



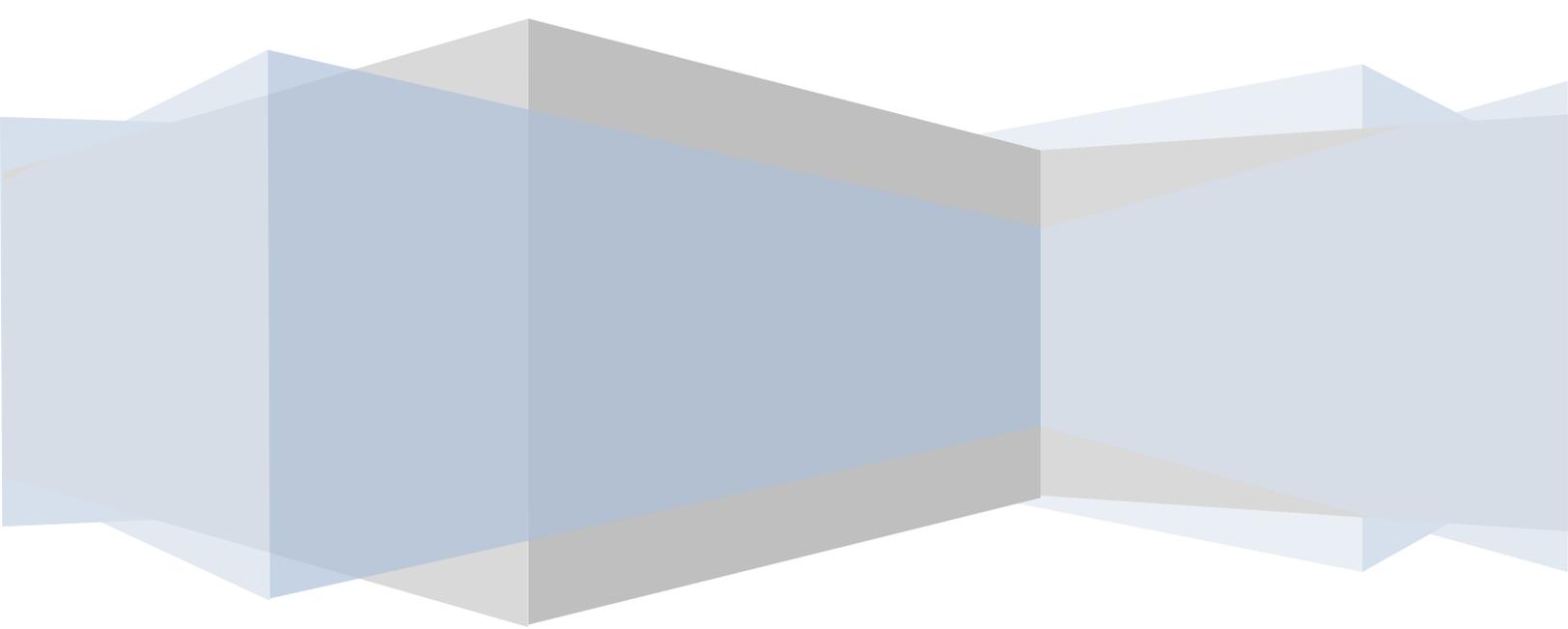
U.S. Department of Housing and Urban Development

FHA Single-Family Mutual Mortgage Insurance Fund Programs

Quarterly Report to Congress

FY 2017 Q4

Delivered: December 05, 2017



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

FY 2017 Q4
Data as of September 30, 2017

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

FOREWORD

On behalf of Secretary Carson and General Deputy Assistant Secretary for Housing Dana Wade, and pursuant to requirements of section 202(a)(5) of the National Housing Act, as amended by the FHA Modernization Act of 2008 (Public Law 110-289, Page 122 Stat. 2834), I am herewith transmitting the Fiscal Year 2017 Fourth 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 July 1, 2017 through September 30, 2017.

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

Also posted in the Office of Housing Reading Room are annual independent actuarial reviews of the MMI Fund and HUD's Annual Report to Congress on the financial status of that fund. HUD posted the Actuarial Review and Annual Report to Congress for FY 2017 on November 15, 2017. The FY 2017 Annual Report, which summarize an independent actuary's exhaustive analysis of the portfolio, include detailed projections of future performance and discussion of economic risk to the MMI Fund. The Department is pleased to provide details to the Congress on how this report was prepared or to answer any questions about the information presented.

Sincerely,

A handwritten signature in black ink that reads "Nandini Bhaskara Rao". The signature is written in a cursive style with a large, looping initial "N".

Nandini Rao

Associate Deputy Assistant Secretary
Risk Management and Regulatory Affairs

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

Mandated Item	Summary	Page	Exhibit
<p>A) Cumulative volume of mortgage insurance commitments that have been made during such fiscal year through the end of the quarter for which the report is submitted</p>	<p>Single-family forward endorsements during the fourth quarter of FY 2017 decreased 0.2 percent by count from the prior quarter. Single-family forward endorsements by volume were \$62.0 billion, up 2.0 percent from the prior quarter. Reverse Mortgage (HECM) endorsements by count were down 6.5 percent from the previous quarter. HECM endorsement volume, at \$4.5 billion for the fourth quarter of FY 2017, represents a decrease of 7.3 percent from the previous quarter.</p>	<p>4, 16, 17</p>	<p>1, A-1, A-2</p>
<p>B) Types of mortgages insured, categorized by risk</p>	<p>The average credit score this quarter decreased by 1 point to 674. Endorsement share of 720+ credit score mortgages has fallen to 16.7 percent. Share of less than 640 credit score has risen to 23.2 percent. Average borrower loan-to-value ratio fell to 92.8 percent.</p>	<p>5, 6, 7, 18, 19, 20, 21</p>	<p>2, 3, 4, A-3, A-4, A-5, A-6</p>
<p>C) Any significant changes between actual and projected claim and prepayment activity</p>	<p>Prepayment speeds through this quarter were 96 percent higher than predicted counts. Claim payments are running 28 percent below predicted level by count and 48 percent below predicted level by dollar amount.</p>	<p>8, 22</p>	<p>5, A-7</p>
<p>D) Projected versus actual loss rates</p>	<p>The year-to-date net loss rate on claim activity of 51.38 percent is slightly above the projection of 51.21 percent.</p>	<p>8</p>	<p>5</p>
<p>E) Updated projections of the annual subsidy rates</p>	<p>The budget execution credit subsidy rates (CSR) for FY 2017 Q4 are at -4.42 percent and -0.33 percent for forward mortgages and HECMs, respectively.</p>	<p>9</p>	<p>6</p>

