Quarterly Report to Congress

# Financial Status of the Mutual Mortgage Insurance Fund

Fiscal Year 2021, Quarter One



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 2021 Q1 Data as of December 31, 2020

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

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#### FOREWORD

On behalf of Secretary Fudge and Principal Deputy Assistant Secretary Lopa P. Kolluri 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 2021 First 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 October 1, 2020 through December 31, 2020.

Millions of Americans are facing continued hardship from the COVID-10 pandemic, and the Biden Administration is taking action to prioritize housing stability and keep individuals and families safely housed. The COVID-19 pandemic has created a National Emergency for the United States and brought economic challenges to homeowners with FHA loans, many of whom are first time, low-to-moderate income borrowers, and disproportionately homeowners of color. FHA has taken proactive policy steps to assist homeowners facing hardships during these unprecedented times, offering forbearance, deferral of payments, and streamlined loss mitigation options for those impacted by COVID-19. The agency has ramped up mortgage servicer and housing counselor engagement, ensuring tools and flexibilities needed to manage delinquent forward and reverse mortgage loans are available to reach homeowners in need. HUD has coordinated with other federal housing agencies including VA and USDA to achieve alignment, with support from the <u>Biden Administration</u>.

Early performance of the MMI Fund during FY 2020 showed improvement until the onset of the COVID-19 emergency in March 2020. The share of loans originated with higher risk attributes decreased or moderated in FY 2020. However, while early performance reflected overall improvement in the credit quality of FY 2020 endorsements during the first two quarters, portfolio performance deteriorated in the back end of the year, largely driven by COVID-19 related factors. COVID-19 related hardships continued in the first quarter of FY 2021. Seriously delinquent mortgages saw increases from 4 percent to approximately 12 percent compared to the same quarter of the previous year. Similarly, early payment defaults (EPDs) increased from less than one percent to almost six percent.

This quarterly report 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 it's Single-Family mortgage-insurance portfolio via the publication of other complementary reports, including the annual independent actuarial review of the MMI Fund and HUD's Annual Report to Congress on the Financial Status of the Mutual Mortgage Insurance Fund. All FHA reports can be found in the <u>Office of Housing Reading Room</u>.

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,

Shawn Jones

Shawn R. Jones Acting Associate 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
<ul> <li>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</li> </ul>	Single-Family forward endorsements during the first quarter of FY 2021 declined 0.47 percent by count from the prior quarter. Single-Family forward endorsement volume was \$84.66 billion, up by 0.83 percent from the prior quarter. Home Equity Conversion Mortgage (HECM) reverse mortgage endorsements by count were down 6.59 percent from the previous quarter. HECM endorsement volume, at \$4.71 billion for the first quarter of FY 2021, represents a decrease of 6.81 percent from the previous quarter.	<u>5</u> , <u>18</u> , <u>19</u>	<u>1, A-1</u> , <u>A-2</u>
B) Types of mortgages insured, categorized by risk	The average credit score this quarter decreased to 676. Endorsement share of 720+ credit score mortgages decreased from 15.78 percent to 15.20 percent. The share of less than 640 credit score mortgages increased from 16.16 percent to 17.10 percent. 22.87 percent of all FHA-insured forward mortgage purchase transactions in this quarter were comprised of mortgages where the debt-to-income (DTI) ratio is above 50 percent. This is up from last quarter and down from 25.40 the same quarter last year. The average DTI for mortgages endorsed this quarter was 43.07. Average property loan-to-value ratio for all endorsements during this period decreased to 93.43 percent.	$\begin{array}{c} \underline{6}, \\ \underline{7,8}, \\ \underline{9}, \\ \underline{10}, \\ \underline{19}, \\ \underline{20}, \\ \underline{21}, \\ \underline{22}, \\ \underline{23}, \\ \underline{26} \end{array}$	<u>2, 3a,</u> <u>3b, 4,</u> <u>5, A-3,</u> <u>A-4,</u> <u>A-5,</u> <u>A-6,</u> <u>A-9</u>
C) Any significant changes between actual and projected claim and prepayment activity	Prepayment speeds this quarter were 30.22 percent higher than predicted. Claims were 77.45 percent below predicted level by count and 79.75	<u>11</u> ,	<u>6</u> ,

	percent below predicted level by dollar amount.		
D) Projected versus actual loss rates	The year-to-date actual net loss rate on claim activity of 35.20 percent is higher than the projection of 30.09 percent.	<u>11</u>	<u>6</u>
E) Updated projections of the annual subsidy rates	The budget execution credit subsidy rates (CSR) for FY 2021 Q1 are at 3.36 percent for forward mortgages and -2.39 for HECMs.	<u>12</u>	<u>7</u>

Additional Risk Factors	Summary	Page	Exhibit
F) MMI Fund Cash and Investments	The MMI Fund Cash and Investments account total balance at the end of FY 2021 Q1 was \$82.27 billion, up from \$79.86 billion last quarter.	<u>13</u>	<u>8</u>
G) Business Operations Cash Flow	FHA received approximately \$4.76 billion in revenues from premium collections, sale of notes and properties, and other revenue. FHA paid \$2.43 billion in claims and property expenses. In FY 2021 Q1, core business-operations cash flow increased to \$2.33 billion mostly due to a lower volume of claims.	<u>14</u>	<u>9</u>
H) Early Payment Default	The early payment default (EPD) rate decreased this quarter to 6.06 percent, from 8.90 percent last quarter.	<u>15</u>	<u>10</u>
I) Serious Delinquency Rates	The portfolio-level serious delinquency rate increased this quarter to 11.89 percent, from 11.59 percent last quarter. However, subsequent to FY2021Q1 end serious delinquency rates have slightly declined and are at 11.83 percent for month ending January 31, 2021.	<u>16</u>	<u>11</u>
J) Termination Claim Type with Loss Severity Rates	The forward portfolio loss rate decreased to 35.40 percent from 38.47 percent last quarter. Total loan dispositions fell from 8,286 last quarter to 4,329 this quarter due to FHA's	<u>24</u>	<u>A-7</u>

Additional Risk Factors	Summary	Page	Exhibit
	temporary foreclosure and eviction moratorium.		
K) Cash-Out Refinancing Rates	Purchase mortgage share decreased from 65.27 percent last quarter to 63.80 percent. Cash-out refinance mortgage share increased to 5.33 percent from 4.48 percent last quarter.	<u>25</u>	<u>A-8</u>
L) Down Payment Assistance (DPA) – Serious Delinquency Rate (SDQ)	The share of Down Payment Assistance (Purchase only mortgages) increased from 39.19 percent last quarter to 40.72 percent.	<u>27</u>	<u>A-10</u>
M) Reverse Mortgage (HECM) Program Claims	Total HECM program claims decreased this quarter from 11,872 loans to 9,263 loans due to lower number of assigned Claims (Type 1, Type 2 and Supplemental) to HUD.	<u>28</u>	<u>A-11</u>

## **Endorsement Activity**

During the first quarter of fiscal year (FY) 2021, FHA endorsed 357,540 forward mortgages for insurance, a decrease of 0.47 percent from the prior quarter (Exhibit A-1).

The dollar volume of refinance endorsements (Conventional to FHA, FHA to FHA) in the quarter was up 2.82 percent from the previous quarter, while the dollar volume of all forward-mortgage endorsements increased 0.83 percent (Exhibit A-2).

FHA-to-FHA refinance activity, in terms of endorsed mortgages increased by 2.79 percent from the previous quarter, from 110,605 to 113,686. Over the last two years, FHA has seen a significant increase of FHA streamline loan endorsements.

HECM endorsement volume, \$4.71 billion for the first quarter of FY 2021, was down 6.81 percent from the previous quarter. HECM endorsement counts in FY 2021 Q1 of 11,386 were down 6.59 percent from last quarter.





SOURCE: U.S. Department of HUD/FHA, January 2021.

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## **FHA Loan Credit Characteristics**

Average credit scores decreased to 676. This remains above the level preceding the mortgage and credit crisis, and below the peak of 703 in FY 2011 Q2 (Exhibit 2, Exhibit A-4).





NOTE: Excludes streamline refinance and HECM endorsements. SOURCE: U.S. Department of HUD/FHA, January 2021

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As shown in Exhibit 3a, the distribution of credit scores on FHA loans has gradually changed over the past few years. The core of the distribution is in the 640–679 range (42.78 percent). In FY 2021 Q1 the share of 680–850 credit scores decreased by 1.36 percentage points from FY 2020 Q4. (Exhibit 3a, Exhibit A-3).

Exhibit 3a, shows that FHA's credit risk profile has been shifting from nearly 50 percent of mortgages with 680 and greater credit scores in FY 2012 to about 40 percent, currently. At the same time, the share of mortgages with less than 640 credit scores declined to around 17 percent from 26 percent a year ago.

As shown in Exhibit 3b, FHA loans originated with greater than 720 credit scores decreased to 15.20 percent in Q1 FY 2021 from 15.78 percent in Q4 FY 2020, while FHA loans originated with less than 620 credit scores increased modestly from 4.45 percent in Q4 FY 2020 to 4.81 percent in Q1 FY 2021.





NOTE: Excludes streamline refinance and HECM activity. SOURCE: U.S. Department of HUD/FHA, January 2021.



Exhibit 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, January 2021.

## **Debt-to-Income (DTI)**

From FY 2015 to FY 2019 FHA saw average increases in the concentration of purchase mortgages with high debt-to-income (DTI) ratios. More than 22 percent of all FHA-insured forward mortgage purchase transactions in FY 2021 are comprised of mortgages with DTI ratios exceeding 50 percent. The average DTI for all endorsements during this quarter was 43.07.





NOTE: Excludes streamline refinance and HECM activity. SOURCE: U.S. Department of HUD/FHA, January 2021.

## Average Loan-to-Value (LTV)

The average LTV ratio decreased from 93.89 percent to 93.43 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, January 2021.

<sup>&</sup>lt;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 first quarter of FY 2021 are presented in Exhibit 6. Prepayment speeds were significantly higher than predicted. Claims were well below predicted. The number of actual claims through FY 2021 Q1 of 5,224 was 77.45 percent less than the predicted 23,167. 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).

As of December, 2020	Year to Date Predicted <sup>a</sup>	Year to Date Actual	Deviation (Actual Minus Predicted)	Percentage Deviation (Actual Versus Predicted)
Prepayments (number)	362,774	472,394	109,620	30.22
Claims (number) <sup>a</sup>	23,167	5,224	(17,943)	(77.45)
Claims (\$ millions) <sup>b</sup>	1,785	362	(1,424)	(79.75)
Net Loss on Claims (%) <sup>c</sup>	30.09	35.20	5.11	16.98

Exhibit 6. Termination and Claim Loss Experience Compared to Forecasts

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 2020 and FY 2021 FHA financial totaments. All projections of prepayment counts have used and thus reflect a value totaments.

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.

## **Budget Execution Credit Subsidy Rates**

The budget execution subsidy rate for forward mortgages for FY 2021 Q1 is -3.36 percent. The subsidy rate for HECM mortgages is -2.39 percent for FY 2021 Q1 (Exhibit 7).

