



# FHA Single Family Mutual Mortgage Insurance Fund Programs

**FY 2020 Q3**

**QUARTERLY REPORT  
TO CONGRESS**

Delivered: September 18,  
2020

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 2020 Q3  
Data as of June 30, 2020

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

## FOREWORD

On behalf of Secretary Carson and Assistant Secretary for Housing and Federal Housing Commissioner Dana Wade, 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 2020 Third Quarter Report. This report covers mortgages that are obligations of the Mutual Mortgage Insurance (MMI) Fund of the Federal Housing Administration. The reporting period covers April 1, 2020 through June 30, 2020.

The COVID-19 pandemic has created a National Emergency for the United States and brought economic challenges to FHA homeowners, which are mostly first time, low-to-moderate income borrowers. FHA has been there to assist homeowners during these unprecedented times, offering forbearance, deferral of payments, and other support for those impacted by COVID-19-related hardships.

Early performance in FY2020 showed improvement until the onset of the COVID-19 emergency. The share of loans with higher risk attributes decreased or moderated in 2020. However, while early performance reflected overall improvement in the credit quality of FY2020 endorsements during the first two quarters, portfolio performance has begun to deteriorate in the third quarter, largely driven by COVID-19 related factors. For example, serious delinquencies more than doubled from about 4 percent to 9 percent last quarter. Similarly, early payment defaults (EPD's) jumped from 71 basis points to 91 basis points.

This quarterly report provides detailed information on the composition and credit quality of new insurance, and on FHA's financial position. In addition to this report to Congress, FHA provides information regarding the status of the single-family mortgage-insurance portfolio via the publication of other complementary reports. All FHA reports can be found in the [Office of Housing Reading Room](#).

Also posted in the Office of Housing Reading Room are annual independent actuarial reviews of the MMI Fund and HUD's Annual Report to Congress on the financial status of the Fund. HUD posted the Actuarial Review and Annual Report to Congress for FY 2019 on November 14, 2019. The FY 2019 Annual Report, which summarizes the independent actuary's analysis of the portfolio, includes detailed projections of future performance and discussion of economic risk to the MMI Fund. The Department is pleased to provide details to the Congress on how this report was prepared or to answer any questions about the information presented.

Sincerely,



Keith N. Becker

Deputy Assistant Secretary  
Office of Risk Management and Regulatory Affairs

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. The specific items requested under the Act are:

Mandated Item	Summary	Page	Exhibit
<p>A) Cumulative volume of mortgage insurance commitments that have been made during such fiscal year through the end of the quarter for which the report is submitted</p>	<p>Single-family forward endorsements during the third quarter of FY 2020 decreased 6.41 percent by count from the prior quarter. Single-family forward endorsement volume was \$73.13 billion, down by 6.02 percent from the prior quarter. Reverse Mortgage (HECM) endorsements by count were up 6.19 percent from the previous quarter. HECM endorsement volume, at \$4.23 billion for the third quarter of FY 2020, represents an increase of 9.21 percent from the previous quarter.</p>	<p><a href="#">5</a>, <a href="#">18</a>, <a href="#">19</a></p>	<p><a href="#">1</a>, <a href="#">A-1</a>, <a href="#">A-2</a></p>
<p>B) Types of mortgages insured, categorized by risk</p>	<p>The average credit scores this quarter increased to 672. Endorsement share of 720+ credit score mortgages increased to 14.46 percent. The share of less than 640 credit score mortgages decreased to 22.38 percent. 23.39 percent of all FHA-insured forward mortgage purchase transactions in this quarter were comprised of mortgages where the borrower had a DTI ratio above 50 percent. This is down from last quarter and down from 26.35 the same quarter last year. Average property loan-to-value ratio increased to 92.87 percent.</p>	<p><a href="#">6</a>, <a href="#">7</a>,<a href="#">8</a>, <a href="#">9</a>, <a href="#">10</a>, <a href="#">19</a>, <a href="#">20</a>, <a href="#">21</a>, <a href="#">22</a>, <a href="#">23</a>, <a href="#">26</a></p>	<p><a href="#">2</a>, <a href="#">3a</a>, <a href="#">3b</a>, <a href="#">4</a>, <a href="#">5</a>, <a href="#">A-3</a>, <a href="#">A-4</a>, <a href="#">A-5</a>, <a href="#">A-6</a>, <a href="#">A-9</a></p>
<p>C) Any significant changes between actual and projected claim and prepayment activity</p>	<p>Prepayment speeds this quarter were 34.10 percent higher than predicted. Claims were 39.64 percent below predicted level by count and 44.14 percent below predicted level by dollar amount.</p>	<p><a href="#">11</a>,</p>	<p><a href="#">6</a>,</p>

D) Projected versus actual loss rates	The year-to-date actual net loss rate on claim activity of 39.09 percent is lower than the projection of 39.67 percent.	<a href="#">11</a>	<a href="#">6</a>
E) Updated projections of the annual subsidy rates	The budget execution credit subsidy rates (CSR) for FY 2020 Q3 are at -2.27 percent and -0.08 percent for forward mortgages and HECMs, respectively.	<a href="#">12</a>	<a href="#">7</a>

<b>Additional Risk Factors</b>	<b>Summary</b>	<b>Page</b>	<b>Exhibit</b>
F) MMI Fund Cash and Investments	The MMI Fund Cash and Investments account total balance at the end of FY 2020 Q3 was \$74.31 billion, up from \$72.41 billion last quarter.	<a href="#">13</a>	<a href="#">8</a>
G) Business Operations Cash Flow	FHA received approximately \$4.45 billion in revenues from premium collections, sale of notes and properties, and other revenue. FHA paid \$2.70 billion in claims and property expenses. In FY 2020 Q3, core business-operations cash flow increased to \$1.75 billion mostly due to a lower volume of claims.	<a href="#">14</a>	<a href="#">9</a>
H) Early Payment Delinquency	The early payment delinquency (EPD) rate increased this quarter to 0.91 percent, from 0.71 percent last quarter.	<a href="#">15</a>	<a href="#">10</a>
I) Serious Delinquency Rates	The portfolio-level serious delinquency rate increased this quarter to 8.96 percent, from 3.97 percent last quarter.	<a href="#">16</a>	<a href="#">11</a>
J) Termination Claim Type with Loss Severity Rates	The forward portfolio loss rate slightly decreased to 36.62 percent from 36.63 percent last quarter. Total loan dispositions fell from 12,906 last quarter to 7,127 this quarter.	<a href="#">24</a>	<a href="#">A-7</a>
K) Cash-Out Refinancing Rates	Purchase mortgage share increased from 57.96 percent last quarter to 61.20 percent. Cash-out refinance mortgage share decreased to 7.14 percent from 10.95 percent last quarter. During Q1, FY 2020 FHA revised the maximum loan-to-value (LTV) and combined loan-to-value (CLTV) percentages for	<a href="#">25</a>	<a href="#">A-8</a>

Additional Risk Factors	Summary	Page	Exhibit
	Cash-out refinance mortgages from 85 percent to 80 percent to align with industry standards.		
L) Down Payment Assistance (DPA) – Serious Delinquency Rate (SDQ)	The share of Down Payment Assistance (Purchase only mortgages) decreased from 40.84 percent last quarter to 38.77 percent.	<a href="#">27</a>	<a href="#">A-10</a>
M) Reverse Mortgage (HECM) Program Claims	Total HECM program claims decreased this quarter from 16,675 loans to 13,669 loans due to lower number of assigned Claims (Type 1, Type 2 and Supplemental) to HUD.	<a href="#">28</a>	<a href="#">A-11</a>

