 13.34              | 15.41   | 36.61   | 21.13   | 13.51   |
|             | Jan–Mar | 13.79              | 15.87   | 36.74   | 20.66   | 12.94   |
|             | Apr–Jun | 13.10              | 16.38   | 37.68   | 20.66   | 12.17   |
|             | Jul–Sep | 11.76              | 15.34   | 38.38   | 21.57   | 12.95   |
| 2020        | Oct–Dec | 11.45              | 14.89   | 37.51   | 22.03   | 14.12   |
|             | Jan–Mar | 11.86              | 15.29   | 37.16   | 21.35   | 14.35   |
|             | Apr–Jun | 8.81               | 13.57   | 40.03   | 23.13   | 14.46   |
|             | Jul–Sep | 4.48               | 11.68   | 42.35   | 25.72   | 15.77   |
| 2021        | Oct–Dec | 4.84               | 12.27   | 42.78   | 24.91   | 15.19   |
|             | Jan–Mar | 5.78               | 13.47   | 42.44   | 23.84   | 14.48   |
|             | Apr–Jun | 7.50               | 15.64   | 42.26   | 21.93   | 12.68   |
|             | Jul–Sep | 8.87               | 16.88   | 42.72   | 20.47   | 11.06   |
| 2022        | Oct–Dec | 10.80              | 17.19   | 41.36   | 19.82   | 10.84   |
|             | Jan–Mar | 12.06              | 17.17   | 40.46   | 19.60   | 10.71   |
|             | Apr–Jun | 12.98              | 16.90   | 40.25   | 19.53   | 10.34   |
|             | Jul–Sep | 13.62              | 15.87   | 39.41   | 20.36   | 10.75   |
| 2023        | Oct–Dec | 13.37              | 15.03   | 38.39   | 21.31   | 11.91   |
|             | Jan–Mar | 13.07              | 14.63   | 37.65   | 21.68   | 12.97   |

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, April 2023.

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

| Fiscal Year | Quarter | Mortgage Purpose |                             |                      |     |
|-------------|---------|------------------|-----------------------------|----------------------|-----|
|             |         | Home Purchase    | Conventional Loan Refinance | FHA-to-FHA Refinance | All |
| 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 |
| 2023        | Oct–Dec | 670              | 647                         | 642                  | 665 |
|             | Jan–Mar | 671              | 649                         | 643                  | 666 |

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, April 2023.

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

| Loan-to-Value (LTV) Ratio <sup>1</sup> Distribution on New Endorsements<br>By Fiscal Year and Quarter |         |   |       |       |       |
|---|---------|---|-------|-------|-------|
| Fiscal Year   | Quarter | LTV Categories<br>(Shares in each row add up to 100%) |       |       |       |
|   |         | Up to 80  | 81-90 | 91-95 | 96-98 |
| 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 | 12.61   | 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 |
| 2023  | Oct-Dec | 24.29   | 6.82  | 8.38  | 60.52 |
|   | Jan-Mar | 23.19   | 6.46  | 8.33  | 62.02 |

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, April 2023.

**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> |                  |
| 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            |
| 2023        | Oct–Dec | 94.57            | 68.27                           | 73.22                             | 89.48            |
|             | Jan–Mar | 94.73            | 68.44                           | 73.34                             | 89.79            |

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, April 2023.

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

| Fiscal Year | Quarter              | Loss Rates<br>(% Unpaid Principal Balance) |                                  |                         | Disposition Counts  |  |                       | REO<br>Alternatives<br>Share of<br>Dispositions |
|-------------|----------------------|--|----------------------------------|-------------------------|---------------------|--|-----------------------|---|
|             |                      | REO<br>Loss<br>Rate                        | REO<br>Alternatives<br>Loss Rate | Overall<br>Loss<br>Rate | REO<br>Dispositions | REO<br>Alternatives<br>Dispositions <sup>2</sup> | Total<br>Dispositions |   |
| 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              | 37.29                                      | 34.17                            | 34.53                   | 402                 | 3,121  | 3,523                 | 88.59   |
| 2022        | Oct-Dec              | 37.19                                      | 35.11                            | 35.55                   | 591                 | 2,669  | 3,260                 | 81.87   |
|             | Jan-Mar              | 30.26                                      | 33.16                            | 32.48                   | 802                 | 3,075  | 3,877                 | 79.31   |
|             | Apr-Jun              | 25.97                                      | 32.63                            | 31.37                   | 784                 | 4,306  | 5,090                 | 84.60   |
|             | Jul-Sep              | 30.56                                      | 31.79                            | 31.58                   | 648                 | 4,252  | 4,900                 | 86.78   |
| 2023        | Oct-Dec              | 30.57                                      | 32.80                            | 32.28                   | 756                 | 3,497  | 4,253                 | 82.22   |
|             | Jan-Mar <sup>1</sup> | 29.41                                      | 30.56                            | 30.31                   | 761                 | 3,510  | 4,271                 | 82.18   |

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

<sup>1</sup> January and February 2023 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, April 2023.