Type of Mortgage	Rate (%)ª
Forward Mortgages	-3.36
Reverse Mortgages (HECM)	-2.39
<sup>a</sup> Budget execution credit subsidy rates are the expected net present value, per dollar of new ins	urance

#### Exhibit 7. Budget Execution Credit Subsidy Rates, FY 2021 Q1

<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 cash flows. For a historical breakdown of credit subsidy rates and re-estimates, see <a href="https://www.govinfo.gov/content/pkg/BUDGET-2021-FCS/pdf/BUDGET-2021-FCS/pdf/BUDGET-2021-FCS.pdf">https://www.govinfo.gov/content/pkg/BUDGET-2021-FCS/pdf/BUDGET-2021-FCS.pdf</a>. SOURCE: U.S. Department of HUD/FHA, January 2021.

## **MMI Fund Cash and Investments**

As Exhibit 8 shows, the total cash, and investments of the MMI Fund increased to \$82.27 billion in FY 2021 Q1, \$9.62 billion is held in the Financing account, and \$72.65 billion is held in the Capital Reserve account.

Fiscal Year	Quarter	Capital Reserve Account <sup>a</sup> (\$ billions)	Financing Account <sup>b</sup> (\$ billions)	Total <sup>c,d</sup> (\$ billions)
	Oct–Dec	5.70	27.58	33.29
	Jan–Mar	7.03	25.30	32.33
2012	Apr–Jun	9.75	21.86	31.62
	Jul–Sep	3.31	35.10	38.41
	Oct–Dec	7.14	29.99	37.13
2012	Jan–Mar	10.98	25.15	36.13
2013	Apr–Jun	15.80	17.35	33.15
	Jul–Sep	0.00	48.35	48.35
	Oct–Dec	2.61	44.48	47.10
2014	Jan–Mar	2.16	43.64	45.80
2014	Apr–Jun	4.87	40.43	45.31
	Jul–Sep	7.33	38.88	46.21
	Oct–Dec	10.43	35.76	46.20
2015	Jan-Mar	12.87	33.46	46.33
	Apr–Jun	11.97	34.52	46.49
	Jul–Sep	15.99	29.64	45.63
	Oct–Dec	18.17	27.34	45.51
2016	Jan–Mar	20.21	25.33	45.55
	Apr–Jun	34.44	16.55	50.99
	Jul-Sep	37.24	12.59	49.83
	Oct–Dec	40.32	9.58	49.90
2017	Jan–Mar	43.05	7.42	50.46
	Apr–Jun Jul–Sep	28.82 31.64	22.83 18.47	51.65 50.11
	Oct–Dec	33.49	17.34	50.83
	Jan–Mar	35.14	16.47	51.61
2018	Apr-Jun	25.35	27.08	52.42
	Jul-Sep	23.33	23.00	50.22
	Oct–Dec	28.89	20.63	49.52
0040	Jan–Mar	30.41	19.47	49.87
2019	Apr–Jun	48.41	10.43	58.84
	Jul–Sep	51.01	4.28	55.29
	Oct-Dec	52.90	3.76	56.66
2020	Jan–Mar	54.90	17.51	72.41
	Apr–Jun Jul–Sep	67.63 69.57	6.68 10.28	74.31 79.86
2021	Oct–Dec	72.65	9.62	82.27

Exhibit 8. MMI Fund Cash and Investments by Quarter, FY 2012-FY 2021

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.

## **Cash Flows from Business Operations**

FY 2021 Q1 net cash flow was \$2,333 million compared to FY 2020 Q4 of \$2,249 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).

				-	
	FY 2020 Q2	FY 2020 Q3	FY 2020 Q4	FY 2021 Q1	Past 4 Quarters
Collections:					
Premiums	3,533	3,539	3,791	3,756	14,619
Property Sale Receipts	443	487	394	279	1,603
Note Sale Proceeds	(2)	17	19	0	34
Notes Collections Other (includes Settlements & Debt	390	392	518	670	1,970
collections)	93	10	17	56	176
Total	4,457	4,445	4,739	4,761	18,402
Disbursements:					
Claims <sup>a</sup>	(3,168)	(2,658)	(2,436)	(2,363)	(10,625)
Property Maintenance	(34)	(31)	(25)	(19)	(109)
Other	(68)	(11)	(29)	(46)	(154)
Total	(3,270)	(2,700)	(2,490)	(2,428)	(10,888)
Net Operations Cash Flow	1,187	1,745	2,249	2,333	7,514

#### Exhibit 9. Business Operations Cash Flows, FY 2020 Q2–FY 2021 Q1 (\$ millions)

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).

## **Early-Payment Default Rates**

The Early-Payment Default (EPD) rate has increased as a result of ongoing COVID-19 hardships and the volume of loans entering forbearance. Virtually the entire increase occurred beginning May 2020, at the height of the pandemic's economic fallout. The EPD rate quickly increased to 9 percent by mid-year of FY 2020 and is now 6.06 percent.

Fiscal Year	Origination	Mortgage Type/Purpose		pose
	Quarter	Purchase	Refinance	All <sup>a</sup>
	Oct-Dec	0.25	0.20	0.23
2042	Jan-Mar	0.29	0.20	0.24
2013	Apr-Jun	0.32	0.22	0.27
	Jul-Sep	0.36	0.26	0.33
	Oct-Dec	0.32	0.29	0.31
2014	Jan-Mar	0.37	0.33	0.36
2014	Apr-Jun	0.46	0.37	0.44
	Jul-Sep	0.45	0.34	0.43
	Oct-Dec	0.36	0.27	0.34
2045	Jan-Mar	0.42	0.24	0.35
2015	Apr-Jun	0.43	0.28	0.37
	Jul-Sep	0.42	0.34	0.40
	Oct-Dec	0.31	0.27	0.30
0040	Jan-Mar	0.37	0.23	0.32
2016	Apr-Jun	0.46	0.34	0.42
	Jul-Sep	0.45	0.32	0.41
	Oct-Dec	0.31	0.22	0.28
2017	Jan-Mar	0.41	0.24	0.35
	Apr-Jun	1.14	0.65	1.02
	Jul-Sep	1.44	1.17	1.38
	Oct-Dec	0.47	0.35	0.44
2018	Jan-Mar	0.56	0.30	0.49
2010	Apr-Jun	0.84	0.45	0.77
	Jul-Sep	0.96	0.47	0.87
	Oct-Dec	0.79	0.46	0.72
2019	Jan-Mar	0.76	0.42	0.68
	Apr-Jun	0.99	0.46	0.86
	Jul-Sep	0.84	0.41	0.71
	Oct-Dec	2.61	2.35	2.51
2020	Jan-Mar	8.70	9.17	8.90
<sup>a</sup> Percent of mortgages	Apr-Jun*	5.51	6.94	6.06

Exhibit 10. Early Payment Default Rates

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

\*Data for Apr and May only.

### **Serious Delinquency Rates**

The pandemic and its impact to the health and economic condition of citizens has created an increase in Serious delinquency (SDQ) rates from 11.59 percent last quarter to 11.89 percent this quarter. The increase is a result of the hardships that FHA borrowers experienced due to the COVID-19 economic and health crisis, and borrowers that have fallen behind on their mortgages having received forbearance, which allows them to delay payments under the CARES Act. Virtually the entire increase occurred beginning May 2020, resulting from the onset of the COVID-19 pandemic. The SDQ rate continues to rise in FY 2021, to nearly 12 percent as of December 31.





## APPENDIX

Forward Mortgages <sup>a</sup>					
-		Conventional	FHA-to-FHA		Reverse Mortgages
	Home Purchase	Loan	Refinance	All Forward Loans	(HECM) <sup>b</sup>
		Refinance			
Fiscal Year 2014	594,998	55,353	136,000	786,351	51,616
2014	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	743,277	103,948	143,199	990,424	31,272
2020	817,843	94,554	420,755	1,333,152	41,821
2021	228,100	15,754	113,686	357,540	11,386
Fiscal Year ar					
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 Q2 2017 Q3	230,474	31,055	44,003	305,532	14,721
2017 Q3 2017 Q4	230,474				
		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	153,566	23,759	24,631	201,956	8,222
2019 Q3	192,032	25,430	35,872	253,334	8,139
2019 Q4	218,089	28,564	59,764	306,417	7,525
2020 Q1	197,378	32,834	95,300	325,512	8,586
2020 Q2	194,073	28,595	112,154	334,822	10,206
2020 Q3	191,925	18,979	102,696	313,600	10,840
2020 Q4	234,467	14,146	110,605	359,218	12,189
2021 Q1	228,100	15,754	113,686	357,540	11,386

<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, January 2021.