Other	Summary	Page	Exhibit
F) MMI Fund Cash and Investments	The MMI Fund Cash and Investments account balance at the end of FY 2017 Q3 was \$50.1 billion, down from \$51.7 billion last quarter.	10	7
G) Business-Operations Cash Flow	Core business-operations cash flow in FY 2017 Q4 was \$845 million. FHA paid \$3.5 billion in claims and property expenses, while receiving \$4.4 billion in revenues from premium collections, sale of notes and properties, and other revenue.	11	8
H) Early Payment Delinquency	The early payment delinquency (EPD) rate increased this quarter to 0.34 percent, from 0.28 percent last quarter.	12	9
I) Serious Delinquency Rates	The portfolio-level serious delinquency rate increased this quarter to 4.32 percent, from 4.28 percent last quarter.	13, 14	10, 11

Endorsement Activity

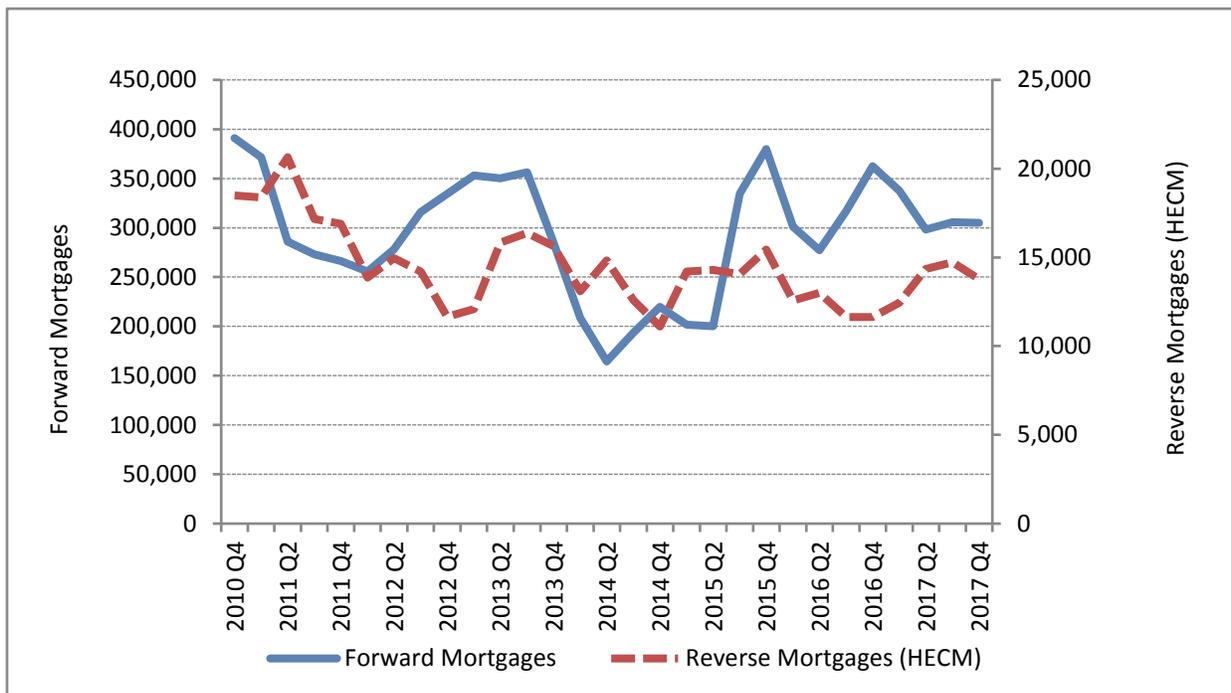
During the fourth quarter of fiscal year (FY) 2017, the FHA endorsed 304,857 forward mortgages for insurance, down 0.2 percent from the prior quarter.

The dollar volume of refinance endorsements (Conventional to FHA, FHA to FHA) in this quarter was down 5.8 percent from the previous quarter, while the volume of all forward-mortgage endorsements was up 2.0 percent (Exhibit A-2).

FHA-to-FHA refinance activity, in terms of endorsed mortgages, decreased by 11.2 percent from the quarter-earlier period—from 44,006 to 39,084.

The HECM endorsement volume, \$4.5 billion for the fourth quarter of FY 2017, is down 7.3 percent from the previous quarter. HECM endorsement counts in FY 2017 Q4 (13,767) were down 6.5 percent from last quarter.