## Endorsement Activity

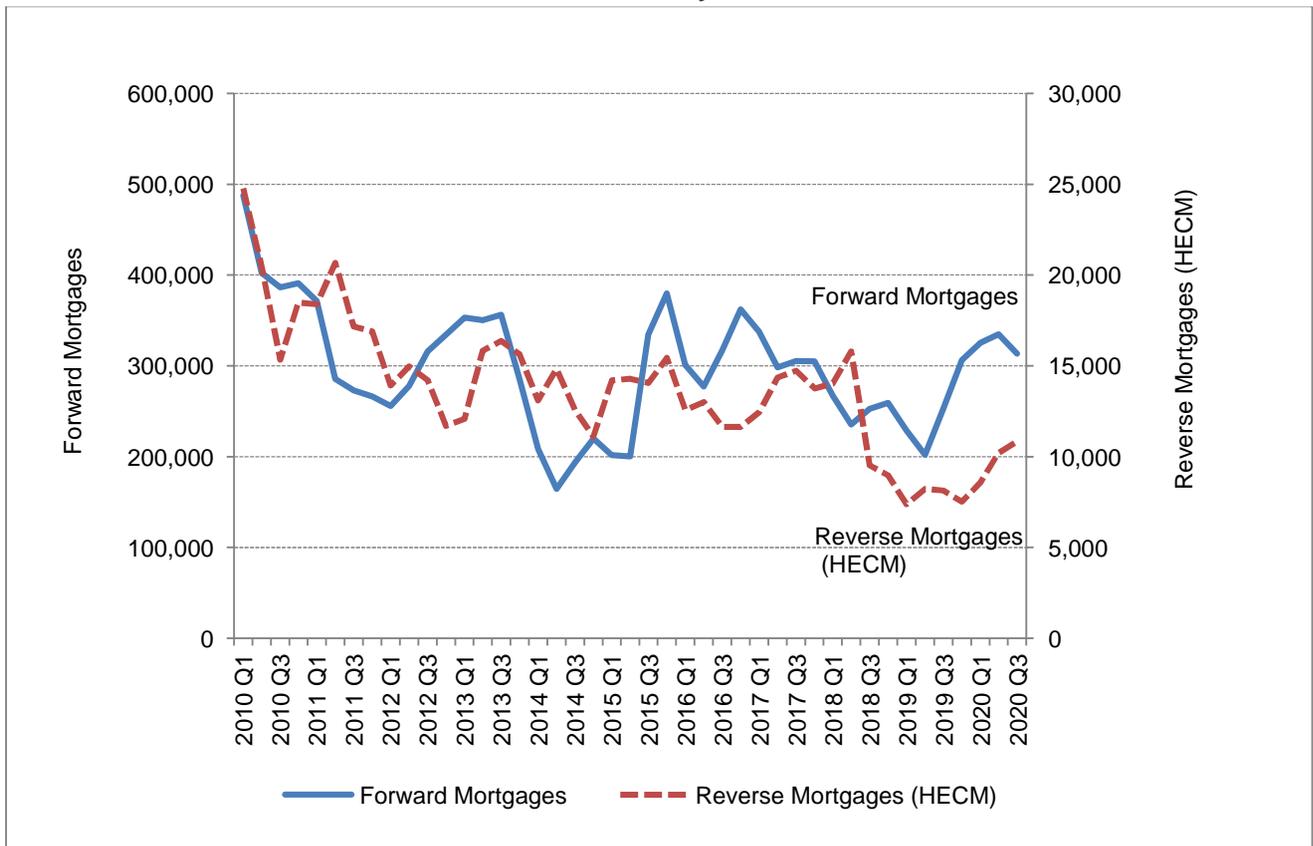
During the third quarter of fiscal year (FY) 2020, FHA endorsed 313,362 forward mortgages for insurance, down 6.41 percent from the prior quarter (Exhibit A-1).

The dollar volume of refinance endorsements (Conventional to FHA, FHA to FHA) in the quarter was down 13.36 percent from the previous quarter, while the dollar volume of all forward-mortgage endorsements decreased 6.02 percent (Exhibit A-2).

FHA-to-FHA refinance activity, in terms of endorsed mortgages decreased by 8.49 percent from the quarter-earlier period from 112,152 to 102,625. Over the last two years, FHA has seen a significant increase of FHA streamline loan endorsements.

HECM endorsement volume, \$4.23 billion for the third quarter of FY 2020, was up 9.21 percent from the previous quarter. HECM endorsement counts in FY 2020 Q3 of 10,839 was up 6.19 percent from last quarter.

**Exhibit 1. Endorsement Counts by Fiscal Year and Quarter**

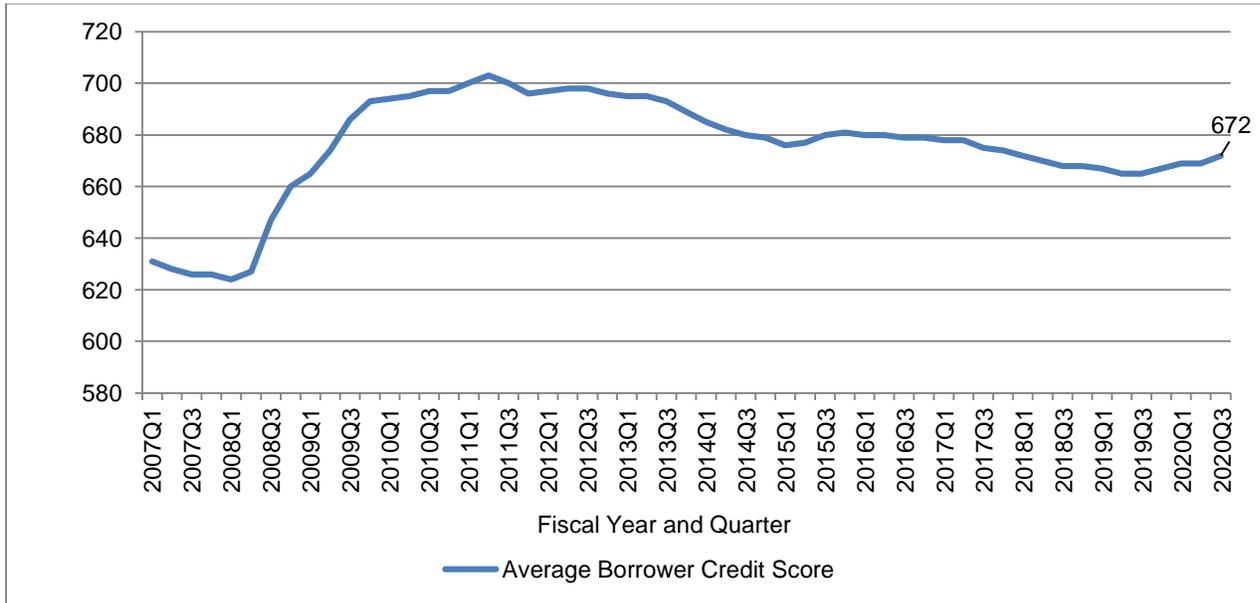


SOURCE: U.S. Department of HUD/FHA, July 2020.

## Borrower Credit Scores

Average borrower credit score increased by 3 points to 672. Although this continues to be above the levels preceding the mortgage and credit crisis, it is well below the peak of 703 in FY 2011 Q2 (Exhibit 2, Exhibit A-4).

**Exhibit 2. Average Borrower Credit Scores by Fiscal Year and Quarter**

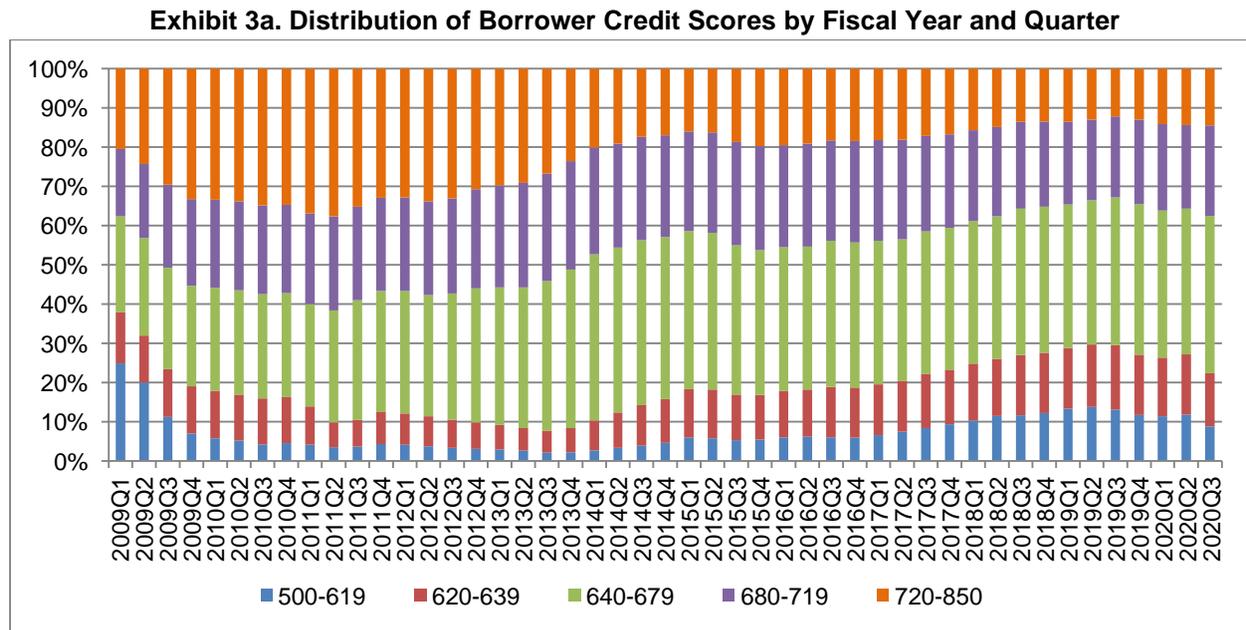


NOTE: Excludes streamline refinance and HECM endorsements.  
 SOURCE: U.S. Department of HUD/FHA, July 2020

As shown in Exhibit 3a, the distribution of borrower credit scores has gradually changed over the past few years. The core of the distribution is in the 640–679 range (40.04 percent). In FY 2020 Q3 the share of 680–850 credit scores increased by 1.89 percentage points from FY 2020 Q2. (Exhibit 3a, Exhibit A-3).