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2011         134,366         36,846         46,440         217,642         18,2           2012         124,454         23,473         65,345         213,272         13,1           2013         124,934         16,932         98,249         240,115         144,66           2014         105,721         9,410         20,085         135,216         13,5           2016         171,632         20,550         53,223         245,405         144,66           2017         178,621         25,303         47,031         250,955         17,66           2018         160,894         21,678         26,477         209,049         16,1           2020         188,216         20,591         101,515         310,322         16,2           2021         54,995         3,420         26,244         84,659         4,7           75,623         27,544         2,212         4,755         32,816         32,2           2014 Q1         27,346         2,577         5,903         35,825         3,4           2014 Q2         21,424         2,316         4,560         28,30         3,9           2014 Q3         25,849         2,212         4,755         32			Volumes (\$ Billions)						
Home Purchase         Conventional Loan Refinance         FHA-to-FHA Refinance         All Forward Loans         Mortogoes (HECM)*           2010         191,603         56,431         49,469         297,503         21,02           2011         134,356         36,846         46,440         217,622         13,1           2012         124,454         23,473         66,335         213,272         13,1           2013         124,934         16,932         98,249         240,115         14,63           2014         105,721         9,410         20,050         53,223         245,405         14,63           2017         178,621         225,530         47,031         250,955         17,66           2018         160,884         21,678         26,477         209,049         16,12           2020         188,216         20,591         101,515         310,322         16,22           2021         54,995         3,420         26,244         84,695         33,42           2014 Q2         21,424         2,216         4,560         28,300         3,92           2014 Q2         21,424         2,577         5,903         35,825         3,42           2014 Q2         <			Forward Mortgages <sup>a</sup>						
$\begin{array}{c c c c c c c c c c c c c c c c c c c $						Mortgages			
2011         134,366         36,846         46,440         217,642         18,2           2012         124,454         23,473         65,345         213,272         13,1           2013         124,934         16,932         98,249         240,115         144,66           2014         105,721         9,410         20,085         135,216         13,5           2015         140,262         14,428         58,431         213,121         16,1           2016         171,632         20,550         53,223         245,405         14,62           2017         178,621         25,303         47,031         250,955         17,6           2018         160,894         21,678         26,477         209,049         16,1           2020         188,216         20,591         101,515         310,322         16,2           2021         54,995         3,420         26,244         84,659         4,7           2014 Q1         27,346         2,577         5,903         35,825         3,4           2014 Q2         21,424         2,316         4,560         28,30         3,9           2014 Q3         25,849         2,212         4,755         32	Fiscal Year								
2011         134,366         36,846         46,440         217,642         18,2           2012         124,454         23,473         65,345         213,272         13,1           2013         124,934         16,932         98,249         240,115         144,66           2014         105,721         9,410         20,085         135,216         13,5           2015         140,262         14,428         58,431         213,121         16,1           2016         171,632         20,550         53,223         245,405         14,62           2017         178,621         25,303         47,031         250,955         17,6           2018         160,894         21,678         26,477         209,049         16,1           2020         188,216         20,591         101,515         310,322         16,2           2021         54,995         3,420         26,244         84,659         4,7           2014 Q1         27,346         2,577         5,903         35,825         3,4           2014 Q2         21,424         2,316         4,560         28,30         3,9           2014 Q3         25,849         2,212         4,755         32	2010	191,603	56,431	49,469	297,503	21,074			
2012         124,454         23,473         65,345         213,272         13,1           2013         124,934         16,932         98,249         240,115         14,65           2014         105,721         9,410         20,085         135,516         13,55           2015         140,262         14,428         58,431         213,121         16,1           2016         171,632         22,0550         53,223         245,405         14,66           2017         178,621         25,303         47,031         250,955         17,6           2018         160,894         21,678         26,477         209,049         16,1           2020         158,246         20,591         101,515         310,322         16,2           2021         54,995         3,420         26,244         84,659         4,7           Fiscal Year and Quarter         -         -         -         5,903         35,825         3,4           2014 Q1         27,346         2,577         5,903         35,825         3,4           2014 Q2         21,424         2,316         4,868         38,275         2,8           2014 Q3         26,849         2,615 <td< td=""><td></td><td></td><td></td><td></td><td></td><td>18,215</td></td<>						18,215			
2013         124,934         16,932         98,249         240,115         14,6           2014         105,721         9,410         20,085         135,216         135,216           2016         140,262         14,428         58,431         213,121         16,1           2016         171,632         20,550         53,223         245,405         14,6           2017         178,621         25,303         47,031         250,955         17,6           2018         160,894         21,678         26,477         209,049         16,1           2019         159,366         21,281         33,973         214,620         10,8           2020         188,216         20,591         101,151         310,322         16,2           2021         54,995         3,420         26,244         84,659         4,7           Fiscal Year and Quarter         27,346         2,577         5,903         35,825         3,4           2014 Q1         27,442         2,316         4,650         28,300         3,9         2014 Q3         25,849         2,212         4,755         32,816         3,2           2014 Q2         21,424         2,316         4,562         3,3,9<						13,163			
$\begin{array}{c c c c c c c c c c c c c c c c c c c $					-	14,681			
$\begin{array}{c c c c c c c c c c c c c c c c c c c $						13,521			
$\begin{array}{c c c c c c c c c c c c c c c c c c c $						16,130			
$\begin{array}{c c c c c c c c c c c c c c c c c c c $						14,660			
2018         160,894         21,678         26,477         209,049         16,1           2019         159,366         21,281         33,973         214,620         10.8           2020         188,216         20,591         101,515         310,322         16,2           2021         54,995         3,420         26,244         84,659         4,7           Fiscal Year and Quarter         7         5,903         35,825         3,44           2014 Q1         27,346         2,577         5,903         35,825         3,44           2014 Q2         21,424         2,316         4,560         28,300         3,99           2014 Q3         25,849         2,212         4,755         32,816         3,22           2014 Q4         31,102         2,305         4,868         38,275         2,88           2015 Q2         23,975         2,668         10,561         37,195         3,89           2015 Q3         36,989         4,012         2,604         66,065         3,88           2015 Q4         51,702         5,154         17,831         74,687         4,55           2016 Q3         43,525         4,975         13,038         61,538						17,691			
$\begin{array}{c c c c c c c c c c c c c c c c c c c $						16,190			
2020         188,216         20,591         101,515         310,322         16,2           2021         54,995         3,420         26,244         84,659         4,77           Fiscal Year and Quarter         2014 Q1         27,346         2,577         5,903         35,825         3,4           2014 Q2         21,424         2,316         4,560         28,300         3,9           2014 Q3         25,849         2,212         4,755         32,816         3,2           2014 Q4         31,102         2,305         4,868         38,275         2,8           2015 Q1         27,596         2,604         4,975         35,175         3,8           2015 Q3         36,989         4,012         25,064         66,065         3,8           2015 Q4         51,702         5,154         17,831         74,687         4,5           2016 Q1         40,563         5,038         12,480         58,081         3,6           2016 Q2         36,486         5,035         12,008         53,529         3,9           2016 Q3         43,525         4,975         13,038         61,538         3,5           2016 Q4         51,059         5,502					-	10,859			
202154,9953,42026,24484,6594,7Fiscal Year and Quarter27,3462,5775,90335,8253,42014 Q127,3462,5775,90335,8253,42014 Q221,4242,3164,56028,3003,92014 Q325,8492,2124,75532,8163,22014 Q431,1022,3054,86838,2752,82015 Q127,5962,6644,97535,1753,82015 Q223,9752,66810,56137,1953,92015 Q336,8894,01225,06466,0653,82015 Q451,7025,15417,83174,6874,52016 Q140,5635,03812,40858,0813,62016 Q236,4865,03512,00853,5293,92016 Q343,5254,97513,03861,5383,52016 Q451,0595,50215,69672,2573,62017 Q144,1206,02718,14968,2963,82017 Q239,5587,13713,04859,7434,52017 Q346,4416,1468,25160,8384,82017 Q448,5025,9927,58362,0784,42018 Q234,8035,7828,37448,9595,3,32018 Q341,6775,0074,91551,5993,12018 Q444,1764,9494,68153,8063,02019 Q3 <td></td> <td></td> <td></td> <td></td> <td></td> <td>16,283</td>						16,283			
Fiscal Year and Quarter           2014 Q1         27,346         2,577         5,903         35,825         3,4           2014 Q2         21,424         2,316         4,560         28,300         3,9           2014 Q3         25,849         2,212         4,755         32,816         3,2           2014 Q4         31,102         2,305         4,868         38,275         2,8           2015 Q1         27,596         2,604         4,975         35,175         3,8           2015 Q2         23,975         2,658         10,561         37,195         3,9           2015 Q3         36,989         4,012         25,064         66,065         3,8           2016 Q4         51,702         5,154         17,831         74,687         4,5           2016 Q2         36,486         5,035         12,008         53,529         3,9           2016 Q4         51,059         5,502         15,696         72,257         3,6           2017 Q1         44,120         6,027         18,149         68,296         3,8           2017 Q2         39,558         7,137         13,048         59,743         4,5           2017 Q3         46,441 <td< td=""><td></td><td></td><td></td><td></td><td></td><td>4,709</td></td<>						4,709			
2014 Q221,4242,3164,56028,3003,92014 Q325,8492,2124,75532,8163,222014 Q431,1022,3054,86838,2752,882015 Q127,5962,6044,97535,1753,82015 Q223,9752,65810,65137,1953,92015 Q336,9894,01225,06466,0653,82015 Q451,7025,15417,83174,6874,52016 Q140,5635,03812,48058,0813,62016 Q236,4865,03512,00853,5293,92016 Q343,5254,97513,03861,5383,52016 Q451,0595,50215,69672,2573,62017 Q144,1206,02718,14968,2963,82017 Q346,4416,1468,25160,8384,82017 Q448,6505,9397,58362,0784,42018 Q234,8035,7828,37448,9595,32018 Q341,6775,0074,91551,5993,12018 Q444,1764,9494,68153,8063,02019 Q340,9475,2638,57354,7832,82019 Q340,9475,2638,57354,7832,82019 Q448,3456,19015,18969,7242,662020 Q144,4827,13323,76275,5573,12020 Q244,413			,	· · ·	,	,			