Exhibit 1. Endorsement Counts by Fiscal Year and Quarter

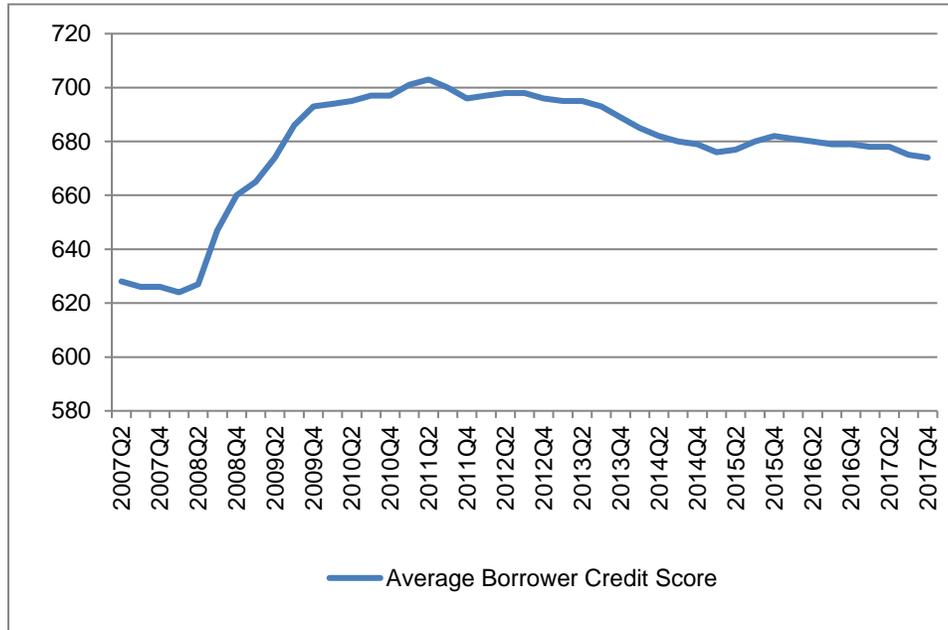


SOURCE: U.S. Department of HUD/FHA, October 2017.

Borrower Credit Scores

Average borrower credit scores fell by 1 point to 674. This continues to be well above the levels preceding the mortgage and credit crisis (Exhibit 2, Exhibit A-4).

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

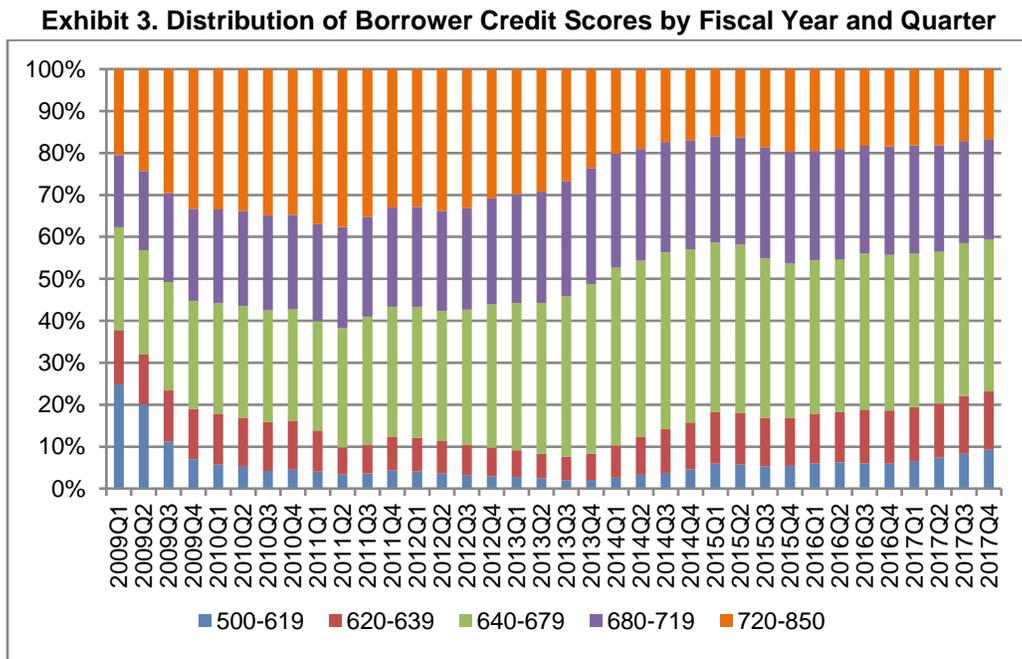


NOTE: Excludes streamline refinance activity.

SOURCE: U.S. Department of HUD/FHA, October 2017.

As shown in Exhibit 3, the distribution of borrower credit scores remained fairly consistent over the past few years. The core of the distribution is in the 640–679 range (36.2 percent). In FY 2017 the share of 680–850 credit scores continued to decline. (Exhibit 3, Exhibit A-3).

A shift in FHA’s risk profile could easily be lost by focusing on average credit score alone. As shown in Exhibit 3, mortgages with less than 620 credit score accounted for almost 25 percent of total originations in 2009, compared to 9.3 percent today. On the other hand, the share of mortgages with credit scores exceeding 720, which accounted for more than one-third of FHA’s production in 2011, is now under 20 percent. The distribution remained stable with the core business of FHA in the 640–679 range.