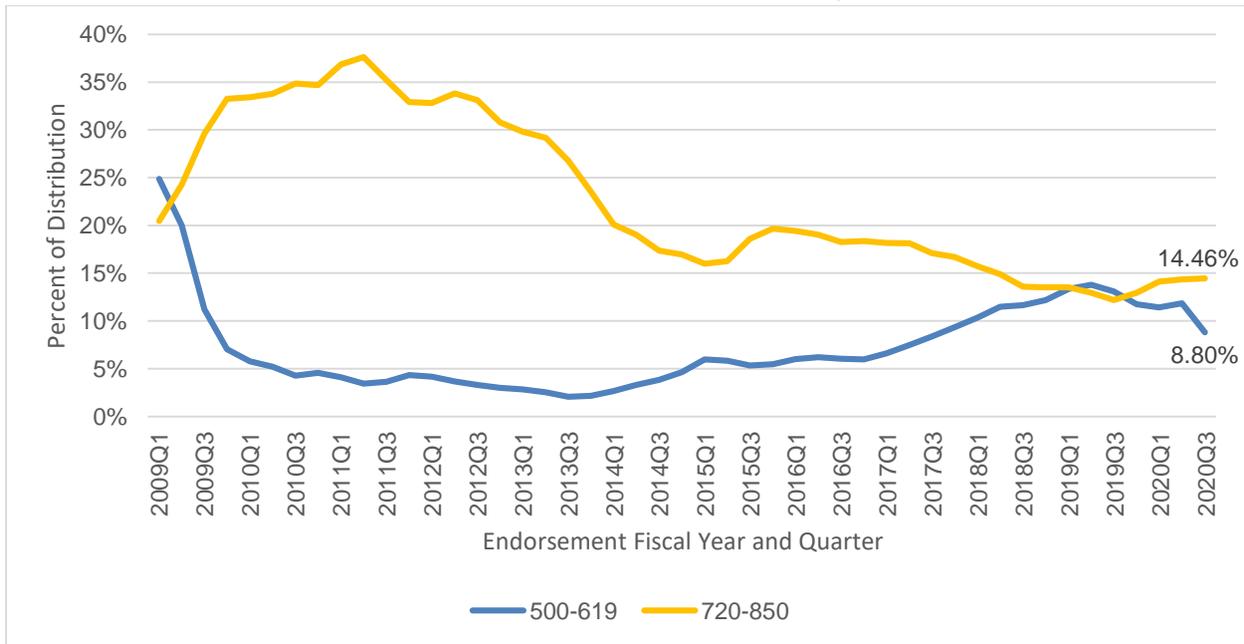
In Exhibit 3a, shows that FHA’s credit risk profile has been shifting from nearly 50 percent of borrowers at 680 and greater credit scores in FY2012 to about 38 percent, currently. At the same time, the share of borrowers with less than 640 credit scores declined to around 22 percent from 29 percent a year ago. Performance of low credit score mortgages are closely monitored to determine if policy changes are required.

As shown in Exhibit 3b, borrowers with greater than 720 credit scores increased to 14.46 percent in Q3 FY 2020 from 14.35 percent in Q2 FY 2020, while borrowers with less than 620 credit scores decreased from 11.83 percent in Q2 FY 2020 to 8.80 percent in Q3 FY 2020.



NOTE: Excludes streamline refinance and HECM activity.  
 SOURCE: U.S. Department of HUD/FHA, July 2020.

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

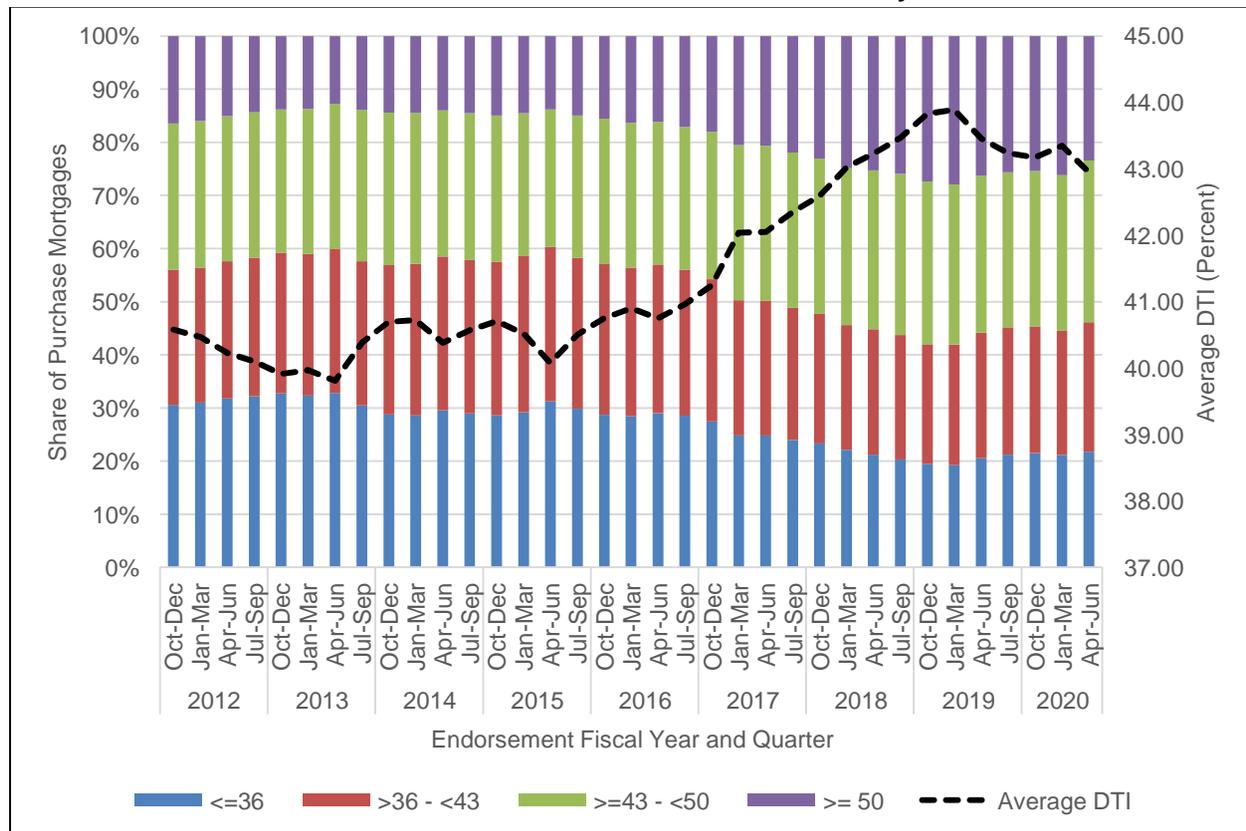


NOTE: Excludes streamline refinance and HECM activity.  
 SOURCE: U.S. Department of HUD/FHA, July 2020.

## Debt-to-Income (DTI)

From 2015 to FY2019 Q2 FHA saw average increases in the concentration of purchase mortgages with high debt-to-income (DTI) ratios. More than 23 percent of all FHA-insured forward mortgage purchase transactions in FY 2020 are comprised of mortgages in which the borrower has a DTI ratio above 50 percent. This quarter, FHA’s average DTI ratios decreased from their recent peak. We expect this decline to continue in the coming quarters due to tighter credit requirements recently put in place by FHA lenders. FHA closely monitors the volume of mortgages with high DTI ratios coming into MMIF.