2014 Q325,8492,2124,75532,8163,22014 Q431,1022,3054,86838,2752,82015 Q127,5962,6044,97535,1753,82015 Q223,9752,65810,56137,1953,92015 Q336,9894,01225,06466,0653,82015 Q451,7025,15417,83174,6874,52016 Q140,5635,03812,48058,0813,62016 Q236,4865,03512,00853,5293,92016 Q343,5254,97513,03861,5383,52016 Q451,0595,50215,69672,2573,62017 Q144,1206,02718,14968,2963,82017 Q239,5587,13713,04859,7434,52017 Q346,4416,1468,25160,8384,82017 Q448,5025,9927,58362,0784,42018 Q234,8035,7828,57448,9595,32018 Q341,6775,0074,91551,5993,12018 Q444,1764,9494,68153,8063,02019 Q137,6515,1064,79047,5482,42019 Q232,4234,7225,42042,5652,82019 Q340,9475,2638,57354,7832,82019 Q448,3456,19015,18969,7242,662020 Q144,442<	2014 Q1	27,346	2,577	5,903	35,825	3,434			
2014 Q431,1022,3054,86838,2752,82015 Q127,5962,6044,97535,1753,82015 Q223,9752,65810,56137,1953,92015 Q336,9894,01225,06466,0653,82015 Q451,7025,15417,83174,6874,52016 Q140,5635,03812,00853,5293,92016 Q236,4865,03512,00853,5293,92016 Q343,5254,97513,03861,5383,52017 Q451,0595,50215,69672,2573,62017 Q239,5587,13713,04859,7434,52017 Q346,4416,1468,25160,8384,82017 Q448,5025,9927,58362,0784,42018 Q234,8035,7828,37448,9595,32018 Q341,6775,0074,91551,5993,12018 Q444,1764,9494,68153,8063,02019 Q232,4234,7225,42042,5652,82019 Q340,9475,2638,57354,7832,82019 Q448,3456,19015,18969,7242,62020 Q144,4627,13323,76275,3573,12020 Q244,4136,11727,28677,8153,82020 Q344,2334,23424,72473,1904,2	2014 Q2	21,424	2,316	4,560	28,300	3,997			
2015 Q1 $27,596$ $2,604$ $4,975$ $35,175$ $3,8$ $2015 Q2$ $23,975$ $2,658$ $10,561$ $37,195$ $3,9$ $2015 Q3$ $36,989$ $4,012$ $25,064$ $66,065$ $3,8$ $2015 Q4$ $51,702$ $5,154$ $17,831$ $74,687$ $4,5$ $2016 Q1$ $40,563$ $5,038$ $12,480$ $58,081$ $3,6$ $2016 Q2$ $36,486$ $5,035$ $12,008$ $53,529$ $3,9$ $2016 Q3$ $43,525$ $4,975$ $13,038$ $61,538$ $3,5$ $2016 Q4$ $51,059$ $5,502$ $15,696$ $72,257$ $3,6$ $2017 Q1$ $44,120$ $6,027$ $18,149$ $68,296$ $3,8$ $2017 Q2$ $39,558$ $7,137$ $13,048$ $59,743$ $4,5$ $2017 Q3$ $46,441$ $6,146$ $8,251$ $60,838$ $4,8$ $2017 Q4$ $48,502$ $5,992$ $7,583$ $62,078$ $4,4$ $2018 Q2$ $34,803$ $5,782$ $8,374$ $48,959$ $5,3$ $2018 Q3$ $41,677$ $5,007$ $4,915$ $51,599$ $3,1$ $2018 Q4$ $44,176$ $4,949$ $4,681$ $53,806$ $3,00$ $2019 Q1$ $37,651$ $5,106$ $4,790$ $47,548$ $2,4$ $2019 Q2$ $32,423$ $4,722$ $5,420$ $42,565$ $2,8$ $2019 Q4$ $48,345$ $6,190$ $15,189$ $69,724$ $2,66$ $2020 Q1$ $44,462$ $7,133$ $23,762$ $75,357$ $3,1$ <	2014 Q3	25,849	2,212	4,755	32,816	3,202			
2015 Q223,9752,65810,56137,1953,92015 Q336,9894,01225,06466,0653,82015 Q451,7025,15417,83174,6874,52016 Q140,5635,03812,48058,0813,62016 Q236,4865,03512,00853,5293,92016 Q343,5254,97513,03861,5383,52016 Q451,0595,50215,69672,2573,62017 Q144,1206,02718,14968,2963,82017 Q239,5587,13713,04859,7434,52017 Q346,4416,1468,25160,8384,42018 Q140,2395,9398,50854,6864,52018 Q234,8035,7828,37448,9595,32018 Q341,6775,0074,91551,5993,12018 Q444,1764,9494,68153,8063,02019 Q137,6515,1064,79047,5482,42019 Q232,4234,7225,42042,5652,82019 Q340,9475,2638,57354,7832,82019 Q448,3456,19015,18969,7242,62020 Q144,4627,13323,76275,3573,12020 Q244,4136,11727,28677,8153,82020 Q344,2334,23424,72473,1904,2	2014 Q4	31,102	2,305	4,868	38,275	2,887			
2015 Q3 $36,989$ $4,012$ $25,064$ $66,065$ $3,8$ $2015 Q4$ $51,702$ $5,154$ $17,831$ $74,687$ $4,55$ $2016 Q1$ $40,563$ $5,038$ $12,480$ $58,081$ $3,60$ $2016 Q2$ $36,486$ $5,035$ $12,008$ $53,529$ $3,99$ $2016 Q3$ $43,525$ $4,975$ $13,038$ $61,538$ $3,55$ $2016 Q4$ $51,059$ $5,502$ $15,696$ $72,257$ $3,66$ $2017 Q1$ $44,120$ $6,027$ $18,149$ $68,296$ $3,88$ $2017 Q2$ $39,558$ $7,137$ $13,048$ $59,743$ $4,55$ $2017 Q3$ $46,441$ $6,146$ $8,251$ $60,838$ $4,88$ $2017 Q3$ $46,441$ $6,146$ $8,251$ $60,838$ $4,84$ $2018 Q2$ $34,803$ $5,782$ $8,374$ $48,959$ $5,33$ $2018 Q2$ $34,803$ $5,782$ $8,374$ $48,959$ $5,33$ $2018 Q3$ $41,677$ $5,007$ $4,915$ $51,599$ $3,1$ $2018 Q4$ $44,176$ $4,949$ $4,681$ $53,806$ $3,00$ $2019 Q1$ $37,651$ $5,106$ $4,790$ $47,548$ $2,4$ $2019 Q2$ $32,423$ $4,722$ $5,420$ $42,565$ $2,88$ $2019 Q4$ $48,345$ $6,190$ $15,189$ $69,724$ $2,66$ $2020 Q1$ $44,462$ $7,133$ $23,762$ $75,357$ $3,11$ $2020 Q2$ $44,413$ $6,117$ $27,286$ $77,815$ </td <td>2015 Q1</td> <td>27,596</td> <td>2,604</td> <td>4,975</td> <td>35,175</td> <td>3,802</td>	2015 Q1	27,596	2,604	4,975	35,175	3,802			
2015 Q336,9894,01225,06466,0653,82015 Q451,7025,15417,83174,6874,52016 Q140,5635,03812,48058,0813,62016 Q236,4865,03512,00853,5293,92016 Q343,5254,97513,03861,5383,52016 Q451,0595,50215,69672,2573,62017 Q144,1206,02718,14968,2963,82017 Q239,5587,13713,04859,7434,52017 Q346,4416,1468,25160,8384,82017 Q448,5025,9927,58362,0784,42018 Q140,2395,9398,50854,6864,52018 Q234,8035,7828,37448,9595,32018 Q341,6775,0074,91551,5993,12018 Q444,1764,9494,68153,8063,02019 Q137,6515,1064,79047,5482,42019 Q232,4234,7225,42042,5652,82019 Q340,9475,2638,57354,7832,82019 Q448,3456,19015,18969,7242,62020 Q144,4627,13323,76275,3573,12020 Q244,4136,11727,28677,8153,82020 Q344,2334,23424,72473,1904,2	2015 Q2	23,975	2,658	10,561	37,195	3,916			
2016 Q140,5635,03812,48058,0813,62016 Q236,4865,03512,00853,5293,92016 Q343,5254,97513,03861,5383,52016 Q451,0595,50215,69672,2573,62017 Q144,1206,02718,14968,2963,82017 Q239,5587,13713,04859,7434,52017 Q346,4416,1468,25160,8384,82017 Q448,5025,9927,58362,0784,42018 Q140,2395,9398,50854,6864,52018 Q234,8035,7828,37448,9595,32018 Q341,6775,0074,91551,5993,12018 Q444,1764,9494,68153,8063,02019 Q137,6515,1064,79047,5482,42019 Q232,4234,7225,42042,5652,82019 Q448,3456,19015,18969,7242,62020 Q144,4627,13323,76275,3573,12020 Q244,4136,11727,28677,8153,82020 Q344,2334,23424,72473,1904,2	2015 Q3	36,989	4,012	25,064	66,065	3,871			
2016 Q140,5635,03812,48058,0813,62016 Q236,4865,03512,00853,5293,92016 Q343,5254,97513,03861,5383,52016 Q451,0595,50215,69672,2573,62017 Q144,1206,02718,14968,2963,82017 Q239,5587,13713,04859,7434,52017 Q346,4416,1468,25160,8384,82017 Q448,5025,9927,58362,0784,42018 Q140,2395,9398,50854,6864,52018 Q234,8035,7828,37448,9595,32018 Q341,6775,0074,91551,5993,12018 Q444,1764,9494,68153,8063,02019 Q137,6515,1064,79047,5482,42019 Q232,4234,7225,42042,5652,82019 Q448,3456,19015,18969,7242,62020 Q144,4627,13323,76275,3573,12020 Q244,4136,11727,28677,8153,82020 Q344,2334,23424,72473,1904,2	2015 Q4	51,702	5,154	17,831	74,687	4,540			
2016 Q236,4865,03512,00853,5293,92016 Q343,5254,97513,03861,5383,552016 Q451,0595,50215,69672,2573,62017 Q144,1206,02718,14968,2963,82017 Q239,5587,13713,04859,7434,52017 Q346,4416,1468,25160,8384,82017 Q448,5025,9927,58362,0784,42018 Q140,2395,9398,50854,6864,52018 Q234,8035,7828,37448,9595,32018 Q341,6775,0074,91551,5993,12018 Q444,1764,9494,68153,8063,02019 Q137,6515,1064,79047,5482,42019 Q232,4234,7225,42042,5652,82019 Q448,3456,19015,18969,7242,62020 Q144,4627,13323,76275,3573,12020 Q244,4136,11727,28677,8153,82020 Q344,2334,23424,72473,1904,2	2016 Q1	40,563				3,625			
2016 Q343,5254,97513,03861,5383,552016 Q451,0595,50215,69672,2573,62017 Q144,1206,02718,14968,2963,82017 Q239,5587,13713,04859,7434,52017 Q346,4416,1468,25160,8384,82017 Q448,5025,9927,58362,0784,42018 Q140,2395,9398,50854,6864,52018 Q234,8035,7828,37448,9595,32018 Q341,6775,0074,91551,5993,12018 Q444,1764,9494,68153,8063,02019 Q137,6515,1064,79047,5482,42019 Q232,4234,7225,42042,5652,82019 Q448,3456,19015,18969,7242,62020 Q144,4627,13323,76275,3573,12020 Q244,4136,11727,28677,8153,82020 Q344,2334,23424,72473,1904,2	2016 Q2	36,486		12,008		3,906			
2016 Q451,0595,50215,69672,2573,62017 Q144,1206,02718,14968,2963,82017 Q239,5587,13713,04859,7434,52017 Q346,4416,1468,25160,8384,82017 Q448,5025,9927,58362,0784,42018 Q140,2395,9398,50854,6864,52018 Q234,8035,7828,37448,9595,32018 Q341,6775,0074,91551,5993,12018 Q444,1764,9494,68153,8063,002019 Q137,6515,1064,79047,5482,42019 Q232,4234,7225,42042,5652,82019 Q340,9475,2638,57354,7832,82019 Q448,3456,19015,18969,7242,62020 Q144,4627,13323,76275,3573,12020 Q244,4136,11727,28677,8153,82020 Q344,2334,23424,72473,1904,2	2016 Q3				-	3,527			
2017 Q144,1206,02718,14968,2963,82017 Q239,5587,13713,04859,7434,52017 Q346,4416,1468,25160,8384,82017 Q448,5025,9927,58362,0784,42018 Q140,2395,9398,50854,6864,52018 Q234,8035,7828,37448,9595,32018 Q341,6775,0074,91551,5993,12018 Q444,1764,9494,68153,8063,002019 Q137,6515,1064,79047,5482,42019 Q232,4234,7225,42042,5652,82019 Q340,9475,2638,57354,7832,82019 Q448,3456,19015,18969,7242,62020 Q144,4627,13323,76275,3573,12020 Q244,4136,11727,28677,8153,82020 Q344,2334,23424,72473,1904,2	2016 Q4					3,603			
2017 Q239,5587,13713,04859,7434,52017 Q346,4416,1468,25160,8384,82017 Q448,5025,9927,58362,0784,42018 Q140,2395,9398,50854,6864,52018 Q234,8035,7828,37448,9595,32018 Q341,6775,0074,91551,5993,12018 Q444,1764,9494,68153,8063,002019 Q137,6515,1064,79047,5482,42019 Q232,4234,7225,42042,5652,82019 Q448,3456,19015,18969,7242,62020 Q144,4627,13323,76275,3573,12020 Q244,4136,11727,28677,8153,82020 Q344,2334,23424,72473,1904,2						3,892			
2017 Q346,4416,1468,25160,8384,82017 Q448,5025,9927,58362,0784,42018 Q140,2395,9398,50854,6864,52018 Q234,8035,7828,37448,9595,32018 Q341,6775,0074,91551,5993,12018 Q444,1764,9494,68153,8063,002019 Q137,6515,1064,79047,5482,42019 Q232,4234,7225,42042,5652,82019 Q340,9475,2638,57354,7832,82019 Q448,3456,19015,18969,7242,662020 Q144,4627,13323,76275,3573,12020 Q244,4136,11727,28677,8153,82020 Q344,2334,23424,72473,1904,2	2017 Q2					4,548			
2017 Q448,5025,9927,58362,0784,442018 Q140,2395,9398,50854,6864,52018 Q234,8035,7828,37448,9595,332018 Q341,6775,0074,91551,5993,142018 Q444,1764,9494,68153,8063,002019 Q137,6515,1064,79047,5482,42019 Q232,4234,7225,42042,5652,82019 Q340,9475,2638,57354,7832,82019 Q448,3456,19015,18969,7242,662020 Q144,4627,13323,76275,3573,112020 Q244,4136,11727,28677,8153,82020 Q344,2334,23424,72473,1904,2	2017 Q3				-	4,801			
2018 Q140,2395,9398,50854,6864,52018 Q234,8035,7828,37448,9595,32018 Q341,6775,0074,91551,5993,12018 Q444,1764,9494,68153,8063,02019 Q137,6515,1064,79047,5482,42019 Q232,4234,7225,42042,5652,82019 Q340,9475,2638,57354,7832,82019 Q448,3456,19015,18969,7242,62020 Q144,4627,13323,76275,3573,12020 Q244,4136,11727,28677,8153,82020 Q344,2334,23424,72473,1904,2	2017 Q4	48,502		7,583		4,450			
2018 Q234,8035,7828,37448,9595,32018 Q341,6775,0074,91551,5993,12018 Q444,1764,9494,68153,8063,02019 Q137,6515,1064,79047,5482,42019 Q232,4234,7225,42042,5652,82019 Q340,9475,2638,57354,7832,82019 Q448,3456,19015,18969,7242,662020 Q144,4627,13323,76275,3573,12020 Q244,4136,11727,28677,8153,82020 Q344,2334,23424,72473,1904,2	2018 Q1				-	4,584			
2018 Q341,6775,0074,91551,5993,12018 Q444,1764,9494,68153,8063,02019 Q137,6515,1064,79047,5482,42019 Q232,4234,7225,42042,5652,82019 Q340,9475,2638,57354,7832,82019 Q448,3456,19015,18969,7242,62020 Q144,4627,13323,76275,3573,12020 Q244,4136,11727,28677,8153,82020 Q344,2334,23424,72473,1904,2						5,388			
2018 Q444,1764,9494,68153,8063,02019 Q137,6515,1064,79047,5482,42019 Q232,4234,7225,42042,5652,82019 Q340,9475,2638,57354,7832,82019 Q448,3456,19015,18969,7242,62020 Q144,4627,13323,76275,3573,12020 Q244,4136,11727,28677,8153,82020 Q344,2334,23424,72473,1904,2						3,183			
2019 Q137,6515,1064,79047,5482,42019 Q232,4234,7225,42042,5652,82019 Q340,9475,2638,57354,7832,82019 Q448,3456,19015,18969,7242,62020 Q144,4627,13323,76275,3573,12020 Q244,4136,11727,28677,8153,82020 Q344,2334,23424,72473,1904,2						3,034			
2019 Q232,4234,7225,42042,5652,82019 Q340,9475,2638,57354,7832,82019 Q448,3456,19015,18969,7242,62020 Q144,4627,13323,76275,3573,12020 Q244,4136,11727,28677,8153,82020 Q344,2334,23424,72473,1904,2						2,481			
2019 Q340,9475,2638,57354,7832,82019 Q448,3456,19015,18969,7242,62020 Q144,4627,13323,76275,3573,112020 Q244,4136,11727,28677,8153,82020 Q344,2334,23424,72473,1904,2						2,801			
2019 Q448,3456,19015,18969,7242,62020 Q144,4627,13323,76275,3573,12020 Q244,4136,11727,28677,8153,82020 Q344,2334,23424,72473,1904,2						2,884			
2020 Q144,4627,13323,76275,3573,12020 Q244,4136,11727,28677,8153,82020 Q344,2334,23424,72473,1904,2						2,693			
2020 Q244,4136,11727,28677,8153,82020 Q344,2334,23424,72473,1904,2						3,134			
2020 Q3         44,233         4,234         24,724         73,190         4,234						3,869			
						4,226			
						5,053			
						4,709			