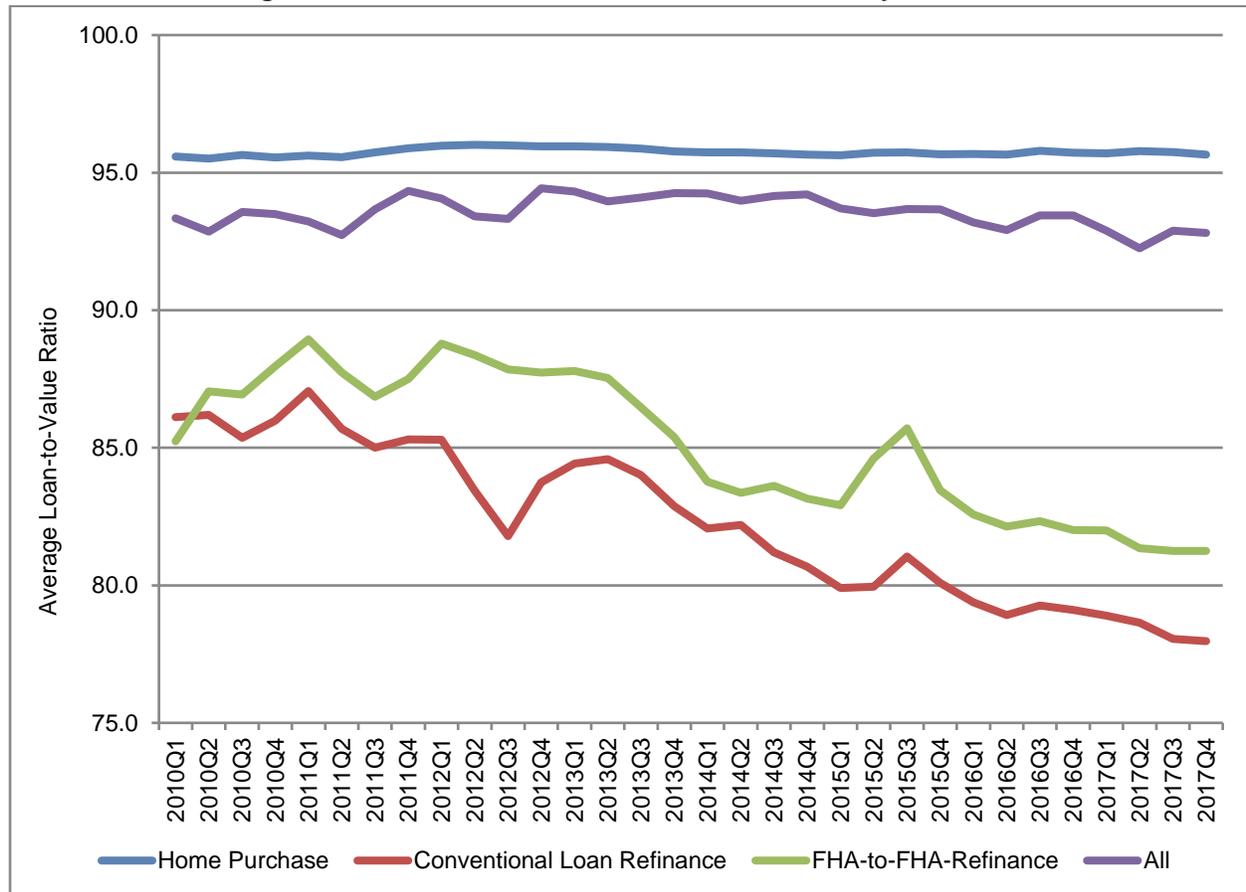
NOTE: Excludes streamline refinance activity.

SOURCE: U.S. Department of HUD/FHA, October 2017.

Average Loan-to-Value (LTV)

The average LTV decreased slightly to 92.8 percent from 92.9 percent for all FHA mortgages combined. Typically, LTV ratios of refinance mortgages are lower than home purchase mortgages. FHA activity consisted of a lower volume of refinance mortgages relative to purchase mortgages in the third quarter. (Exhibit 4, Exhibit A-1, Exhibit A-5, Exhibit A-6).

Exhibit 4. Average Loan-to-Value Ratios on New Endorsements by Fiscal Year and Quarter



NOTE: Excludes streamline refinance activity.
 SOURCE: U.S. Department of HUD/FHA, October 2017.

Predicted and Actual Termination and Claim-Loss Rates

The predicted-versus-actual comparisons through the fourth quarter of FY 2017 are presented in Exhibit 5. Prepayment speeds continue to be higher than predicted. Claims continue to be well below predictions. The number of claims through 2017 Q4 (83,894) is 28 percent less than predicted (117,098). That deviation comes from a combination of continued foreclosure-processing delays in many states and more aggressive servicing actions to promote home retention. Neither of these is a factor that can easily be captured in the actuarial forecast models, which are based upon behavioral relationships observed over many years. When institutional and/or borrower behaviors change, it can take a number of years for the actuarial models to have enough data to reset the behavioral patterns to adapt to those changes (Exhibit 5).

Exhibit 5. Termination and Claim Loss Experience Compared to Forecasts

Oct 2016–Sept 2017	Year to Date Predicted ^a	Year to Date Actual	Deviation (Actual Minus Predicted)	Percentage Deviation (Actual Versus Predicted)
Prepayments (number)	509,229	998,451	489,222	96
Claims (number) ^a	117,098	83,894	(16,009)	(28)
Claims (\$ millions) ^b	15,948	8,241	(7,707)	(48)
Net Loss on Claims (%) ^c	51.21	51.38	.19	0

na = not applicable.

^a Projections of prepayment counts, claim counts, and claim dollars are modeled for the FY 2017 FHA financial statements. All projections shown here use quarterly forecasts and thus reflect cyclical trends throughout the year.

^b 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.

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

SOURCE: U.S. Department of HUD/FHA, October 2017.

Budget Execution Credit Subsidy Rates

The budget execution subsidy rate for forward mortgages for FY 2017 Q4 is -4.42 percent. The subsidy rate for HECM mortgages is -0.33 percent as of FY 2017 Q4 (Exhibit 6).

Exhibit 6. Budget Execution Credit Subsidy Rates, FY 2017 Q4

Type of Mortgage	Rate (%) ^a
Forward Mortgages	-4.42
Reverse Mortgages (HECM)	-0.33

^a Budget execution credit subsidy rates are the expected net present value, per dollar of new insurance endorsements, of all cash flows from insurance operations over the life of the mortgage insurance as of the year of the insurance commitments. A negative rate means that the present value of premium revenues is expected to be greater than the present value of net claim expenses over the life of the insurance, i.e., a negative subsidy.

Mortgages with negative credit subsidies are expected to produce receipts for the federal budget. These initial budget-execution rates are those approved by the Office of Management and Budget for budget accounting. The rates are updated on an annual basis, once the insurance is in place, to reflect both actual experience and updated forecasts of future mortgage performance and insurance cash flows.

SOURCE: U.S. Department of HUD/FHA, October 2017.