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

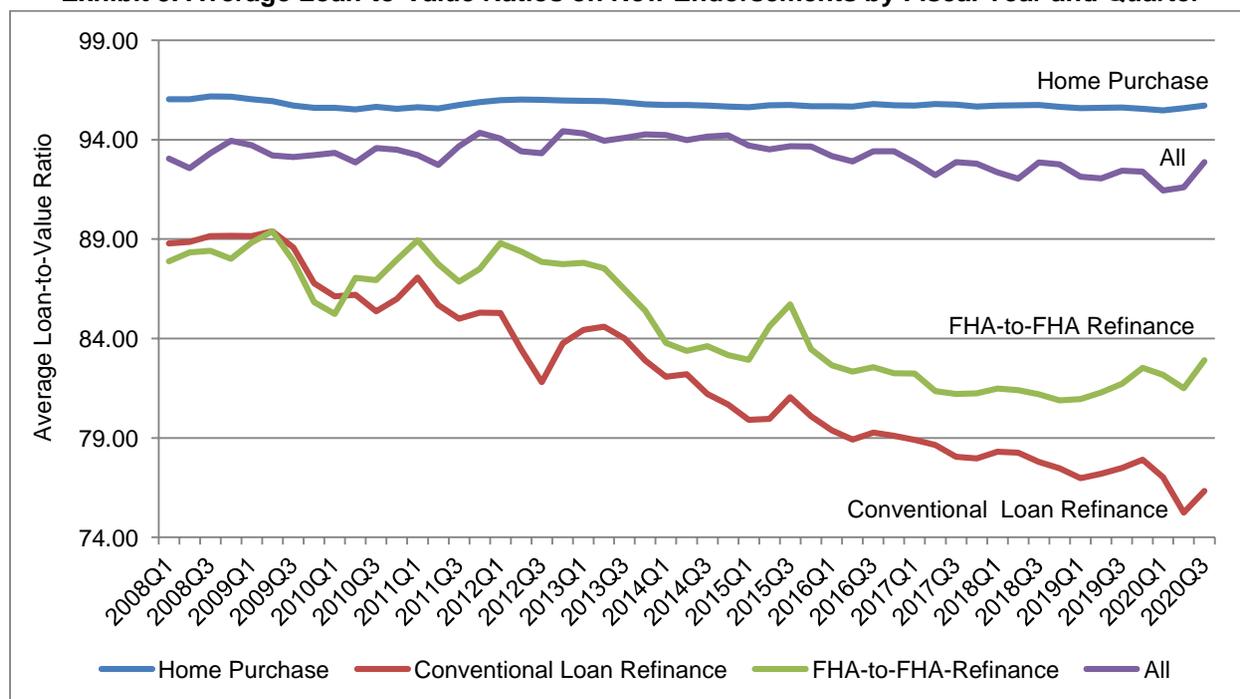


NOTE: Excludes streamline refinance and HECM activity.  
 SOURCE: U.S. Department of HUD/FHA, July 2020.

## Average Loan-to-Value (LTV)

The average LTV increased from 91.60 percent to 92.87 percent for all FHA mortgages combined. Typically, LTV ratios of refinance mortgages are lower than home purchase mortgages. (Exhibit 5, Exhibit A-1, Exhibit A-5, Exhibit A-6). 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.<sup>1</sup> 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.

**Exhibit 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, July 2020.

<sup>1</sup> Interested Party Contributions are contributions made to the borrower from an interested party to the transaction, customarily the property seller.

## Predicted and Actual Termination and Claim-Loss Rates

The predicted-versus-actual comparisons through the third quarter of FY 2020 are presented in Exhibit 6. Prepayment speeds were significantly higher than predicted. Claims were well below predicted. The number of actual claims through FY 2020 Q3 of 32,689 was 39.64 percent less than the predicted 54,161. That deviation comes from model forecasts and actuarial models deviating from actual experience. When institutional and/or borrower behaviors change, it can take a few years for the actuarial models to have enough data to reset the behavioral patterns to adapt to those changes (Exhibit 6).

**Exhibit 6. Termination and Claim Loss Experience Compared to Forecasts**

As of June 2020	Year to Date Predicted <sup>a</sup>	Year to Date Actual	Deviation (Actual Minus Predicted)	Percentage Deviation (Actual Versus Predicted)
Prepayments (number)	734,046	984,358	250,312	34.10
Claims (number) <sup>a</sup>	54,161	32,689	(21,472)	(39.64)
Claims (\$ millions) <sup>b</sup>	4,779	2,670	(2,109)	(44.14)
Net Loss on Claims (%) <sup>c</sup>	39.67	39.09	(0.58)	(1.47)

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.

<sup>a</sup> Projections of prepayment counts, claim counts, and claim dollars are modeled for the FY 2019 and FY 2020 FHA financial statements. All projections shown here use quarterly forecasts and thus reflect cyclical trends throughout the year.

<sup>b</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>c</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, July 2020.

## Budget Execution Credit Subsidy Rates

The budget execution subsidy rate for forward mortgages for FY 2020 Q3 is -2.27 percent. The subsidy rate for HECM mortgages is -0.08 percent for FY 2020 Q3 (Exhibit 7).

**Exhibit 7. Budget Execution Credit Subsidy Rates, FY 2020 Q3**

Type of Mortgage	Rate (%) <sup>a</sup>
Forward Mortgages	-2.27
Reverse Mortgages (HECM)	-0.08

<sup>a</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-2020-FCS/pdf/BUDGET-2020-FCS.pdf>. SOURCE: U.S. Department of HUD/FHA, July 2020.

## MMI Fund Cash and Investments

As Exhibit 8 shows, the total cash and investments of the MMI Fund increased to \$74.31 billion in FY 2020 Q3, \$6.68 billion is held in the Financing account, and \$67.63 billion is held in the Capital Reserve account.

**Exhibit 8. MMI Fund Cash and Investments by Quarter, FY 2012–FY 2020**

Fiscal Year	Quarter	Capital Reserve Account <sup>a</sup> (\$ billions)	Financing Account <sup>b</sup> (\$ billions)	Total <sup>c,d</sup> (\$ billions)
2012	Oct–Dec	5.70	27.58	33.29
	Jan–Mar	7.03	25.30	32.33
	Apr–Jun	9.75	21.86	31.62
	Jul–Sep	3.31	35.10	38.41
2013	Oct–Dec	7.14	29.99	37.13
	Jan–Mar	10.98	25.15	36.13
	Apr–Jun	15.80	17.35	33.15
	Jul–Sep	0.00	48.35	48.35
2014	Oct–Dec	2.61	44.48	47.10
	Jan–Mar	2.16	43.64	45.80
	Apr–Jun	4.87	40.43	45.31
	Jul–Sep	7.33	38.88	46.21
2015	Oct–Dec	10.43	35.76	46.20
	Jan–Mar	12.87	33.46	46.33
	Apr–Jun	11.97	34.52	46.49
	Jul–Sep	15.99	29.64	45.63
2016	Oct–Dec	18.17	27.34	45.51
	Jan–Mar	20.21	25.33	45.55
	Apr–Jun	34.44	16.55	50.99
	Jul–Sep	37.24	12.59	49.83
2017	Oct–Dec	40.32	9.58	49.90
	Jan–Mar	43.05	7.42	50.46
	Apr–Jun	28.82	22.83	51.65
	Jul–Sep	31.64	18.47	50.11
2018	Oct–Dec	33.49	17.34	50.83
	Jan–Mar	35.14	16.47	51.61
	Apr–Jun	25.35	27.08	52.42
	Jul–Sep	27.22	23.00	50.22
2019	Oct–Dec	28.89	20.63	49.52
	Jan–Mar	30.41	19.47	49.87
	Apr–Jun	48.41	10.43	58.84
	Jul–Sep	51.01	4.28	55.29
2020	Oct–Dec	52.90	3.76	56.66
	Jan–Mar	54.90	17.51	72.41
	Apr–Jun	67.63	6.68	74.31

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

<sup>a</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 reestimates.

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

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

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

SOURCE: U.S. Department of HUD/FHA, July 2020.

## Cash Flows from Business Operations

FY 2020 Q3 net cash flow was \$1,745 million compared to FY 2020 Q2 of \$1,187 million (Exhibit 9). HUD has been proactive in reducing average losses per claim through a more diversified asset disposition strategy, which includes the promotion of third-party sales at foreclosure auctions through its Claims Without Conveyance of Title (CWCOT) program, expanded eligibility for pre-foreclosure (short) sales and Distressed Asset Stabilization Program (DASP). Claim costs (as measured by loss rates) have decreased from a high of 63 percent in 2012 to less than 40 percent over the last four quarters (see Exhibit A-7).

**Exhibit 9. Business Operations Cash Flows, FY 2019 Q4–FY 2020 Q3 (\$ millions)**

	FY 2019 Q4	FY 2020 Q1	FY 2020 Q2	FY 2020 Q3	Past 4 Quarters
<b>Collections:</b>					
Premiums	3,587	3,710	3,533	3,539	14,369
Property Sale Receipts	351	372	443	487	1,653
Note Sale Proceeds	64	(1)	(2)	17	78
Notes Collections	448	455	390	392	1,685
Other (includes Settlements & Debt collections)	43	16	93	10	162
<b>Total</b>	<b>4,493</b>	<b>4,552</b>	<b>4,457</b>	<b>4,445</b>	<b>17,947</b>
<b>Disbursements:</b>					
Claims <sup>a</sup>	(3,751)	(3,315)	(3,168)	(2,658)	(12,892)
Property Maintenance	(24)	(28)	(34)	(31)	(117)
Other	(17)	(17)	(68)	(11)	(113)
<b>Total</b>	<b>(3,792)</b>	<b>(3,360)</b>	<b>(3,270)</b>	<b>(2,700)</b>	<b>(13,122)</b>
<b>Net Operations Cash Flow</b>	<b>701</b>	<b>1,192</b>	<b>1,187</b>	<b>1,745</b>	<b>4,825</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>a</sup> Claim 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, July 2020.

## Early-Payment Delinquency Rates

The Early-Payment Delinquency (EPD) rate for mortgages originated in FY 2020 Q1 increased by 20 basis points from the previous quarter. The increase is most likely the result of economic stress brought on by the COVID – 19 pandemic.