#### **Exhibit A-2. Endorsement Volumes**

 <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.

				Credit Score Ra	•	,
Fiscal Year	Quarter	500–619	620–639	640–679	680–719	720–850
2012	Oct–Dec	4.17	7.98	31.20	23.80	32.85
2012	Jan–Mar	3.69	7.70	30.96	23.81	33.84
	Apr–Jun	3.32	7.19	32.22	24.14	33.14
	Jul–Sep	3.03	6.82	34.13	25.24	30.78
2013	Oct–Dec	2.87	6.35	35.07	25.92	29.79
2010	Jan–Mar	2.55	5.88	35.87	26.54	29.16
	Apr–Jun	2.08	5.65	38.18	27.31	26.78
	Jul–Sep	2.16	6.23	40.40	27.68	23.53
2014	Oct-Dec	2.67	7.66	42.35	27.22	20.10
2014	Jan–Mar	3.31	9.10	41.95	26.60	19.03
	Apr–Jun	3.84	10.43	42.04	26.32	17.38
	Jul–Sep	4.65	11.16	41.31	25.92	16.97
2015	Oct-Dec	5.97	12.30	40.38	25.37	15.97
2010	Jan–Mar	5.84	12.35	39.96	25.62	16.23
	Apr–Jun	5.36	11.57	38.01	26.44	18.62
	Jul–Sep	5.48	11.38	36.85	26.60	19.69
2016	Oct-Dec	6.01	11.84	36.63	26.07	19.45
2010	Jan–Mar	6.21	11.99	36.42	26.33	19.05
	Apr–Jun	6.06	12.80	37.23	25.64	18.27
	Jul–Sep	5.98	12.71	37.01	25.91	18.39
2017	Oct-Dec	6.62	12.88	36.57	25.74	18.18
2011	Jan–Mar	7.49	12.84	36.19	25.34	18.13
	Apr–Jun	8.36	13.72	36.46	24.36	17.10
	Jul–Sep	9.34	13.89	36.16	23.92	16.68
2018	Oct-Dec	10.33	14.42	36.35	23.21	15.70
2010	Jan–Mar	11.47	14.51	36.38	22.76	14.88
	Apr–Jun	11.64	15.29	37.37	22.12	13.57
	Jul–Sep	12.16	15.37	37.24	21.73	13.50
2019	Oct–Dec	13.32	15.41	36.62	21.13	13.52
2010	Jan–Mar	13.77	15.87	36.74	20.67	12.95
	Apr–Jun	13.08	16.38	37.69	20.66	12.18
	Jul–Sep	11.75	15.35	38.38	21.56	12.96
2020	Oct–Dec	11.45	14.92	37.51	22.01	14.12
_0_0	Jan–Mar	11.87	15.31	37.13	21.34	14.36
	Apr–Jun	8.82	13.59	40.02	23.10	14.46
	Jul–Sep	4.45	11.71	42.38	25.69	15.78
2021	Oct–Dec	4.81	12.29	42.78	24.91	15.20
OTE: Shares are based						

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

NOTE: Shares are based on loan counts. Excludes streamline refinancing. 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 morewhich 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 lowest score 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, January 2021.

	chibit A-4. A	Mortgage Purpose							
Fiscal Year	Quarter	Home Purchase	Conventional Loan Refinance	FHA-to-FHA Refinance <sup>a</sup>	All				
	Oct-Dec	695	702	705	697				
0040	Jan–Mar	695	707	708	698				
2012	Apr–Jun	695	711	709	698				
	Jul–Sep	695	698	703	696				
	Oct-Dec	694	696	703	695				
0010	Jan–Mar	694	697	703	695				
2013	Apr–Jun	692	694	699	693				
	Jul–Sep	689	685	690	689				
	Oct–Dec	686	677	679	685				
	Jan-Mar	684	674	675	682				
2014	Apr–Jun	681	672	673	680				
	Jul–Sep	680	671	671	679				
	Oct-Dec	678	669	669	676				
0045	Jan-Mar	678	673	675	677				
2015	Apr–Jun	681	678	679	680				
	Jul–Sep	682	677	674	681				
	Oct–Dec	682	676	673	680				
	Jan–Mar	681	676	672	680				
2016	Apr–Jun	679	677	673	679				
	Jul–Sep	680	677	672	679				
	Oct–Dec	679	677	673	678				
0017	Jan–Mar	679	675	669	678				
2017	Apr–Jun	676	672	666	675				
	Jul–Sep	676	670	664	674				
	Oct-Dec	674	668	663	672				
2018	Jan-Mar	672	666	661	670				
2018	Apr–Jun	670	664	660	668				
	Jul-Sep	669	663	658	668				
	Oct-Dec	668	662	657	667				
2019	Jan–Mar	667	660	656	665				
2010	Apr–Jun	666	663	659	665				
	Jul–Sep	668	667	663	667				
	Oct-Dec	670	667	666	669				
2020	Jan-Mar	671	661	662	669				
	Apr–Jun	673	664	667	672				
0004	Jul-Sep	677	674	674	677				
2021	Oct–Dec	676	673	672	676				

Exhibit A-4. Average Credit Scores on New Endorsements

NOTE: Credit scores are cobranded between the three major credit repositories (Equifax, Experian, TransUnion) and Fair Isaac Corporation NOTE: Credit scores are cobranded between the three major credit repositories (Equitax, 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 lowest score 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, January 2021.

EXNID			atio Distribution istribution on New E		ements				
	Loan-to-va		ear and Quarter	Indorsements					
			LTV Cat	egories					
Fiscal Year	Quarter	(Shares in each row add up to 100%)							
		Up to 80	81-90	91-95	96-98 <sup>b</sup>				
	Oct–Dec	5.85	12.02	9.33	72.80				
2012	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				
	Oct–Dec	5.17	9.99	10.14	74.70				
2013	Jan–Mar	5.97	11.52	10.78	71.73				
2010	Apr–Jun	5.64	10.27	9.75	74.35				
	Jul–Sep	5.26	9.71	8.94	76.09				
	Oct-Dec	5.58	9.95	9.00	75.47				
2014	Jan–Mar	6.08	10.91	9.41	73.59				
2014	Apr–Jun	5.63	9.61	9.04	75.72				
	Jul–Sep	5.46	9.46	9.14	75.95				
	Oct-Dec	6.70	10.79	8.93	73.57				
2015	Jan–Mar	7.10	11.65	8.97	72.28				
2015	Apr–Jun	6.14	11.59	8.76	73.52				
	Jul–Sep	6.44	11.13	8.35	74.08				
	Oct–Dec	7.53	12.55	8.25	71.67				
2016	Jan–Mar	8.10	13.25	8.22	70.43				
2010	Apr–Jun	6.80	11.68	7.68	73.8				
	Jul–Sep	6.83	11.95	7.76	73.46				
	Oct-Dec	8.02	13.89	7.66	70.43				
2017	Jan–Mar	9.59	15.97	7.62	66.82				
2017	Apr–Jun	7.97	13.80	7.55	70.69				
	Jul–Sep	7.95	14.43	7.48	70.15				
	Oct-Dec	8.79	16.39	7.40	67.42				
2019	Jan–Mar	9.55	17.61	7.02	65.83				
2018	Apr–Jun	7.85	14.43	6.87	70.85				
	Jul–Sep	7.98	14.87	7.11	70.04				
	Oct-Dec	9.29	16.79	7.06	66.86				
0040	Jan–Mar	9.29	17.59	6.83	66.30				
2019	Apr–Jun	8.32	16.27	6.77	68.65				
	Jul–Sep	8.42	16.78	7.03	67.78				
	Oct–Dec	13.90	14.69	7.40	64.01				
2022	Jan–Mar	17.59	7.99	7.91	66.5 <sup>2</sup>				
2020	Apr–Jun	12.63	6.66	7.72	72.99				
	Jul–Sep	8.52	5.83	7.37	78.28				
2021	Oct–Dec	10.11	6.42	7.72	75.75				

Exhibit A-5. Loan-to-Value	(LTV) Ra	io Distribution of	on New Endorsements
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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.