MMI Fund Cash and Investments

As Exhibit 7 shows, the cash and investments of the MMI Fund decreased to \$50.1 billion in FY 2017 Q4. \$18.5 billion is held in the Financing account, and \$31.6 billion is held in the Capital Reserve account.

Exhibit 7. MMI Fund Cash and Investments by Quarter, FY 2011–FY 2017

Fiscal Year	Quarter	Capital Reserve Account ^a (\$ billions)	Financing Account ^b (\$ billions)	Total ^{cd} (\$ billions)
2011	Oct–Dec	6.3	26.4	32.7
	Jan–Mar	7.7	23.9	31.6
	Apr–Jun	2.8	28.9	31.7
	Jul–Sep	4.7	29.0	33.7
2012	Oct–Dec	5.7	27.6	33.3
	Jan–Mar	7.0	25.3	32.3
	Apr–Jun	9.8	21.9	31.6
	Jul–Sep	3.3	35.1	38.4
2013	Oct–Dec	7.1	30.0	37.1
	Jan–Mar	11.0	25.1	36.1
	Apr–Jun	15.8	17.3	33.1
	Jul–Sep	0	48.4	48.4
2014	Oct–Dec	2.6	44.5	47.1
	Jan–Mar	2.2	43.6	45.8
	Apr–Jun	4.9	40.4	45.3
	Jul–Sep	7.3	38.9	46.2
2015	Oct–Dec	10.4	35.8	46.2
	Jan–Mar	12.9	33.5	46.3
	Apr–Jun	12.0	34.5	46.5
	Jul–Sep	16.0	29.6	45.6
2016	Oct–Dec	18.2	27.3	45.5
	Jan–Mar	20.2	25.3	45.5
	Apr–Jun	34.4	16.6	51.0
	Jul–Sep	37.2	12.6	49.8
2017	Oct–Dec	40.3	9.6	49.9
	Jan–Mar	43.0	7.4	50.5
	Apr–Jun	28.8	22.8	51.7
	Jul–Sep	31.6	18.5	50.1

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

^a 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.

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

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

^d Capital Reserve Account and Financing Account may not always add to total because of rounding.

SOURCE: U.S. Department of HUD/FHA, October 2017.

Cash Flows from Business Operations

FY 2017 Q4 net cash flow was \$845 million compared to FY 2017 Q3 of \$1,098 million. HUD has been proactive in reducing average losses per claim through a more diversified asset disposition strategy that now includes the Distressed Asset Stabilization Program (DASP), promotion of third-party sales at foreclosure auctions, Claims Without Conveyance of Title (CWCOT), and expanded eligibility for pre-foreclosure (short) sales. Claim costs (as measured by loss rates) have decreased from a high of 65 percent in 2011 to around 50 percent over the last four quarters (Exhibit A-7).

Exhibit 8. Business Operations Cash Flows, FY 2017 Q1–FY 2017 Q4 (\$ millions)

	FY 2017 Q1	FY 2017 Q2	FY 2017 Q3	FY 2017 Q4	Past 4 Quarters
Collections					
Premiums	3,390	3,199	3,417	3,419	13,425
Property Sale Receipts	964	889	880	648	3,381
Note Sale Proceeds	524	84	108	121	837
Other	199	123	164	200	686
Total	5,077	4,295	4,569	4,388	18,329
Disbursements					
Claims ^a	(5,011)	(3,733)	(3,414)	(3,499)	(15,657)
Property Maintenance	(46)	(62)	(41)	(39)	(188)
Other	(4)	(5)	(16)	(5)	(30)
Total	(5,061)	(3,800)	(3,471)	(3,543)	(15,875)
Net Operations Cash Flow	16	495	1,098	845	2,454

NOTE: Unaudited figures; details may not sum to total due to rounding.

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

SOURCE: U.S. Department of HUD/FHA, October 2017.

Early-Payment Delinquency Rates

The Early-Payment Delinquency (EPD) rate for mortgages originated in FY 2017 Q2 is up 6 basis points from the previous quarter.

Exhibit 9. Early Payment Delinquency Rates

Fiscal Year	Origination Quarter	Mortgage Type/Purpose		
		Purchase	Refinance	All ^a
2010	Oct-Dec	0.32	0.86	0.52
	Jan-Mar	0.40	0.62	0.49
	Apr-Jun	0.35	0.44	0.37
	Jul-Sep	0.44	0.43	0.44
2011	Oct-Dec	0.32	0.31	0.31
	Jan-Mar	0.36	0.31	0.34
	Apr-Jun	0.46	0.41	0.45
	Jul-Sep	0.40	0.54	0.43
2012	Oct-Dec	0.31	0.29	0.31
	Jan-Mar	0.38	0.30	0.34
	Apr-Jun	0.39	0.32	0.36
	Jul-Sep	0.38	0.29	0.34
2013	Oct-Dec	0.25	0.20	0.23
	Jan-Mar	0.29	0.20	0.24
	Apr-Jun	0.32	0.22	0.27
	Jul-Sep	0.36	0.26	0.33
2014	Oct-Dec	0.32	0.29	0.31
	Jan-Mar	0.37	0.33	0.36
	Apr-Jun	0.46	0.37	0.44
	Jul-Sep	0.45	0.34	0.43
2015	Oct-Dec	0.36	0.27	0.34
	Jan-Mar	0.42	0.24	0.35
	Apr-Jun	0.43	0.28	0.37
	Jul-Sep	0.42	0.34	0.40
2016	Oct-Dec	0.31	0.27	0.30
	Jan-Mar	0.37	0.23	0.32
	Apr-Jun	0.46	0.34	0.42
	Jul-Sep	0.45	0.32	0.41
2017	Oct-Dec	0.31	0.22	0.28
	Jan-Mar	0.40	0.22	0.34