**Exhibit 10. Early Payment Delinquency Rates**

Fiscal Year	Origination Quarter	Mortgage Type/Purpose		
		Purchase	Refinance	All <sup>a</sup>
2013	Oct-Dec	0.25	0.20	0.23
	Jan-Mar	0.29	0.20	0.24
	Apr-Jun	0.32	0.22	0.27
	Jul-Sep	0.36	0.26	0.33
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	0.47	0.35	0.44
	Jan-Mar	0.56	0.30	0.49
	Apr-Jun	0.84	0.45	0.77
	Jul-Sep	0.96	0.47	0.87
2019	Oct-Dec	0.79	0.46	0.72
	Jan-Mar	0.76	0.42	0.68
	Apr-Jun	0.99	0.46	0.86
	Jul-Sep	0.84	0.41	0.71
2020	Oct-Dec	1.04	0.69	0.91

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

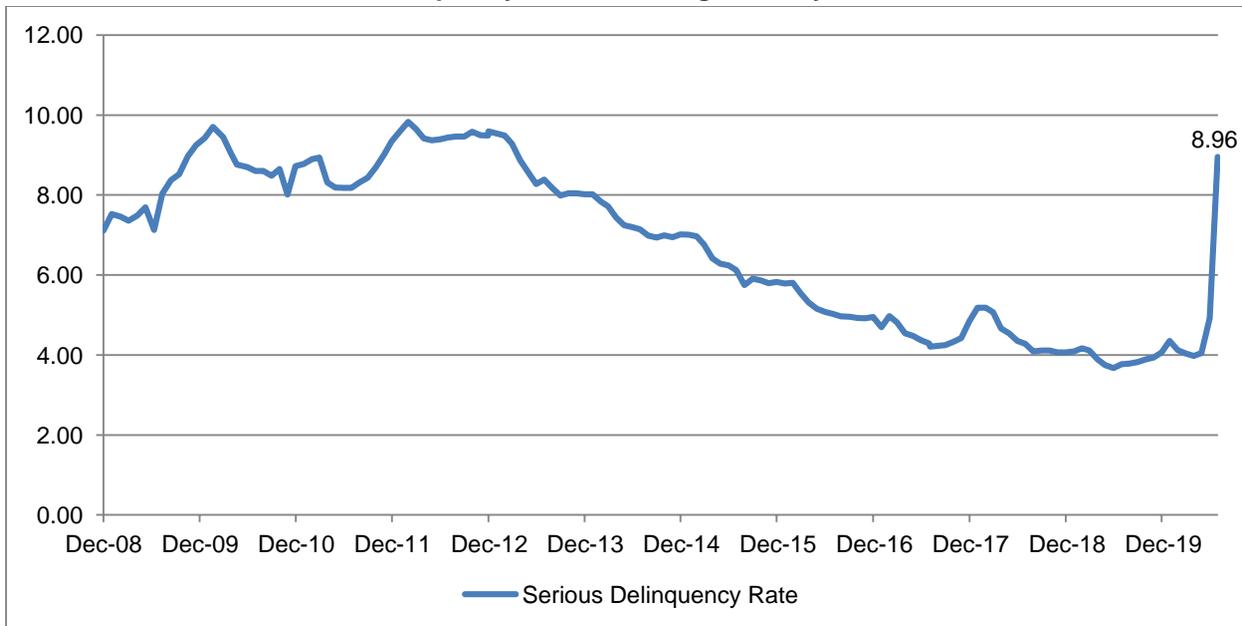
SOURCE: U.S. Department of HUD/FHA, July 2020.

## Serious Delinquency Rates

Serious delinquency (SDQ) rates for this quarter increased from 3.97 percent last quarter to 8.96 percent this quarter. For all cohorts, mortgages with down payment assistance (DPA) have typically underperformed those without DPA (Exhibit A-10).

SDQ rates tend to be somewhat seasonal and may fluctuate along current levels. We expect the seriously delinquency rates to continue to rise due to the current economic outlook from COVID-19.

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



SOURCE: U.S. Department of HUD/FHA, July 2020.

## **APPENDIX**

**Exhibit A-1. New Endorsement Counts**

	Forward Mortgages <sup>a</sup>				Reverse Mortgages (HECM) <sup>b</sup>
	Home Purchase	Conventional Loan Refinance	FHA-to-FHA Refinance	All Forward Loans	
<b>Fiscal Year</b>					
2011	777,101	194,811	224,760	1,196,672	73,112
2012	733,700	129,185	321,615	1,184,500	54,813
2013	702,415	91,500	550,930	1,344,845	59,924
2014	594,998	55,353	136,000	786,351	51,616
2015	753,387	80,014	282,829	1,116,230	57,990
2016	879,511	107,463	271,073	1,258,047	48,868
2017	882,077	126,878	237,480	1,246,435	55,291
2018	776,275	109,455	128,870	1,014,600	48,329
2019	743,279	103,946	143,199	990,424	31,272
2020	583,220	80,400	310,077	973,697	29,632
<b>Fiscal Year and Quarter</b>					
2014 Q1	152,965	14,611	40,910	208,486	13,094
2014 Q2	119,833	13,456	31,202	164,491	14,826
2014 Q3	148,017	13,573	32,042	193,632	12,590
2014 Q4	174,183	13,713	31,846	219,742	11,106
2015 Q1	154,806	15,826	30,966	201,598	14,199
2015 Q2	132,529	15,430	52,179	200,138	14,288
2015 Q3	198,802	21,486	114,367	334,655	14,058
2015 Q4	267,250	27,272	85,317	379,839	15,445
2016 Q1	210,550	27,164	63,471	301,185	12,578
2016 Q2	187,068	26,110	64,246	277,424	13,002
2016 Q3	225,132	26,059	65,903	317,094	11,643
2016 Q4	256,761	28,130	77,453	362,344	11,645
2017 Q1	220,353	30,153	87,011	337,517	12,453
2017 Q2	195,485	35,490	67,318	298,293	14,351
2017 Q3	230,474	31,055	44,003	305,532	14,721
2017 Q4	235,765	30,180	39,148	305,093	13,766
2018 Q1	195,513	30,092	42,032	267,637	14,024
2018 Q2	166,640	28,814	40,000	235,454	15,802
2018 Q3	202,746	25,314	24,269	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	153,567	23,759	24,631	201,957	8,222
2019 Q3	192,032	25,430	35,871	253,333	8,139
2019 Q4	218,090	28,562	59,765	306,417	7,525
2020 Q1	197,378	32,835	95,300	325,513	8,586
2020 Q2	194,075	28,595	112,152	334,822	10,207
2020 Q3	191,767	18,970	102,625	313,362	10,839

<sup>a</sup> Starting in FY 2008 Q4, these counts include 203(k) purchase and rehabilitation loans and 234(c) condominium loans.

<sup>b</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 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, July 2020.

## Exhibit A-2. Endorsement Volumes

	Volumes (\$ Billions)					Reverse Mortgages (HECM) <sup>b</sup>
	Forward Mortgages <sup>a</sup>				All Forward Loans	
	Home Purchase	Conventional Loan Refinance	FHA-to-FHA Refinance			
Fiscal Year						
2009	171,672	86,984	71,729	330,385	30,074	
2010	191,602	56,431	49,469	297,502	21,074	
2011	134,357	36,846	46,440	217,642	18,215	
2012	124,454	23,473	65,345	213,272	13,163	
2013	124,934	16,932	98,249	240,115	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	209,049	16,190	
2019	159,367	21,280	33,973	214,620	10,859	
2020	133,069	17,481	75,753	226,303	11,230	
Fiscal Year and Quarter						
2013 Q1	30,994	4,135	28,596	63,725	2,821	
2013 Q2	27,887	4,793	30,991	63,671	3,839	
2013 Q3	32,330	4,510	26,446	63,285	4,090	
2013 Q4	33,724	3,494	12,217	49,435	3,932	
2014 Q1	27,346	2,577	5,903	35,825	3,434	
2014 Q2	21,424	2,316	4,560	28,300	3,997	
2014 Q3	25,849	2,212	4,755	32,816	3,202	
2014 Q4	31,102	2,305	4,868	38,275	2,887	
2015 Q1	27,596	2,604	4,975	35,175	3,802	
2015 Q2	23,975	2,658	10,561	37,195	3,916	
2015 Q3	36,989	4,012	25,064	66,065	3,871	
2015 Q4	51,702	5,154	17,831	74,687	4,540	
2016 Q1	40,563	5,038	12,480	58,081	3,625	
2016 Q2	36,486	5,035	12,008	53,529	3,906	
2016 Q3	43,525	4,975	13,038	61,538	3,527	
2016 Q4	51,059	5,502	15,696	72,257	3,603	
2017 Q1	44,120	6,027	18,149	68,296	3,892	
2017 Q2	39,558	7,137	13,048	59,743	4,548	
2017 Q3	46,441	6,146	8,251	60,838	4,801	
2017 Q4	48,502	5,992	7,583	62,078	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	6,189	15,190	69,725	2,693	
2020 Q1	44,462	7,133	23,762	75,357	3,134	
2020 Q2	44,413	6,117	27,285	77,815	3,870	
2020 Q3	44,193	4,231	24,706	73,131	4,226	

<sup>a</sup> Starting in FY 2008 Q4, these counts include 203(k) purchase and rehabilitation loans and 234(c) condominium loans.