			Mortgage Purpose	9	
Fiscal Year	Quarter	Home Purchase	Conventional Mortgage Refinance	FHA-to-FHA Refinance <sup>a</sup>	All <sup>a</sup>
	Oct–Dec	95.98	85.29	88.79	94.06
2012	Jan–Mar	96.01	83.44	88.37	93.41
2012	Apr–Jun	95.99	81.79	87.85	93.32
	Jul–Sep	95.96	83.74	87.73	94.43
	Oct–Dec	95.95	84.43	87.79	94.31
2013	Jan–Mar	95.93	84.59	87.53	93.95
2013	Apr–Jun	95.87	84.01	86.47	94.09
	Jul–Sep	95.77	82.88	85.39	94.26
	Oct–Dec	95.74	82.07	83.76	94.24
2014	Jan–Mar	95.73	82.19	83.36	93.98
2014	Apr–Jun	95.70	81.20	83.60	94.15
	Jul–Sep	95.66	80.68	83.15	94.21
	Oct–Dec	95.63	79.90	82.91	93.70
2015	Jan–Mar	95.72	79.95	84.61	93.52
2015	Apr–Jun	95.73	81.05	85.71	93.68
	Jul–Sep	95.67	80.09	83.45	93.66
	Oct–Dec	95.68	79.38	82.64	93.18
2016	Jan–Mar	95.65	78.92	82.33	92.90
2010	Apr–Jun	95.79	79.27	82.54	93.42
	Jul–Sep	95.72	79.11	82.25	93.42
	Oct–Dec	95.70	78.90	82.23	92.86
2017	Jan–Mar	95.78	78.64	81.35	92.21
2017	Apr–Jun	95.75	78.05	81.21	92.87
	Jul–Sep	95.65	77.97	81.24	92.79
	Oct–Dec	95.70	78.30	81.48	92.36
2018	Jan–Mar	95.72	78.25	81.40	92.04
2010	Apr–Jun	95.73	77.80	81.19	92.85
	Jul–Sep	95.64	77.48	80.88	92.76
	Oct–Dec	95.57	76.97	80.94	92.13
2019	Jan–Mar	95.60	77.20	81.29	92.05
2019	Apr–Jun	95.61	77.49	81.72	92.44
	Jul–Sep	95.54	77.91	82.52	92.39
	Oct–Dec	95.46	77.03	82.16	91.44
2020	Jan–Mar	95.57	75.24	81.49	91.60
2020	Apr–Jun	95.71	76.32	82.90	92.87
	Jul–Sep	95.76	76.86	82.69	93.89
2021	Oct-Dec	95.66	76.28	81.69	93.43

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

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, January 2021

Fiend		(% Unp	Loss Rates baid Principal Ba	lance)	[	Disposition Counts		REO
Fiscal Year	Quarter	REO Loss Rate	REO Alternatives Loss Rate	Overall Loss Rate	REO Dispositions	REO Alternatives Dispositions <sup>b</sup>	Total Dispositions	Alternatives Share of Dispositions
	Oct-Dec	66.36	54.86	61.48	26,269	13,920	40,189	34.64
2013	Jan-Mar	64.18	48.90	58.30	27,132	12,241	39,373	31.09
2013	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
	Oct-Dec	61.30	47.13	53.81	24,468	21,007	45,475	46.19
2014	Jan-Mar	62.87	50.33	54.70	20,110	26,245	46,355	56.62
2014	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
	Oct-Dec	59.73	44.25	49.57	13,147	20,026	33,173	60.37
2015	Jan-Mar	61.47	43.25	52.62	14,019	10,372	24,391	42.52
2015	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
	Oct-Dec	63.00	47.41	54.66	16,507	15,121	31,628	47.81
0040	Jan-Mar	63.52	45.97	54.27	14,759	13,323	28,082	47.44
2016	Apr-Jun	60.11	47.14	52.88	13,088	13,213	26,301	50.24
	Jul-Sep	59.93	50.29	53.96	12,843	16,428	29,271	56.12
	Oct-Dec	60.97	49.87	53.91	12,927	18,311	31,238	58.62
00/7	Jan-Mar	62.25	40.15	51.02	11,828	10,877	22,705	47.91
2017	Apr-Jun	59.43	40.77	48.29	10,651	14,168	24,819	57.09
	Jul-Sep	59.23	40.24	46.27	7,973	15,766	23,739	66.41
	Oct-Dec	58.47	38.63	44.85	6,999	14,406	21,405	67.30
0040	Jan-Mar	59.20	41.93	47.51	7,162	13,313	20,475	65.02
2018	Apr-Jun	57.17	40.44	45.17	6,358	14,290	20,648	69.21
	Jul-Sep	56.41	38.35	43.28	5,249	12,442	17,691	70.33
	Oct-Dec	57.35	41.57	45.39	4,635	12,647	17,282	73.18
2019	Jan-Mar	57.25	37.26	42.16	4,311	12,040	16,351	73.63
2019	Apr-Jun	54.28	34.14	38.85	3,808	10,886	14,694	74.08
	Jul-Sep	52.40	31.60	36.64	3,579	9,758	13,337	73.16
	Oct-Dec	53.66	32.69	38.19	3,814	9,129	12,943	70.53
2020	Jan-Mar	54.78	31.00	38.25	4,493	8,546	13,039	65.54
	Apr-Jun	51.64	31.60	39.39	4,595	6,178	10,773	57.35
	Jul-Sep	48.74	30.88	38.47	3,814	4,472	8,286	53.97
2021	Oct-Dec <sup>a</sup>	44.91	30.51	35.40	1,629	2,700	4,329	62.37

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

NOTE: Real Estate Owned (REO) refers to properties that HUD has assumed ownership of through the conveyance of title. <sup>a</sup> October and November 2020 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 that 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).