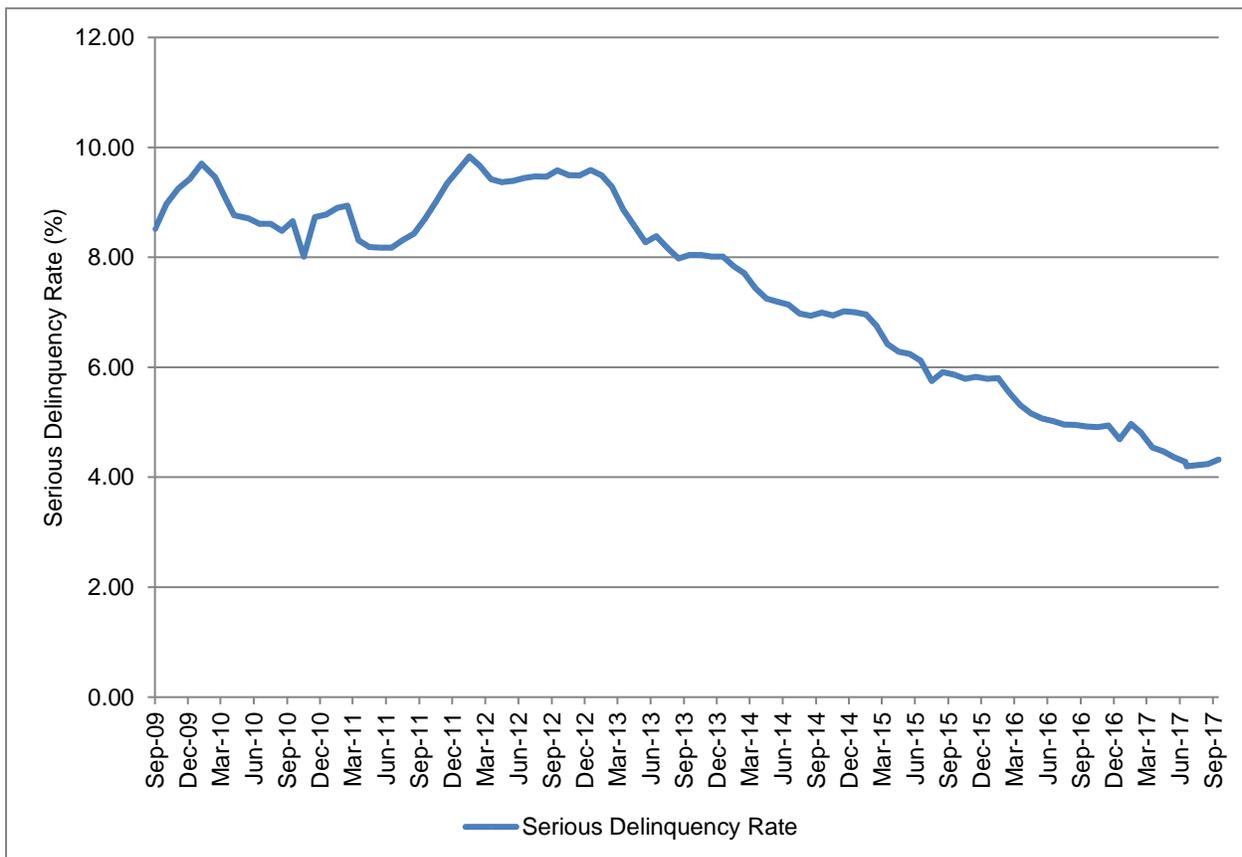
^a Percent of mortgages originated in each quarter for FHA insurance that experience a three-month delinquency in the first six payment cycles.

SOURCE: U.S. Department of HUD/FHA, October 2017.

Serious Delinquency Rates

Serious delinquency (SDQ) rates for this quarter increased to 4.32 percent from last quarter's historical low. As the portfolio serious delinquency rate has reached a historical low and FHA expands access to underserved borrowers, FHA may see increases in SDQ rates going forward. However, SDQ rates tend to be somewhat seasonal and may vacillate along current levels. Recent disasters such as hurricanes Harvey, Irma and Maria as well as California wildfires may also have a near term effect on overall delinquency rates. Overall, serious delinquency rates are significantly improved from the highs seen in 2011.

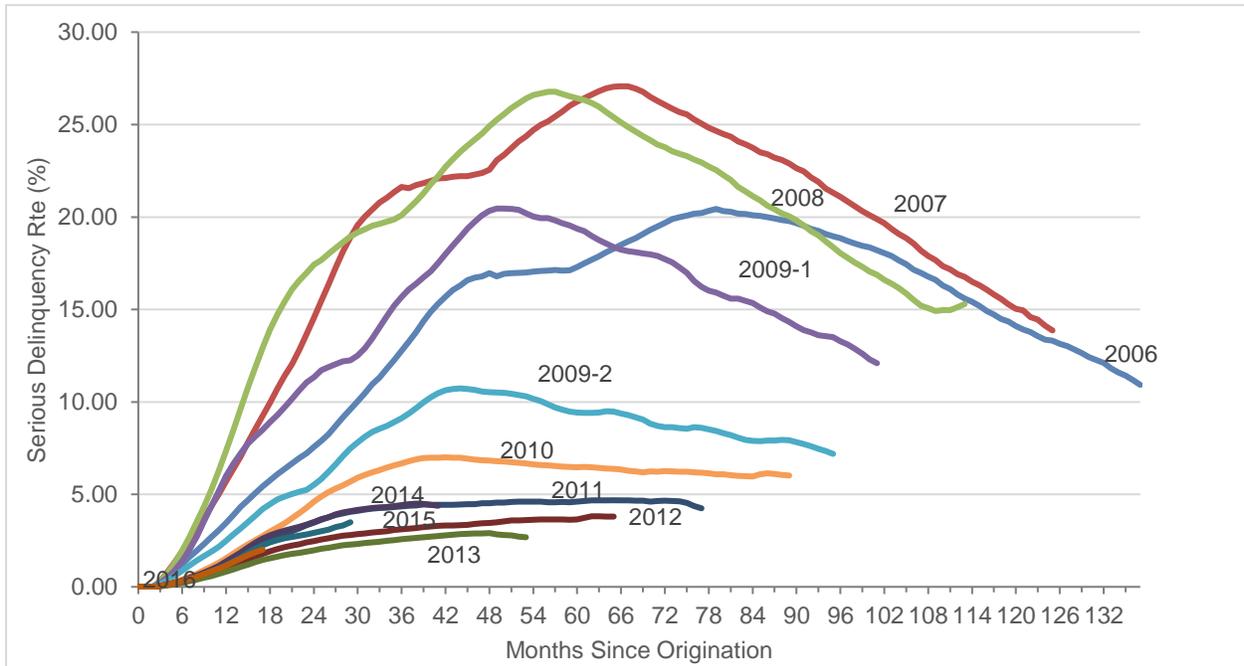
Exhibit 10. Serious Delinquency Rates, All Single-Family Forward Endorsements