<sup>b</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, July 2020.

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

Fiscal Year	Quarter	Credit Score Range <sup>a</sup>				
		500–619	620–639	640–679	680–719	720–850
2012	Oct–Dec	4.17	7.98	31.20	23.80	32.85
	Jan–Mar	3.68	7.70	30.97	23.81	33.84
	Apr–Jun	3.31	7.19	32.22	24.14	33.14
	Jul–Sep	3.02	6.82	34.14	25.24	30.78
2013	Oct–Dec	2.85	6.35	35.08	25.92	29.79
	Jan–Mar	2.54	5.87	35.88	26.55	29.17
	Apr–Jun	2.07	5.65	38.19	27.31	26.78
	Jul–Sep	2.14	6.23	40.41	27.68	23.53
2014	Oct–Dec	2.66	7.66	42.36	27.22	20.10
	Jan–Mar	3.30	9.10	41.96	26.60	19.04
	Apr–Jun	3.84	10.43	42.04	26.32	17.38
	Jul–Sep	4.64	11.15	41.32	25.92	16.97
2015	Oct–Dec	5.96	12.30	40.39	25.38	15.97
	Jan–Mar	5.83	12.35	39.96	25.63	16.23
	Apr–Jun	5.35	11.57	38.02	26.45	18.62
	Jul–Sep	5.48	11.38	36.86	26.60	19.69
2016	Oct–Dec	6.01	11.84	36.64	26.07	19.45
	Jan–Mar	6.22	11.98	36.42	26.34	19.05
	Apr–Jun	6.06	12.78	37.23	25.65	18.27
	Jul–Sep	5.99	12.70	37.01	25.92	18.38
2017	Oct–Dec	6.63	12.87	36.57	25.75	18.18
	Jan–Mar	7.50	12.84	36.19	25.34	18.13
	Apr–Jun	8.38	13.72	36.45	24.35	17.10
	Jul–Sep	9.36	13.89	36.15	23.92	16.68
2018	Oct–Dec	10.36	14.41	36.34	23.19	15.69
	Jan–Mar	11.49	14.50	36.38	22.76	14.87
	Apr–Jun	11.66	15.29	37.36	22.12	13.56
	Jul–Sep	12.19	15.36	37.23	21.73	13.49
2019	Oct–Dec	13.34	15.41	36.62	21.12	13.51
	Jan–Mar	13.78	15.87	36.74	20.66	12.95
	Apr–Jun	13.08	16.39	37.70	20.66	12.18
	Jul–Sep	11.73	15.34	38.39	21.57	12.96
2020	Oct–Dec	11.42	14.90	37.53	22.04	14.12
	Jan–Mar	11.83	15.30	37.17	21.35	14.35
	Apr–Jun	8.80	13.58	40.04	23.13	14.46

NOTES: Shares are based on loan counts. Excludes streamline refinancing.

<sup>a</sup> 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. They are grouped here according to the “decision” score used for loan underwriting. The decision score represents the weakest borrower on a loan application when there are multiple applicants. Streamline refinance loans do not require full underwriting; therefore, they are not represented here.

SOURCE: U.S. Department of HUD/FHA, July 2020.

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

Fiscal Year	Quarter	Mortgage Purpose			
		Home Purchase	Conventional Loan Refinance	FHA-to-FHA Refinance <sup>a</sup>	All
2012	Oct–Dec	695	702	705	697
	Jan–Mar	695	707	708	698
	Apr–Jun	695	711	709	698
	Jul–Sep	695	698	704	696
2013	Oct–Dec	694	696	703	695
	Jan–Mar	694	697	703	695
	Apr–Jun	692	694	699	693
	Jul–Sep	689	685	690	689
2014	Oct–Dec	686	677	679	685
	Jan–Mar	684	674	675	682
	Apr–Jun	681	672	673	680
	Jul–Sep	680	671	671	679
2015	Oct–Dec	678	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	672	678
	Jan–Mar	679	675	669	678
	Apr–Jun	676	672	666	675
	Jul–Sep	676	669	664	674
2018	Oct–Dec	673	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

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. They are grouped here according to the “decision” score used for loan underwriting. The decision score represents the weakest borrower on a loan application when there are multiple applicants. Streamline refinance loans do not require full underwriting; therefore, they are not represented here.

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

SOURCE: U.S. Department of HUD/FHA, July 2020.

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

Loan-to-Value (LTV) Ratio <sup>a</sup> Distribution on New Endorsements By Fiscal Year and Quarter					
Fiscal Year	Quarter	LTV Categories (Shares in each row add up to 100%)			
		Up to 80	81-90	91-95	96-98 <sup>b</sup>
2012	Oct–Dec	5.85	12.02	9.33	72.80
	Jan–Mar	7.52	12.50	9.27	70.72
	Apr–Jun	7.67	11.34	8.96	72.04
	Jul–Sep	5.08	9.31	9.59	76.02
2013	Oct–Dec	5.17	9.99	10.14	74.70
	Jan–Mar	5.97	11.52	10.78	71.73
	Apr–Jun	5.64	10.27	9.75	74.35
	Jul–Sep	5.26	9.71	8.94	76.09
2014	Oct–Dec	5.58	9.95	9.00	75.47
	Jan–Mar	6.08	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	6.70	10.79	8.93	73.57
	Jan–Mar	7.10	11.65	8.97	72.28
	Apr–Jun	6.14	11.59	8.76	73.52
	Jul–Sep	6.44	11.13	8.35	74.08
2016	Oct–Dec	7.54	12.57	8.26	71.62
	Jan–Mar	8.12	13.32	8.26	70.30
	Apr–Jun	6.83	11.77	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	16.03	7.66	66.64
	Apr–Jun	8.02	13.83	7.57	70.58
	Jul–Sep	7.99	14.46	7.50	70.06
2018	Oct–Dec	8.83	16.41	7.42	67.34
	Jan–Mar	9.57	17.64	7.04	65.75
	Apr–Jun	7.87	14.44	6.88	70.81
	Jul–Sep	7.99	14.88	7.13	70.00
2019	Oct–Dec	9.31	16.80	7.07	66.83
	Jan–Mar	9.30	17.61	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	14.77	7.54	63.82
	Jan–Mar	17.57	8.14	8.06	66.24
	Apr–Jun	12.61	6.88	7.90	72.61

NOTES: Shares are based on loan counts. Excludes streamline refinancing.

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

<sup>b</sup> The statutory maximum LTV since October 1, 2008, is 96.5 percent. Prior to October 1, 2008, the statutory maximum was 97 percent, with higher allowances for borrowers financing loan closing costs into the mortgage balance. If there was such financing, then the statutory maximum was between 97 and 98.15 percent, depending on the geographic location and price of the property.

SOURCE: U.S. Department of HUD/FHA, July 2020.

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

Fiscal Year	Quarter	Mortgage Purpose			All <sup>a</sup>
		Home Purchase	Conventional Mortgage Refinance	FHA-to-FHA Refinance <sup>a</sup>	
2012	Oct–Dec	95.98	85.29	88.79	94.06
	Jan–Mar	96.01	83.44	88.37	93.41
	Apr–Jun	95.99	81.79	87.85	93.32
	Jul–Sep	95.96	83.74	87.73	94.43
2013	Oct–Dec	95.95	84.43	87.79	94.31
	Jan–Mar	95.93	84.59	87.53	93.95
	Apr–Jun	95.87	84.01	86.47	94.09
	Jul–Sep	95.77	82.88	85.39	94.26
2014	Oct–Dec	95.74	82.07	83.76	94.24
	Jan–Mar	95.73	82.19	83.36	93.98
	Apr–Jun	95.70	81.20	83.60	94.15
	Jul–Sep	95.66	80.68	83.15	94.21
2015	Oct–Dec	95.63	79.90	82.91	93.70
	Jan–Mar	95.72	79.95	84.61	93.52
	Apr–Jun	95.73	81.05	85.71	93.68
	Jul–Sep	95.67	80.09	83.45	93.66
2016	Oct–Dec	95.68	79.38	82.64	93.18
	Jan–Mar	95.65	78.92	82.33	92.90
	Apr–Jun	95.79	79.27	82.54	93.42
	Jul–Sep	95.72	79.11	82.25	93.42
2017	Oct–Dec	95.70	78.90	82.23	92.86
	Jan–Mar	95.78	78.64	81.35	92.21
	Apr–Jun	95.75	78.05	81.21	92.87
	Jul–Sep	95.65	77.97	81.24	92.79
2018	Oct–Dec	95.70	78.30	81.48	92.36
	Jan–Mar	95.72	78.25	81.40	92.04
	Apr–Jun	95.73	77.80	81.19	92.85
	Jul–Sep	95.64	77.48	80.88	92.76
2019	Oct–Dec	95.57	76.97	80.94	92.13
	Jan–Mar	95.60	77.20	81.29	92.05
	Apr–Jun	95.61	77.49	81.72	92.44
	Jul–Sep	95.54	77.91	82.52	92.39
2020	Oct–Dec	95.46	77.03	82.16	91.44
	Jan–Mar	95.57	75.24	81.49	91.60
	Apr–Jun	95.71	76.32	82.90	92.87