2012         Jan-Mar         4.46         0.90         8.69         3.90         22.34         59.70         278,209           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           2014         Jan-Mar         2.48         0.73         4.78         2.54         44.53         44.94         350,354           Jul-Sep         2.63         0.91         4.08         1.52         25.65         65.21         284,985           2014         Jul-Sep         2.63         0.91         4.08         1.13         17.22         73.37         208,486           3.01         1.51         3.91         1.13         17.22         73.37         208,486           3.01         1.56         3.23         1.07         11.76         79.27         219,422           2015         Jul-Sep         3.01         1.56         3.23         1.07         11.67         76.79         210,588           2016         Jul-Sep         3.69         2.20         3.39         3.66         2								<i>.</i>	
2012         Jan-Mar         4.46         0.90         8.69         3.90         22.34         59.70         278,209           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           2014         Jan-Mar         2.48         0.73         4.78         2.54         44.53         44.94         350,354           Jan-Mar         2.48         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           Jul-Sep         3.01         1.56         4.74         1.26         16.05         77.85         164,491           Jul-Sep         3.01         1.56         3.23         1.07         11.76         79.27         219.742           Jul-Sep         3.01         1.66         3.23         1.07         11.67         76.79         210.58           Jul-Sep         3.69         2.22         3.98         1.47         11.67		Quarter					Streamline	Purchase	Total
2012         Jan-Mar         4.46         0.90         8.69         3.90         22.34         59.70         278,209           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           2014         Jan-Mar         2.48         0.73         4.78         2.54         44.53         44.94         350,354           Jan-Mar         2.48         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           Jul-Sep         3.01         1.56         4.74         1.26         16.05         77.85         164,491           Jul-Sep         3.01         1.56         3.23         1.07         11.76         79.27         219.742           Jul-Sep         3.01         1.66         3.23         1.07         11.67         76.79         210.58           Jul-Sep         3.69         2.22         3.98         1.47         11.67		Oct-Dec	4.39	0.91	8.05	3.47	14.33	68.84	255,796
Jul-Sep         2.50         0.62         4.28         2.05         31.35         59.20         334,435           2013         Jan-Mar         2.48         0.73         4.78         2.54         44.53         44.94         350,354           Jan-Mar         2.48         0.79         4.42         2.17         39.39         50.87         356,380           Jul-Sep         2.63         0.91         4.08         1.52         2565         65.21         228,985           2014         Jan-Mar         3.44         1.66         4.74         1.26         160.5         72.85         164,491           Jul-Sep         3.01         1.51         3.91         1.15         13.88         76.44         193,632           Jul-Sep         3.01         1.66         3.23         1.07         11.76         72.27         219,792           Jul-Sep         3.01         1.66         3.23         1.07         11.67         76.79         201,598           Jan-Mar         3.75         2.16         3.98         2.47         96.622         200,138           Jul-Sep         3.69         2.30         3.49         2.01         18.15         76.49         301,185	2012		4.46	0.90	8.69	3.90	22.34	59.70	278,209
2013         Oct-Dec Jan-Mar         2.31         0.66         4.14         2.22         40.32         50.37         353,126           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           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         214.9         66.22         20013           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		Apr-Jun	4.04	0.82	8.01	3.62	22.27	61.24	316,060
2013         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         356,350           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           Apr-Jun         3.10         1.51         3.91         1.15         13.88         76.44         193,652           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         3.99         3.06         29.09         59.41         334,655           2016         Oct-Dec         4.93         2.18         3.63         2.30         2.08         67.49         301,185           2016         Oct-Dec         4.93         2.16         3.96		Jul-Sep	2.50	0.62	4.28	2.05	31.35	59.20	334,435
Jahrwai         2.48         0.73         4.78         2.54         44.55         44.55         44.98         350,53           Jul-Sep         2.63         0.91         4.08         1.52         25.65         65.21         284,985           2014         Jan-Mar         3.44         1.66         4.74         1.26         160.5         72.85         164,491           Jan-Mar         3.44         1.66         4.74         1.26         10.65         72.85         164,491           Jul-Sep         3.01         1.66         3.23         1.07         11.76         79.27         219,742           2015         Jul-Sep         3.01         1.66         3.23         1.07         11.67         76.79         201,58           Jul-Sep         3.03         2.02         3.98         1.47         11.67         76.79         201,58           Jul-Sep         3.69         2.30         3.49         2.01         18.15         70.36         379,839           2016         Jan-Mar         5.42         2.22         3.98         1.47         11.67         76.79         277,424           Apr-Jun         4.83         2.16         3.66         2.42         <		Oct-Dec	2.31	0.66	4.14	2.22	40.32	50.37	353,126
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	2013	Jan-Mar	2.48	0.73	4.78	2.54	44.53	44.94	350,354
2014         Oct-Dec Jan-Mar         3.08         1.27         3.93         1.13         17.22         73.37         208,486           Apr-Jun         3.10         1.51         3.91         1.15         1.86         72.85         164,491           Jul-Sep         3.01         1.51         3.91         1.15         13.88         76.44         193,632           2015         Jul-Sep         3.01         1.66         3.23         1.07         11.67         76.79         221,792           2015         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         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         3.93         3.06		Apr-Jun	2.36	0.79	4.42	2.17	39.39	50.87	356,380
2014         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         Jan-Mar         3.75         2.16         3.98         2.47         11.67         76.79         201,598           Jan-Mar         3.75         2.16         3.96         2.42         2.149         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         Apr-Jun         4.83         2.16         3.66         2.30         2.026         2.046         67.49         301,185           Jul-Sep         4.75         2.02         3.39         3.06         29.09         59.41         362,344           2017         Jan-Mar         7.74         4.85         4.15		-	2.63	0.91	4.08	1.52	25.65	65.21	284,985
Jah-Mar         3.44         1.66         4.74         1.26         16.05         72.65         164,491           Apr-Jun         3.10         1.51         3.91         1.15         13.88         76.44         193,632           2015         Jah-Sep         3.01         1.66         3.23         1.07         11.76         79.27         219,742           2015         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         334,65           2016         Jah-Mar         5.42         2.22         3.98         1.47         11.67         76.79         277,424           Apr-Jun         3.03         2.02         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         3.98         3.06         29.09         59.41         362,344           2017         Jan-Mar         7.74         4.85         4.15         1.80		Oct-Dec	3.08	1.27	3.93	1.13	17.22	73.37	208,486
Apr-Jun         3.10         1.51         3.91         1.15         13.88         76.44         193,632           2015         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           Apr-Jun         3.03         2.02         3.93         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         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         317,94           Jul-Sep         4.75         2.02         3.93         3.06         29.09         65.29         337,517           Jul-Sep         4.75         2.02         3.93         3.06         29.09         65.53         298,293           2017         Jan-Mar         7.74         4.85         4.15         1.80	2014	Jan-Mar	3.44	1.66	4.74	1.26	16.05	72.85	164,491
2015         Oct-Dec Jan-Mar         3.87         2.22         3.98         1.47         11.67         76.79         201,598           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         Mar         5.42         2.22         3.98         1.47         11.67         76.79         201,794           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           Jul-Sep         7.16         5.27         2.73         1.15         64.2		Apr-Jun	3.10	1.51	3.91	1.15	13.88	76.44	193,632
2015         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         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         Jan-Mar         7.74         4.85         4.15         1.80         15.91         66.53         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         305,933           2018         Jan-Mar         9.21         7.32         3.03         1.33         <		Jul-Sep	3.01	1.66	3.23	1.07	11.76	79.27	219,742
2015         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         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         Jan-Mar         7.74         4.85         4.15         1.80         15.91         66.53         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         305,933           2018         Jan-Mar         9.21         7.32         3.03         1.33         <		Oct-Dec	3.87	2.22	3.98	1.47	11.67	76.79	201,598
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	2015		3.75	2.16	3.96	2.42	21.49	66.22	200,138
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Apr-Jun	3.03	2.02	3.39	3.06	29.09	59.41	334,655
2016         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         Jan-Mar         7.74         4.85         4.15         1.80         15.91         65.53         298,293           Jan-Mar         7.74         4.85         4.15         1.80         15.91         65.53         298,293           Jul-Sep         7.16         5.27         2.73         1.15         6.42         77.28         305,532           Jul-Sep         7.16         5.27         2.73         1.15         6.42         77.28         305,933           2018         Oct-Dec         8.30         6.60         2.94         1.29         7.81         73.05         267,637           Jul-Sep         7.16         5.27         2.34         0.79         2.76         80.35         252,329           Jul-Sep         7.80         6.61         1.93         0.65         1.45 <td< td=""><td></td><td>Jul-Sep</td><td>3.69</td><td></td><td>3.49</td><td></td><td></td><td>70.36</td><td>379,839</td></td<>		Jul-Sep	3.69		3.49			70.36	379,839
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         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         305,933           Jul-Sep         7.16         5.27         2.73         1.15         6.42         77.28         305,933           Jul-Sep         7.16         5.27         2.73         1.15         6.42         77.28         305,933           Jul-Sep         7.16         5.27         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 <td></td> <td>Oct-Dec</td> <td>4.93</td> <td>2.18</td> <td>3.63</td> <td>2.30</td> <td>20.86</td> <td>67.49</td> <td>301,185</td>		Oct-Dec	4.93	2.18	3.63	2.30	20.86	67.49	301,185
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	2016	Jan-Mar	5.42	2.22	3.98	1.47	11.67	76.79	277,424
2017         Oct-Dec         5.64         3.64         3.29         2.05         20.09         65.29         337,517           2017         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           3n-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           Jul-Sep         7.76         7.08         1.56         2.01         10.		Apr-Jun	4.83	2.16	3.96	2.42	21.49	66.22	317,094
2017         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           2019         Oct-Dec         9.42         7.84         2.03         0.78         1.41         78.52         228,717           2019         Jan-Mar         9.71         7.99         2.05         0.8		Jul-Sep	4.75	2.02	3.39	3.06	29.09	59.41	362,344
Jah-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           2018         Oct-Dec         8.30         6.60         2.94         1.29         7.81         73.05         267,637           2018         Oct-Dec         8.30         6.60         2.94         1.29         7.81         73.05         267,637           2018         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           2019         Oct-Dec         9.42         7.84         2.03         0.78         1.41         78.52         228,717           2019         Jan-Mar         8.27         7.19         1.7		Oct-Dec	5.64	3.64	3.29	2.05	20.09	65.29	337,517
Jul-Sep7.165.272.731.156.4277.28305,0932018Oct-Dec8.306.602.941.297.8173.05267,637Jan-Mar9.217.323.031.338.3370.77235,454Apr-Jun7.696.072.340.792.7680.35252,329Jul-Sep7.806.611.930.651.4581.56259,1802019Oct-Dec9.427.842.030.781.4178.52228,717Jan-Mar9.717.992.050.883.3376.04201,956Apr-Jun8.277.191.771.235.7475.80253,334Jul-Sep7.767.081.562.0110.4271.17306,4172020Apr-Jun8.017.002.083.5818.6960.64325,5122020Apr-Jun3.963.182.104.2125.3561.20313,600Jul-Sep2.452.031.482.9125.8565.27359,218	2017	Jan-Mar	7.74	4.85	4.15	1.80	15.91	65.53	298,293
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         Jul-Sep         7.80         6.61         1.93         0.65         1.45         81.56         259,180           2019         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         306,417           Jul-Sep         7.76         7.08         1.56         2.01         10.42         71.17         306,417           Jul-Sep         7.76         7.08         1.56         2.01         10.42         7		Apr-Jun	6.94	4.54	3.23	1.20	8.67	75.43	305,532
2018         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           2019         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         306,417           Jul-Sep         7.76         7.08         1.56         2.01         10.42         71.17         306,417           Jul-Sep         7.76         7.08         1.56         2.01         10.42         71.17         306,417           Jul-Sep         4.6.15         4.80         2.39         4.09         24.60 <t< td=""><td></td><td>Jul-Sep</td><td>7.16</td><td>5.27</td><td>2.73</td><td>1.15</td><td>6.42</td><td>77.28</td><td>305,093</td></t<>		Jul-Sep	7.16	5.27	2.73	1.15	6.42	77.28	305,093
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         306,417           Jul-Sep         7.76         7.08         1.56         2.01         10.42         71.17         306,417           Jul-Sep         7.76         7.08         1.56         2.01         10.42         71.17         306,417           Jul-Sep         4.15         4.80         2.39         4.09         24.60         57.96         334,822 <td></td> <td>Oct-Dec</td> <td>8.30</td> <td>6.60</td> <td>2.94</td> <td>1.29</td> <td>7.81</td> <td>73.05</td> <td>267,637</td>		Oct-Dec	8.30	6.60	2.94	1.29	7.81	73.05	267,637
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           2019         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         306,417           Jul-Sep         7.76         7.08         1.56         2.01         10.42         71.17         306,417           Jul-Sep         7.76         7.08         1.56         2.01         10.42         71.17         306,417           Jan-Mar         6.15         4.80         2.39         4.09         24.60         57.96         334,822           2020         Apr-Jun         3.96         3.18         2.10         4.21         25.35         61.20         313,600           Jul-Sep         2.45         2.03         1.48         2.91         25.85 <t< td=""><td>2018</td><td>Jan-Mar</td><td>9.21</td><td>7.32</td><td>3.03</td><td>1.33</td><td>8.33</td><td>70.77</td><td>235,454</td></t<>	2018	Jan-Mar	9.21	7.32	3.03	1.33	8.33	70.77	235,454
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         306,417           Oct-Dec         8.01         7.00         2.08         3.58         18.69         60.64         325,512           Jan-Mar         6.15         4.80         2.39         4.09         24.60         57.96         334,822           2020         Apr-Jun         3.96         3.18         2.10         4.21         25.35         61.20         313,600           Jul-Sep         2.45         2.03         1.48         2.91         25.85         65.27         359,218		Apr-Jun	7.69	6.07	2.34	0.79	2.76	80.35	252,329
2019         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         306,417           Oct-Dec         8.01         7.00         2.08         3.58         18.69         60.64         325,512           Jan-Mar         6.15         4.80         2.39         4.09         24.60         57.96         334,822           2020         Apr-Jun         3.96         3.18         2.10         4.21         25.35         61.20         313,600           Jul-Sep         2.45         2.03         1.48         2.91         25.85         65.27         359,218		Jul-Sep	7.80	6.61	1.93	0.65	1.45	81.56	259,180
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         306,417           Oct-Dec         8.01         7.00         2.08         3.58         18.69         60.64         325,512           Jan-Mar         6.15         4.80         2.39         4.09         24.60         57.96         334,822           2020         Apr-Jun         3.96         3.18         2.10         4.21         25.35         61.20         313,600           Jul-Sep         2.45         2.03         1.48         2.91         25.85         65.27         359,218		Oct-Dec	9.42	7.84	2.03	0.78	1.41	78.52	228,717
Jul-Sep         7.76         7.08         1.56         2.01         10.42         71.17         306,417           Oct-Dec         8.01         7.00         2.08         3.58         18.69         60.64         325,512           Jan-Mar         6.15         4.80         2.39         4.09         24.60         57.96         334,822           2020         Apr-Jun         3.96         3.18         2.10         4.21         25.35         61.20         313,600           Jul-Sep         2.45         2.03         1.48         2.91         25.85         65.27         359,218	2019	Jan-Mar	9.71	7.99	2.05	0.88	3.33	76.04	201,956
Oct-Dec8.017.002.083.5818.6960.64325,512Jan-Mar6.154.802.394.0924.6057.96334,822Apr-Jun3.963.182.104.2125.3561.20313,600Jul-Sep2.452.031.482.9125.8565.27359,218		Apr-Jun	8.27	7.19	1.77	1.23	5.74	75.80	253,334
Jan-Mar         6.15         4.80         2.39         4.09         24.60         57.96         334,822           2020         Apr-Jun         3.96         3.18         2.10         4.21         25.35         61.20         313,600           Jul-Sep         2.45         2.03         1.48         2.91         25.85         65.27         359,218		Jul-Sep	7.76	7.08	1.56	2.01	10.42	71.17	306,417
2020         Apr-Jun         3.96         3.18         2.10         4.21         25.35         61.20         313,600           Jul-Sep         2.45         2.03         1.48         2.91         25.85         65.27         359,218		Oct-Dec	8.01	7.00	2.08	3.58	18.69	60.64	325,512
Jul-Sep         2.45         2.03         1.48         2.91         25.85         65.27         359,218		Jan-Mar	6.15	4.80	2.39	4.09	24.60	57.96	334,822
	2020	Apr-Jun	3.96	3.18	2.10	4.21	25.35	61.20	313,600
2021 Oct-Dec 2.82 2.51 1.58 3.14 26.15 63.80 357,540		Jul-Sep	2.45	2.03	1.48	2.91	25.85	65.27	359,218
	2021	Oct-Dec	2.82	2.51	1.58	3.14	26.15	63.80	357,540