SOURCE: U.S. Department of HUD/FHA, October 2017.

Exhibit 11 follows the serious delinquency rates of recent vintages from their month of origination. Serious delinquency rates have risen in the more recent vintages. This may be due to increases in credit to underserved borrowers or other factors in the economy. However, recent vintage delinquency rates are still considerably lower than for those mortgages originated during 2006-2010.

Exhibit 11. Serious Delinquency Rate by Fiscal Year



NOTE: The FY 2009 cohort is separated into two parts, representing mortgage originations from October through March in 2009-1 and mortgage originations from April through September in 2009-2.
 SOURCE: U.S. Department of HUD/FHA, October 2017.

APPENDIX

Exhibit A-1. New Endorsement Counts

	Forward Mortgages ^a				Reverse Mortgages (HECM) ^b
	Home Purchase	Conventional Mortgage Refinance	FHA-to-FHA Refinance	All Forward Mortgages	
Fiscal Year					
2000	763,063	30,352	38,131	831,546	6,637
2001	730,105	43,802	188,644	962,551	7,789
2002	787,094	61,101	319,985	1,168,180	13,048
2003	602,452	59,499	556,983	1,218,934	18,084
2004	540,314	53,939	298,170	892,423	37,791
2005	328,543	31,957	117,853	478,353	43,082
2006	293,257	58,226	48,423	399,906	76,280
2007	261,166	104,578	36,601	402,345	107,367
2008	591,326	349,123	91,133	1,031,582	112,013
2009	995,102	468,768	367,449	1,831,319	114,639
2010	1,109,164	305,296	252,451	1,666,911	78,758
2011	777,101	194,811	224,760	1,196,672	73,093
2012	733,699	129,185	321,614	1,184,498	54,677
2013	702,415	91,500	550,930	1,344,845	59,918
2014	594,998	55,352	136,002	786,352	51,616
2015	753,388	80,013	282,830	1,116,231	57,990
2016	879,513	107,460	271,077	1,258,050	48,868
2017	881,926	126,859	237,419	1,246,204	55,293
Fiscal Year and Quarter					
2013 Q1	177,852	22,754	152,521	353,127	12,079
2013 Q2	157,439	25,428	167,487	350,354	15,830
2013 Q3	181,297	24,176	150,906	356,379	16,371
2013 Q4	185,827	19,142	80,016	284,985	15,638
2014 Q1	152,965	14,610	40,912	208,487	13,094
2014 Q2	119,833	13,456	31,202	164,491	14,827
2014 Q3	148,016	13,573	32,042	193,631	12,590
2014 Q4	174,184	13,713	31,846	219,743	11,105
2015 Q1	154,807	15,826	30,966	201,599	14,199
2015 Q2	132,529	15,429	52,180	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	27,163	63,472	301,185	12,578
2016 Q2	187,068	26,111	64,247	277,426	13,002
2016 Q3	225,133	26,058	65,903	317,094	11,643
2016Q4	256,762	28,128	77,455	362,345	11,645
2017Q1	220,354	30,154	87,009	337,517	12,453
2017Q2	195,484	35,489	67,320	298,293	14,352
2017Q3	230,475	31,056	44,006	305,537	14,721
2017Q4	235,613	30,160	39,084	304,857	13,767

^a Starting in FY 2008 Q4, these counts include 203(k) purchase and rehabilitation mortgages and 234(c) condominium mortgages.

^b 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. Amounts May not reconcile to the FY 2017 Annual Report.

SOURCE: U.S. Department of HUD/FHA, October 2017.