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

SOURCE: U.S. Department of HUD/FHA, July 2020

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

Fiscal Year	Quarter	Loss Rates (% Unpaid Principal Balance)			Disposition Counts			REO Alternatives Share of Dispositions
		REO Loss Rate	REO Alternatives Loss Rate	Overall Loss Rate	REO Dispositions	REO Alternatives Dispositions <sup>b</sup>	Total Dispositions	
2012	Oct-Dec	72.44	47.14	63.38	26,623	10,130	36,753	27.56
	Jan-Mar	71.21	45.87	61.97	23,015	9,709	32,724	29.67
	Apr-Jun	69.38	48.55	61.34	24,923	10,852	35,775	30.33
	Jul-Sep	67.99	48.00	60.64	28,385	11,909	40,294	29.56
2013	Oct-Dec	66.36	54.86	61.48	26,269	13,920	40,189	34.64
	Jan-Mar	64.18	48.90	58.30	27,132	12,241	39,373	31.09
	Apr-June	60.61	53.87	57.02	29,159	24,621	53,780	45.78
	Jul-Sep	59.56	51.33	54.96	28,722	29,525	58,247	50.69
2014	Oct-Dec	61.30	47.13	53.81	24,467	21,007	45,474	46.20
	Jan-Mar	62.87	50.33	54.70	20,110	26,245	46,355	56.62
	Apr-Jun	59.12	44.57	50.39	16,090	18,438	34,528	53.40
	Jul-Sep	57.68	46.60	49.55	12,982	26,582	39,564	67.19
2015	Oct-Dec	59.73	44.25	49.57	13,147	20,027	33,174	60.37
	Jan-Mar	61.47	43.25	52.62	14,019	10,372	24,391	42.52
	Apr-June	59.77	41.00	51.64	15,982	10,010	25,992	38.51
	Jul-Sep	60.63	46.40	52.81	16,942	15,587	32,529	47.92
2016	Oct-Dec	63.00	47.40	54.65	16,507	15,121	31,628	47.81
	Jan-Mar	63.52	45.96	54.27	14,758	13,323	28,081	47.44
	Apr-Jun	60.10	47.14	52.87	13,088	13,213	26,301	50.24
	Jul-Sep	59.92	50.29	53.96	12,843	16,428	29,271	56.12
2017	Oct-Dec	60.96	49.87	53.90	12,927	18,311	31,238	58.62
	Jan-Mar	62.24	40.15	51.01	11,828	10,877	22,705	47.91
	Apr-Jun	59.42	40.77	48.29	10,651	14,168	24,819	57.09
	Jul-Sep	59.19	40.22	46.24	7,972	15,766	23,738	66.42
2018	Oct-Dec	58.41	38.59	44.80	6,999	14,407	21,406	67.30
	Jan-Mar	59.09	41.89	47.45	7,160	13,314	20,474	65.03
	Apr-Jun	57.04	40.39	45.10	6,355	14,290	20,645	69.22
	Jul-Sep	56.26	38.28	43.18	5,248	12,442	17,690	70.33
2019	Oct-Dec	57.04	41.53	45.29	4,634	12,647	17,281	73.18
	Jan-Mar	56.87	37.24	42.05	4,310	12,038	16,348	73.64
	Apr-Jun	53.61	34.11	38.67	3,808	10,890	14,698	74.09
	Jul-Aug	51.22	31.53	36.22	3,516	9,756	13,272	73.51
2020	Oct-Dec	51.59	32.49	37.41	3,758	9,128	12,886	70.84
	Jan-Mar	50.64	30.71	36.63	4,361	8,545	12,906	66.21
	Apr-Jun <sup>a</sup>	48.65	30.90	36.62	2,549	4,578	7,127	64.23

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

<sup>a</sup> October and December 2019 only.

<sup>b</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. Short sales are part of the pre-foreclosure sale (PFS) program. 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 in order to reduce foreclosure costs for borrowers. Note Sales are conducted through the Distressed Asset Stabilization Program (DASP).

SOURCE: U.S. Department of HUD/FHA, July 2020.

**Exhibit A-8. Cash Out Refinance – 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
2012	Oct-Dec	4.39	0.91	8.05	3.47	14.33	68.84	255,796
	Jan-Mar	4.46	0.90	8.69	3.90	22.34	59.70	278,209
	Apr-Jun	4.04	0.82	8.01	3.62	22.27	61.24	316,060
	Jul-Sep	2.50	0.62	4.28	2.05	31.35	59.20	334,435
2013	Oct-Dec	2.31	0.66	4.14	2.22	40.32	50.37	353,126
	Jan-Mar	2.48	0.73	4.78	2.54	44.53	44.94	350,354
	Apr-Jun	2.36	0.79	4.42	2.17	39.39	50.87	356,380
	Jul-Sep	2.63	0.91	4.08	1.52	25.65	65.21	284,985
2014	Oct-Dec	3.08	1.27	3.93	1.13	17.22	73.37	208,486
	Jan-Mar	3.44	1.66	4.74	1.26	16.05	72.85	164,491
	Apr-Jun	3.10	1.51	3.91	1.15	13.88	76.44	193,632
	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	2.18	3.63	2.30	20.86	67.49	301,185
	Jan-Mar	5.42	2.22	3.98	1.47	11.67	76.79	277,424
	Apr-Jun	4.83	2.16	3.96	2.42	21.49	66.22	317,094
	Jul-Sep	4.75	2.02	3.39	3.06	29.09	59.41	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	298,293
	Apr-Jun	6.94	4.54	3.23	1.20	8.67	75.43	305,532
	Jul-Sep	7.16	5.27	2.73	1.15	6.42	77.28	305,093
2018	Oct-Dec	8.30	6.60	2.94	1.29	7.81	73.05	267,637
	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	201,957
	Apr-Jun	8.27	7.19	1.77	1.23	5.75	75.80	253,333
	Jul-Sep	7.76	7.08	1.56	2.01	10.42	71.17	306,417
2020	Oct-Dec	8.01	7.00	2.08	3.58	18.69	60.64	325,513
	Jan-Mar	6.15	4.80	2.39	4.09	24.60	57.96	334,822
	Apr-Jun	3.96	3.18	2.10	4.21	25.36	61.20	313,362

SOURCE: U.S. Department of HUD/FHA, July 2020.

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

Endorsement Fiscal Year	Quarter	Share of FHA Endorsed Purchase Mortgages				
		<=36	>36 - <43	>=43 - <50	>= 50	Average DTI
2012	Oct-Dec	30.61	25.45	27.48	16.47	40.58
	Jan-Mar	31.02	25.40	27.61	15.97	40.47
	Apr-Jun	31.80	25.79	27.32	15.09	40.23
	Jul-Sep	32.18	26.08	27.38	14.36	40.10
2013	Oct-Dec	32.76	26.45	26.96	13.83	39.91
	Jan-Mar	32.36	26.62	27.34	13.68	39.97
	Apr-Jun	32.83	27.04	27.35	12.77	39.81
	Jul-Sep	30.46	27.14	28.52	13.88	40.38
2014	Oct-Dec	28.81	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	28.64	28.87	27.53	14.96	40.71
	Jan-Mar	29.23	29.33	26.91	14.53	40.52
	Apr-Jun	31.28	29.04	25.86	13.81	40.08
	Jul-Sep	29.90	28.35	26.79	14.95	40.50
2016	Oct-Dec	28.75	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	41.25
	Jan-Mar	24.87	25.42	29.16	20.55	42.04
	Apr-Jun	24.85	25.32	29.17	20.66	42.05
	Jul-Sep	23.99	24.90	29.20	21.91	42.35
2018	Oct-Dec	23.32	24.38	29.26	23.04	42.59
	Jan-Mar	22.12	23.44	29.58	24.87	43.02
	Apr-Jun	21.21	23.55	29.99	25.25	43.23
	Jul-Sep	20.31	23.43	30.31	25.95	43.47
2019	Oct-Dec	19.48	22.52	30.56	27.45	43.83
	Jan-Mar	19.23	22.67	30.12	27.98	43.89
	Apr-Jun	20.51	23.60	29.54	26.35	43.46
	Jul-Sep	21.17	23.98	29.25	25.60	43.24
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	42.95

SOURCE: US Department of HUD/FHA, July 2020.