**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   |
|-------------|---------|-----------------------|--------------|--------------------------|-----------------|------------|----------|---------|
| 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    | 313,599 |
|             | 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    | 358,380 |
|             | 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    | 306,476 |
|             | Jan-Mar | 7.58                  | 10.69        | 1.63                     | 1.86            | 11.14      | 67.10    | 240,965 |
|             | Apr-Jun | 9.26                  | 12.32        | 1.37                     | 0.91            | 2.49       | 73.65    | 218,719 |
|             | Jul-Sep | 9.35                  | 11.40        | 0.89                     | 0.35            | 0.13       | 77.88    | 216,036 |
| 2023        | Oct-Dec | 10.17                 | 9.98         | 0.87                     | 0.26            | 0.08       | 78.64    | 179,155 |
|             | Jan-Mar | 10.30                 | 9.13         | 0.85                     | 0.26            | 0.03       | 79.43    | 146,735 |

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

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

| Endorsement Fiscal Year | Quarter | Share of FHA Endorsed Purchase Mortgages |           |            |       | Average DTI |
|-------------------------|---------|--|-----------|------------|-------|-------------|
|                         |         | <=36                                     | >36 - <43 | >=43 - <50 | >= 50 |             |
| 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       |
| 2023                    | Oct-Dec | 13.85                                    | 20.44     | 33.56      | 32.15 | 45.34       |
|                         | Jan-Mar | 14.05                                    | 21.01     | 33.55      | 31.38 | 45.17       |

SOURCE: US Department of HUD/FHA, April 2023.