Exhibit A-8. Cash Out Refinance – Share of Endorsements by Loan type

	1			()	•	
Endorsement	Quarter		ase Mortgages	Mortgages		
Fiscal Year		<=36	>36 - <43	>=43 - <50	>= 50	Average DTI
	Oct-Dec	30.61	25.45	27.48	16.47	40.58
2012	Jan-Mar	31.02	25.40	27.61	15.97	40.47
2012	Apr-Jun	31.80	25.79	27.32	15.09	40.23
	Jul-Sep	32.18	26.08	27.38	14.36	40.10
	Oct-Dec	32.76	26.45	26.96	13.83	39.91
2013	Jan-Mar	32.36	26.62	27.34	13.68	39.97
2010	Apr-Jun	32.83	27.04	27.35	12.77	39.81
	Jul-Sep	30.46	27.14	28.52	13.88	40.38
	Oct-Dec	28.81	28.06	28.72	14.42	40.70
2014	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
	Oct-Dec	28.64	28.87	27.53	14.96	40.71
2015	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
	Oct-Dec	28.75	28.31	27.41	15.54	40.75
2016	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
	Oct-Dec	27.45	26.80	27.75	18.00	41.25
2017	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 Oct-Dec	23.99	24.90	29.20	21.91	42.35
	Jan-Mar	23.32	24.38	29.26	23.04	42.59
2018	Apr-Jun	22.12	23.44	29.58	24.87	43.02
	Apr-Jun Jul-Sep	21.21 20.31	23.55 23.43	29.99 30.31	25.25 25.95	43.23 43.47
	Oct-Dec	19.48	23.43	30.56	25.95	43.83
	Jan-Mar				27.45	
2019	Apr-Jun	19.23 20.51	22.67	30.13 20.54		43.89
	Jul-Sep	20.51 21.17	23.60 23.98	29.54 29.25	26.35 25.60	43.46 43.24
	Oct-Dec	21.57	23.79	29.24	25.40	43.17
	Jan-Mar	21.07	23.35	29.33	26.21	43.35
2020	Apr-Jun	21.79	24.34	30.48	23.39	42.95
	Jul-Sep	21.79	24.93	31.46	22.17	42.90
2021	Oct-Dec	20.88	24.49	31.76	22.87	43.07
		EUA Jonuory 2021		00	22.07	10.07

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

Exhibit A-10. Down Payment Assistance Program (DPA)									
Endorsement Fiscal Year	Quarters	Govern	ment	Relat	ive	Non-Re		No D	PA
i iscai i eai		Share	SDQ	Share	SDQ	Share	SDQ	Share	SDQ
	Oct-Dec	8.24	14.78	23.06	10.40	0.61	10.56	68.09	7.0
2012	Jan-Mar	8.02	14.65	23.27	9.78	0.36	10.96	68.35	7.1
2012	Apr-Jun	7.51	14.52	20.74	9.72	0.32	10.77	71.42	7.3
	Jul-Sept	7.50	14.10	21.91	9.62	0.32	13.11	70.26	7.2
	Oct-Dec	7.72	13.49	22.51	9.70	0.36	11.27	69.41	7.2
2013	Jan-Mar	8.50	12.75	22.46	9.35	0.45	11.82	68.60	7.3
2015	Apr-Jun	8.09	12.40	21.01	9.69	0.42	10.05	70.48	7.
	Jul-Sept	4.32	13.71	23.87	9.28	0.39	9.85	71.42	7.
	Oct-Dec	7.19	12.55	26.24	9.27	0.40	9.34	66.18	7.2
2014	Jan-Mar	8.60	12.83	26.47	9.59	0.51	9.21	64.43	7.
2014	Apr-Jun	8.77	12.22	23.96	9.46	0.70	8.27	66.58	7.
	Jul-Sept	8.90	12.90	25.73	9.98	0.96	9.91	64.41	7.
	Oct-Dec	9.61	12.67	27.51	10.78	1.13	9.73	61.75	8.
2015	Jan-Mar	10.34	13.13	27.09	11.38	1.33	8.73	61.23	8.
2015	Apr-Jun	9.62	12.96	24.34	11.66	1.60	10.24	64.44	9.
	Jul-Sept	10.00	12.30	25.57	11.38	1.82	10.35	62.61	8.
	Oct-Dec	10.94	12.45	27.26	11.78	2.15	10.46	59.65	8.
2016	Jan-Mar	10.58	12.14	26.62	12.17	2.18	10.43	60.61	9.
2016	Apr-Jun	9.86	12.46	25.10	12.95	1.63	10.97	63.42	10.
	Jul-Sept	9.85	12.98	26.43	13.77	1.58	12.45	62.14	10.
	Oct-Dec	10.34	12.61	26.86	13.81	1.77	13.09	61.03	10.
2017	Jan-Mar	10.52	12.86	26.88	13.77	2.01	12.44	60.59	10.
2017	Apr-Jun	10.38	14.03	24.76	13.84	1.64	13.77	63.22	10.
	Jul-Sept	10.96	14.57	26.06	14.76	1.44	15.12	61.54	11.
	Oct-Dec	11.77	15.18	26.45	14.98	1.26	14.95	60.52	11.
2010	Jan-Mar	11.34	15.56	26.79	15.13	1.20	14.54	60.67	11.
2018	Apr-Jun	10.77	16.08	25.29	15.08	1.25	15.92	62.69	11.
	Jul-Sept	11.71	16.79	26.23	15.29	1.24	16.51	60.83	11.
	Oct-Dec	12.25	17.19	26.74	14.82	1.08	15.66	59.94	11.
2019	Jan-Mar	13.18	17.20	26.27	14.77	1.04	16.00	59.51	10.
2013	Apr-Jun	13.05	17.05	24.03	15.21	1.04	15.18	61.88	11.
	Jul-Sept	13.16	15.88	24.92	14.74	0.94	14.88	60.98	10.
	Oct-Dec	14.47	14.01	25.15	13.65	0.88	12.59	59.50	10.
2020	Jan-Mar	15.49	12.08	24.42	12.27	0.93	11.73	59.16	9.
	Apr-Jun	15.95	5.69	21.90	5.80	0.92	5.35	61.23	4.
	Jul-Sept	15.76	1.06	22.43	1.14	0.99	1.47	60.81	0.
2021	Oct-Dec	16.11	0.02	23.73	0.03	0.88	0.00	59.28	0.

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

	Exhibit A-11. Reverse Mortgage Program (HECM) Reverse Mortgage Loans (HECM) Claims <sup>a</sup> by Type											
			Reverse	Mortgage L	oans (HECM) Cla	ims <sup>a</sup> by Typ	De					
Fiscal		Clain	n Type 1	Cla	im Type 2	Supp	olemental		Total⁵			
Year	Quarter	Number	Total Claims Paid	Number	Total Claims Paid	Number	Total Claims Paid	Number	Total Claims Paid			
	Oct-Dec	3,032	236,708,768	1,337	306,952,073	76	165,275	4,445	543,826,117			
2014	Jan-Mar	2,977	243,464,207	1,827	396,681,617	49	112,194	4,853	640,258,017			
2014	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 T	otal	12,273	990,451,066	7,128	1,604,358,176	726	2,153,727	20,127	2,596,962,969			
	Oct-Dec	12,516	977,456,146	1,701	392,204,512	1,125	1,688,735	15,342	1,371,349,394			
2015	Jan-Mar	7,142	574,998,013	1,880	453,417,423	4,259	8,666,375	13,281	1,037,081,812			
2015	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 T	otal	34,266	2,739,147,083	11,310	2,811,563,817	12,319	33,497,716	57,895	5,584,208,616			
	Oct-Dec	5,366	447,345,205	3,923	986,113,498	8,886	23,146,161	18,175	1,456,604,864			
0040	Jan-Mar	5,854	455,189,374	3,874	972,917,814	11,526	24,824,881	21,254	1,452,932,070			
2016	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 T		23,843	1,886,001,410	18,548	4,606,474,686	51,010	156,457,331	93,401	6,648,933,427			
	Oct-Dec	6,144	477,712,116	6,204	1,504,458,822	7,823	29,702,312	20,171	2,011,873,250			
0047	Jan-Mar	7,203	581,198,659	5,783	1,401,927,594	6,623	18,908,074	19,609	2,002,034,327			
2017	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 T		24,092	1,877,276,936	22,280	5,312,080,328	26,605	83,636,449	72,977	7,272,993,713			
	Oct-Dec	4,918	364,732,308	6,375	1,466,323,543	5,644	15,300,518	16,937	1,846,356,370			
0040	Jan-Mar	4,702	365,552,817	5,424	1,241,859,664	5,496	18,069,817	15,622	1,625,482,298			
2018	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 T		17,614	1,343,232,358	27,894	6,439,672,343	19,514	79,095,791	65,022	7,862,000,491			
	Oct-Dec	3,598	276,743,900	15,734	3,584,137,917	4,389	20,085,976	23,721	3,880,967,793			
0040	Jan-Mar	3,864	298,948,014	10,105	2,339,723,175	4,268	18,247,891	18,237	2,656,919,079			
2019	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 T		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	3,674	295,971,269	9,380	2,198,948,676	3,709	12,817,402	16,763	2,507,737,348			
2020	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 T	otal	12,379	1,006,885,098	32,919	7,733,905,427	13,681	52,092,437	58,978	8,792,882,961			
2021	Oct-Dec	1,552	120,060,442	5,627	1,349,867,511	2,084	7,782,229	9,263	1,477,710,181			
2020 T		1,552	120,060,442 eed in Lieu of Foreclos	5,627	1,349,867,511	2,084	7,782,229	9,263	1,477,710,181			

Exhibit A-11, Reverse Mortgage Program (HECM)

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

b 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 1 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 no 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, January 2021