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

Endorsement Fiscal Year	Quarters	Government		Relative		Non-Government/ Non-Relative		No DPA	
		Share	SDQ	Share	SDQ	Share	SDQ	Share	SDQ
2012	Oct-Dec	8.24	13.48	23.06	9.50	0.61	10.56	68.09	6.55
	Jan-Mar	8.02	13.03	23.27	9.05	0.36	9.97	68.35	6.58
	Apr-Jun	7.51	12.66	20.74	9.12	0.32	10.45	71.42	6.70
	Jul-Sept	7.50	12.21	21.91	8.81	0.32	11.39	70.26	6.63
2013	Oct-Dec	7.72	11.69	22.51	8.89	0.36	9.57	69.41	6.57
	Jan-Mar	8.50	10.76	22.46	8.52	0.45	9.83	68.60	6.56
	Apr-Jun	8.09	10.58	21.01	8.69	0.42	7.96	70.48	6.95
	Jul-Sept	4.31	11.62	23.87	8.44	0.39	8.46	71.43	6.82
2014	Oct-Dec	7.19	10.96	26.24	8.50	0.40	8.53	66.18	6.58
	Jan-Mar	8.60	10.78	26.47	8.44	0.51	9.54	64.43	6.54
	Apr-Jun	8.77	10.13	23.96	8.38	0.70	6.71	66.58	6.66
	Jul-Sept	8.90	10.51	25.73	8.75	0.96	8.60	64.41	6.78
2015	Oct-Dec	9.61	10.25	27.51	9.40	1.13	8.19	61.75	7.13
	Jan-Mar	10.34	10.56	27.09	9.79	1.33	6.86	61.24	7.75
	Apr-Jun	9.62	10.19	24.34	10.01	1.60	8.16	64.44	7.62
	Jul-Sept	10.00	9.56	25.57	9.72	1.82	7.84	62.61	7.24
2016	Oct-Dec	10.94	9.40	27.26	9.67	2.15	8.01	59.65	7.36
	Jan-Mar	10.58	9.26	26.62	10.06	2.18	7.59	60.61	7.40
	Apr-Jun	9.86	8.88	25.10	10.63	1.63	8.10	63.42	8.15
	Jul-Sept	9.85	9.11	26.43	10.94	1.58	9.25	62.14	8.08
2017	Oct-Dec	10.34	8.88	26.86	11.02	1.77	9.66	61.03	8.36
	Jan-Mar	10.52	8.97	26.88	11.12	2.01	9.35	60.59	8.26
	Apr-Jun	10.38	9.44	24.76	10.77	1.64	9.81	63.22	7.88
	Jul-Sept	10.96	9.39	26.06	11.40	1.44	9.98	61.54	8.54
2018	Oct-Dec	11.77	9.91	26.45	11.03	1.26	10.62	60.53	8.55
	Jan-Mar	11.34	9.99	26.79	11.47	1.20	10.53	60.67	8.68
	Apr-Jun	10.76	9.89	25.29	11.16	1.25	11.31	62.70	8.47
	Jul-Sept	11.71	10.19	26.23	11.07	1.24	10.19	60.83	8.22
2019	Oct-Dec	12.25	10.69	26.74	10.94	1.08	10.59	59.94	8.11
	Jan-Mar	13.18	9.53	26.27	10.52	1.04	10.48	59.52	7.56
	Apr-Jun	13.05	8.26	24.03	9.85	1.04	8.49	61.88	6.96
	Jul-Sept	13.16	7.01	24.92	8.93	0.94	7.44	60.98	6.51
2020	Oct-Dec	14.47	5.58	25.15	8.16	0.88	6.10	59.50	5.94
	Jan-Mar	15.49	3.17	24.42	5.83	0.93	5.65	59.16	4.08
	Apr-Jun	15.95	0.04	21.90	0.25	0.92	0.28	61.23	0.13

SOURCE: US Department of HUD/FHA, July 2020.

**Exhibit A-11. Reverse Mortgage Program (HECM)**

Reverse Mortgage Loans (HECM) Claims<sup>a</sup> by Type

Fiscal Year	Quarter	Claim Type 1		Claim Type 2		Supplemental		Total <sup>b</sup>	
		Number	Total Claims Paid	Number	Total Claims Paid	Number	Total Claims Paid	Number	Total Claims Paid
2014	Oct-Dec	3,032	236,708,768	1,337	306,952,073	76	165,275	4,445	543,826,117
	Jan-Mar	2,977	243,464,207	1,827	396,681,617	49	112,194	4,853	640,258,017
	Apr-Jun	3,445	283,383,650	2,090	477,264,963	172	815,079	5,707	761,463,691
	July-Sep	2,819	226,894,442	1,874	423,459,523	429	1,061,179	5,122	651,415,144
2014 Total		12,273	990,451,066	7,128	1,604,358,176	726	2,153,727	20,127	2,596,962,969
2015	Oct-Dec	12,516	977,456,146	1,701	392,204,512	1,125	1,688,735	15,342	1,371,349,394
	Jan-Mar	7,142	574,998,013	1,880	453,417,423	4,259	8,666,375	13,281	1,037,081,812
	Apr-Jun	8,386	669,193,871	3,919	996,343,546	2,982	8,950,540	15,287	1,674,487,957
	July-Sep	6,222	517,499,053	3,810	969,598,335	3,953	14,192,066	13,985	1,501,289,453
2015 Total		34,266	2,739,147,083	11,310	2,811,563,817	12,319	33,497,716	57,895	5,584,208,616
2016	Oct-Dec	5,366	447,345,205	3,923	986,113,498	8,886	23,146,161	18,175	1,456,604,864
	Jan-Mar	5,854	455,189,374	3,874	972,917,814	11,526	24,824,881	21,254	1,452,932,070
	Apr-Jun	6,602	515,946,786	4,810	1,196,548,865	12,081	32,022,466	23,493	1,744,518,117
	July-Sep	6,021	467,520,045	5,941	1,450,894,509	18,517	76,463,822	30,479	1,994,878,376
2016 Total		23,843	1,886,001,410	18,548	4,606,474,686	51,010	156,457,331	93,401	6,648,933,427
2017	Oct-Dec	6,144	477,712,116	6,204	1,504,458,822	7,823	29,702,312	20,171	2,011,873,250
	Jan-Mar	7,203	581,198,659	5,783	1,401,927,594	6,623	18,908,074	19,609	2,002,034,327
	Apr-Jun	6,006	456,986,742	4,640	1,096,454,023	6,348	20,055,437	16,994	1,573,496,202
	July-Sep	4,739	361,379,418	5,653	1,309,239,889	5,811	14,970,627	16,203	1,685,589,934
2017 Total		24,092	1,877,276,936	22,280	5,312,080,328	26,605	83,636,449	72,977	7,272,993,713
2018	Oct-Dec	4,918	364,732,308	6,375	1,466,323,543	5,644	15,300,518	16,937	1,846,356,370
	Jan-Mar	4,702	365,552,817	5,424	1,241,859,664	5,496	18,069,817	15,622	1,625,482,298
	Apr-Jun	3,918	299,989,422	7,985	1,864,583,912	4,464	24,670,362	16,367	2,189,243,697
	July-Sep	4,076	312,957,811	8,110	1,866,905,224	3,910	21,055,093	16,096	2,200,918,128
2018 Total		17,614	1,343,232,358	27,894	6,439,672,343	19,514	79,095,791	65,022	7,862,000,491
2019	Oct-Dec	3,598	276,743,900	15,734	3,584,137,917	4,389	20,085,976	23,721	3,880,967,793
	Jan-Mar	3,864	298,948,014	10,105	2,339,723,175	4,268	18,247,891	18,237	2,656,919,079
	Apr-Jun	4,246	328,961,241	10,529	2,413,434,227	3,555	15,980,017	18,330	2,758,375,485
	July-Sep	4,221	344,844,946	10,605	2,475,623,023	3,681	14,470,082	18,507	2,834,938,051
2019 Total		15,929	1,249,498,101	46,973	10,812,918,342	15,893	68,783,965	78,795	12,131,200,407
2020	Oct-Dec	3,675	296,032,579	9,380	2,198,948,676	3,709	12,817,402	16,764	2,507,798,658
	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 <sup>a</sup>	2,799	228,369,975	7,665	1,817,705,062	3,205	11,785,928	13,669	2,057,860,965
2020 Total		10,394	843,481,801	26,175	6,125,269,088	10,539	40,152,711	47,108	7,008,903,600

<sup>a</sup> Claims comprise claim types *Foreclosure*, *Deed in Lieu of Foreclosure*, and *Mortgagor's Short Sale*.

<sup>b</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. Due to differences in timing and data sources, cash flow amounts may not reconcile fully with other tables in this report.

SOURCE: US Department of HUD/FHA, July 2020.