**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  |
| 2014                                    | Oct-Dec  | 7.19       | 9.25 | 26.24    | 6.56 | 0.40                         | 5.74 | 66.17  | 5.20 |
|   | Jan-Mar  | 8.60       | 9.11 | 26.47    | 6.56 | 0.51                         | 6.25 | 64.43  | 5.17 |
|   | Apr-Jun  | 8.77       | 8.49 | 23.96    | 6.57 | 0.70                         | 5.35 | 66.58  | 5.33 |
|   | Jul-Sept | 8.90       | 8.79 | 25.73    | 6.75 | 0.96                         | 7.70 | 64.41  | 5.29 |
| 2015                                    | Oct-Dec  | 9.61       | 8.82 | 27.51    | 7.24 | 1.13                         | 6.01 | 61.75  | 5.41 |
|   | Jan-Mar  | 10.34      | 8.75 | 27.09    | 7.30 | 1.33                         | 5.56 | 61.23  | 5.68 |
|   | Apr-Jun  | 9.62       | 8.66 | 24.34    | 7.18 | 1.60                         | 6.31 | 64.44  | 5.66 |
|   | Jul-Sept | 10.00      | 7.79 | 25.57    | 6.97 | 1.82                         | 6.16 | 62.61  | 5.17 |
| 2016                                    | Oct-Dec  | 10.94      | 7.58 | 27.26    | 6.72 | 2.15                         | 5.69 | 59.65  | 4.97 |
|   | Jan-Mar  | 10.58      | 7.36 | 26.62    | 6.80 | 2.18                         | 5.41 | 60.61  | 4.95 |
|   | Apr-Jun  | 9.86       | 7.39 | 25.10    | 7.02 | 1.63                         | 6.49 | 63.42  | 5.46 |
|   | Jul-Sept | 9.85       | 7.40 | 26.43    | 7.29 | 1.58                         | 6.84 | 62.14  | 5.27 |
| 2017                                    | Oct-Dec  | 10.34      | 7.20 | 26.86    | 7.05 | 1.77                         | 7.05 | 61.03  | 5.18 |
|   | Jan-Mar  | 10.52      | 7.21 | 26.88    | 7.08 | 2.01                         | 6.32 | 60.59  | 5.08 |
|   | Apr-Jun  | 10.38      | 7.80 | 24.76    | 7.04 | 1.64                         | 7.32 | 63.22  | 5.14 |
|   | Jul-Sept | 10.96      | 7.85 | 26.06    | 7.25 | 1.44                         | 7.44 | 61.54  | 5.41 |
| 2018                                    | Oct-Dec  | 11.77      | 8.49 | 26.45    | 7.30 | 1.26                         | 7.42 | 60.52  | 5.46 |
|   | Jan-Mar  | 11.34      | 8.64 | 26.79    | 7.53 | 1.20                         | 7.77 | 60.67  | 5.56 |
|   | Apr-Jun  | 10.77      | 9.02 | 25.29    | 7.54 | 1.25                         | 8.32 | 62.69  | 5.79 |
|   | Jul-Sept | 11.71      | 8.90 | 26.23    | 7.35 | 1.24                         | 8.16 | 60.83  | 5.43 |
| 2019                                    | Oct-Dec  | 12.25      | 9.14 | 26.74    | 7.05 | 1.08                         | 8.01 | 59.94  | 5.20 |
|   | Jan-Mar  | 13.18      | 8.42 | 26.27    | 6.58 | 1.04                         | 6.78 | 59.51  | 4.96 |
|   | Apr-Jun  | 13.05      | 8.26 | 24.03    | 6.73 | 1.04                         | 7.39 | 61.88  | 5.01 |
|   | Jul-Sept | 13.16      | 7.70 | 24.92    | 6.30 | 0.94                         | 7.35 | 60.98  | 4.59 |
| 2020                                    | Oct-Dec  | 14.47      | 7.05 | 25.15    | 5.96 | 0.88                         | 5.98 | 59.50  | 4.45 |
|   | Jan-Mar  | 15.49      | 6.53 | 24.42    | 5.67 | 0.93                         | 5.65 | 59.16  | 4.22 |
|   | Apr-Jun  | 15.96      | 5.77 | 21.90    | 5.12 | 0.92                         | 5.01 | 61.23  | 3.91 |
|   | Jul-Sept | 15.77      | 5.30 | 22.43    | 4.95 | 0.99                         | 4.57 | 60.81  | 3.86 |
| 2021                                    | Oct-Dec  | 16.12      | 5.15 | 23.73    | 5.37 | 0.88                         | 5.23 | 59.28  | 3.97 |
|   | Jan-Mar  | 15.39      | 4.93 | 23.58    | 5.47 | 0.91                         | 5.22 | 60.12  | 4.08 |
|   | Apr-Jun  | 14.31      | 5.16 | 22.01    | 6.01 | 1.07                         | 6.44 | 62.62  | 4.55 |
|   | Jul-Sept | 14.50      | 5.68 | 23.80    | 6.43 | 1.03                         | 6.37 | 60.67  | 4.67 |
| 2022                                    | Oct-Dec  | 15.43      | 5.52 | 23.95    | 6.74 | 1.14                         | 7.59 | 59.48  | 4.69 |
|   | Jan-Mar  | 15.14      | 4.85 | 24.84    | 5.85 | 1.16                         | 7.23 | 58.86  | 4.21 |
|   | Apr-Jun  | 12.07      | 4.06 | 26.40    | 5.04 | 1.09                         | 5.58 | 60.44  | 3.55 |
|   | Jul-Sept | 11.58      | 2.71 | 26.55    | 3.23 | 1.10                         | 3.51 | 60.77  | 2.08 |
| 2023                                    | Oct-Dec  | 13.33      | 0.72 | 25.44    | 0.96 | 1.09                         | 1.57 | 60.14  | 0.62 |
|   | Jan-Mar  | 13.80      | 0.01 | 23.71    | 0.03 | 1.09                         | 0.08 | 61.40  | 0.02 |

SOURCE: US Department of HUD/FHA, April 2023.



**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 \$ |
| 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       | 4,376,525,265        | 6,310        | 24,711,052           | 30,100             | 4,814,465,556        |
| 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 | 1,574        | 104,148,615          | 3,032        | 741,426,578          | 960          | 5,541,210            | 5,566              | 851,116,403          |
| 2022 Total  |          | 5,054        | 346,090,784          | 12,210       | 2,926,184,271        | 3,689        | 18,247,957           | 20,953             | 3,290,523,012        |
| 2023        | Oct-Dec  | 1,627        | 117,415,592          | 3,678        | 908,497,929          | 1,095        | 6,173,660            | 6,400              | 1,032,087,181        |
|             | Jan-Mar  | 2,054        | 160,383,700          | 8,308        | 2,014,282,960        | 1,500        | 11,085,314           | 11,862             | 2,185,751,974        |
| 2023 Total  |          | 3,681        | 277,799,292          | 11,986       | 2,922,780,889        | 2,595        | 17,258,974           | 18,262             | 3,217,839,155        |

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

<sup>2</sup> 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, April 2023.

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

| Month Year | Serious Delinquency Rate <sup>1</sup> |        |      |        |       |
|------------|---------------------------------------|--------|------|--------|-------|
| Feb-12     | 9.66                                  | Oct-15 | 5.79 | Aug-19 | 3.82  |
| Mar-12     | 9.42                                  | Nov-15 | 5.82 | Sep-19 | 3.88  |
| Apr-12     | 9.37                                  | Dec-15 | 5.79 | Oct-19 | 3.93  |
| May-12     | 9.39                                  | Jan-16 | 5.80 | Nov-19 | 4.06  |
| Jun-12     | 9.44                                  | Feb-16 | 5.55 | Dec-19 | 4.35  |
| Jul-12     | 9.47                                  | Mar-16 | 5.31 | Jan-20 | 4.12  |
| Aug-12     | 9.47                                  | Apr-16 | 5.16 | Feb-20 | 4.04  |
| Sep-12     | 9.58                                  | May-16 | 5.07 | Mar-20 | 3.97  |
| Oct-12     | 9.49                                  | Jun-16 | 5.02 | Apr-20 | 4.04  |
| Nov-12     | 9.49                                  | Jul-16 | 4.96 | May-20 | 4.91  |
| Dec-12     | 9.59                                  | Aug-16 | 4.95 | Jun-20 | 8.96  |
| Jan-13     | 9.49                                  | Sep-16 | 4.92 | Jul-20 | 10.58 |
| Feb-13     | 9.28                                  | Oct-16 | 4.91 | Aug-20 | 11.35 |
| Mar-13     | 8.87                                  | Nov-16 | 4.94 | Sep-20 | 11.59 |
| Apr-13     | 8.58                                  | Dec-16 | 4.69 | Oct-20 | 11.73 |
| May-13     | 8.27                                  | Jan-17 | 4.97 | Nov-20 | 11.90 |
| Jun-13     | 8.38                                  | Feb-17 | 4.81 | Dec-20 | 11.89 |
| Jul-13     | 8.17                                  | Mar-17 | 4.54 | Jan-21 | 11.83 |
| Aug-13     | 7.98                                  | Apr-17 | 4.47 | Feb-21 | 11.37 |
| Sep-13     | 8.04                                  | May-17 | 4.36 | Mar-21 | 11.61 |
| Oct-13     | 8.04                                  | Jun-17 | 4.28 | Apr-21 | 11.06 |
| Nov-13     | 8.02                                  | Jul-17 | 4.20 | May-21 | 10.59 |
| Dec-13     | 8.02                                  | Aug-17 | 4.24 | Jun-21 | 10.11 |
| Jan-14     | 7.83                                  | Sep-17 | 4.32 | Jul-21 | 9.66  |
| Feb-14     | 7.71                                  | Oct-17 | 4.42 | Aug-21 | 9.17  |
| Mar-14     | 7.44                                  | Nov-17 | 4.83 | Sep-21 | 8.81  |
| Apr-14     | 7.25                                  | Dec-17 | 5.19 | Oct-21 | 8.35  |
| May-14     | 7.19                                  | Jan-18 | 5.18 | Nov-21 | 7.83  |
| Jun-14     | 7.14                                  | Feb-18 | 5.06 | Dec-21 | 7.28  |
| Jul-14     | 6.98                                  | Mar-18 | 4.66 | Jan-22 | 6.81  |
| Aug-14     | 6.94                                  | Apr-18 | 4.54 | Feb-22 | 6.48  |
| Sep-14     | 6.99                                  | May-18 | 4.35 | Mar-22 | 6.00  |
| Oct-14     | 6.94                                  | Jun-18 | 4.28 | Apr-22 | 5.23  |
| Nov-14     | 7.02                                  | Jul-18 | 4.08 | May-22 | 5.19  |
| Dec-14     | 7.00                                  | Aug-18 | 4.11 | Jun-22 | 5.00  |
| Jan-15     | 6.96                                  | Sep-18 | 4.11 | Jul-22 | 4.93  |
| Feb-15     | 6.76                                  | Oct-18 | 4.06 | Aug-22 | 4.82  |
| Mar-15     | 6.42                                  | Nov-18 | 4.06 | Sep-22 | 4.77  |
| Apr-15     | 6.28                                  | Dec-18 | 4.08 | Oct-22 | 4.77  |
| May-15     | 6.24                                  | Jan-19 | 4.16 | Nov-22 | 4.79  |
| Jun-15     | 6.12                                  | Feb-19 | 4.10 | Dec-22 | 4.91  |
| Jul-15     | 5.75                                  | Mar-19 | 3.88 | Jan-23 | 4.90  |
| Aug-15     | 5.91                                  | Apr-19 | 3.74 | Feb-23 | 4.86  |
| Sep-15     | 5.86                                  | May-19 | 3.67 | Mar-23 | 4.53  |
|            |                                       | Jun-19 | 3.76 |        |       |
|            |                                       | Jul-19 | 3.78 |        |       |

<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, April 2023.