Exhibit A-2. Endorsement Volumes

	Volumes (\$ millions)					Reverse Mortgages (HECM) ^b
	Forward Mortgages ^a					
	Home Purchase	Conventional Mortgage Refinance	FHA-to-FHA Refinance	All Forward Mortgages		
Fiscal Year						
2000	79,397	3,181	3,697	86,276	827	
2001	79,709	4,947	22,894	107,550	1,095	
2002	91,025	7,404	37,713	136,142	1,975	
2003	73,026	7,602	66,682	147,310	3,000	
2004	66,835	6,998	33,787	107,621	6,886	
2005	40,196	4,258	13,521	57,975	8,877	
2006	37,102	8,521	6,110	51,733	17,973	
2007	35,003	16,095	5,419	56,516	24,622	
2008	95,374	61,525	14,907	171,806	24,240	
2009	171,672	86,984	71,729	330,385	30,171	
2010	191,602	56,431	49,469	297,502	20,974	
2011	134,357	36,846	46,440	217,642	18,208	
2012	124,454	23,473	65,344	213,272	13,113	
2013	124,934	16,932	98,249	240,115	14,680	
2014	105,721	9,410	20,085	135,216	13,520	
2015	140,262	14,428	58,431	213,121	16,130	
2016	171,632	20,550	53,223	245,406	14,660	
2017	178,587	25,297	47,019	250,904	17,692	
Fiscal Year and Quarter						
2013 Q1	30,994	4,135	28,596	63,725	2,819	
2013 Q2	27,887	4,793	30,991	63,671	3,839	
2013 Q3	32,330	4,510	26,445	63,285	4,090	
2013 Q4	33,724	3,494	12,217	49,435	3,932	
2014 Q1	27,346	2,577	5,903	35,825	3,434	
2014 Q2	21,424	2,316	4,560	28,300	3,997	
2014 Q3	25,849	2,212	4,755	32,816	3,202	
2014 Q4	31,102	2,305	4,868	38,275	2,887	
2015 Q1	27,596	2,604	4,975	35,175	3,802	
2015 Q2	23,975	2,658	10,561	37,195	3,916	
2015 Q3	36,989	4,012	25,064	66,065	3,871	
2015 Q4	51,702	5,154	17,831	74,687	4,540	
2016 Q1	40,563	5,038	12,480	58,081	3,625	
2016 Q2	36,486	5,035	12,008	53,529	3,906	
2016 Q3	43,525	4,975	13,038	61,538	3,527	
2016 Q4	51,059	5,502	15,697	72,257	3,603	
2017 Q1	44,120	6,028	18,147	68,295	3,892	
2017 Q2	39,558	7,137	13,048	59,743	4,548	
2017 Q3	46,441	6,146	8,252	60,839	4,801	
2017 Q4	48,468	5,986	7,572	62,027	4,450	

^a Starting in FY 2008 Q4, these counts include 203(k) purchase and rehabilitation mortgages and 234(c) condominium mortgages.

^b 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. Amounts May not reconcile to the FY 2017 Annual Report.

SOURCE: U.S. Department of HUD/FHA, October 2017.

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

Fiscal Year	Quarters	Credit Scores ^a				
		500-619	620-639	640-679	680-719	720-850
2009	Oct-Dec	24.9	12.9	24.5	17.2	20.5
	Jan-Mar	20.0	12.0	24.9	18.9	24.3
	Apr-Jun	11.2	12.3	25.8	21.2	29.6
	Jul-Sep	7.0	12.0	25.7	22.0	33.3
2010	Oct-Dec	5.7	12.1	26.3	22.4	33.4
	Jan-Mar	5.2	11.7	26.6	22.7	33.8
	Apr-Jun	4.2	11.7	26.7	22.6	34.9
	Jul-Sep	4.5	11.7	26.5	22.6	34.7
2011	Oct-Dec	4.0	9.8	26.1	23.1	36.9
	Jan-Mar	3.4	6.4	28.5	24.1	37.7
	Apr-Jun	3.6	6.9	30.6	23.7	35.3
	Jul-Sep	4.3	8.1	31.0	23.7	33.0
2012	Oct-Dec	4.1	8.0	31.2	23.8	32.9
	Jan-Mar	3.6	7.7	31.0	23.8	33.9
	Apr-Jun	3.2	7.2	32.3	24.2	33.2
	Jul-Sep	2.9	6.8	34.2	25.3	30.8
2013	Oct-Dec	2.8	6.4	35.1	26.0	29.8
	Jan-Mar	2.4	5.9	35.9	26.6	29.2
	Apr-Jun	2.0	5.7	38.2	27.3	26.8
	Jul-Sep	2.1	6.2	40.4	27.7	23.6
2014	Oct-Dec	2.6	7.7	42.4	27.2	20.1
	Jan-Mar	3.3	9.1	42.0	26.6	19.0
	Apr-Jun	3.8	10.4	42.1	26.3	17.4
	Jul-Sep	4.6	11.2	41.3	25.9	17.0
2015	Oct-Dec	5.9	12.3	40.4	25.4	16.0
	Jan-Mar	5.8	12.4	40.0	25.6	16.2
	Apr-Jun	5.3	11.6	38.1	26.5	18.6
	Jul-Sep	5.4	11.4	36.9	26.6	19.7
2016	Oct-Dec	6.0	11.8	36.6	26.1	19.5
	Jan-Mar	6.2	12.0	36.4	26.3	19.1
	Apr-Jun	6.0	12.8	37.2	25.7	18.3
	Jul-Sep	5.9	12.7	37.0	25.9	18.4
2017	Oct-Dec	6.5	12.9	36.6	25.8	18.2
	Jan-Mar	7.4	12.9	36.2	25.4	18.2
	Apr-Jun	8.3	13.7	36.5	24.4	17.1
	Jul-Sep	9.3	13.9	36.2	23.9	16.7

NOTES: Shares in each row may not sum to 100% due to rounding; excludes streamline refinance mortgages.

^a 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. They are grouped here according to the "decision" score used for mortgage underwriting. That score represents the weakest borrower on a mortgage application when there are multiple applicants. Streamline refinance mortgages do not require full underwriting; therefore, they are not represented here.

SOURCE: U.S. Department of HUD/FHA, October 2017.

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

Fiscal Year	Quarter	Mortgage Purpose			
		Home Purchase	Conventional Mortgage Refinance	FHA-to-FHA Refinance ^a	All ^a
2010	Oct–Dec	696	689	679	694
	Jan–Mar	696	695	685	695
	Apr–Jun	697	699	688	697
	Jul–Sep	696	700	693	697
2011	Oct–Dec	699	704	700	701
	Jan–Mar	701	707	703	703
	Apr–Jun	699	702	699	700
	Jul–Sep	697	694	697	696
2012	Oct–Dec	695	702	705	697
	Jan–Mar	695	707	708	698
	Apr–Jun	695	711	709	698
	Jul–Sep	695	698	704	696
2013	Oct–Dec	695	696	703	695
	Jan–Mar	694	697	703	695
	Apr–Jun	692	694	699	693
	Jul–Sep	690	685	690	689
2014	Oct–Dec	686	677	679	685
	Jan–Mar	684	674	675	682
	Apr–Jun	681	672	673	680
	Jul–Sep	680	671	671	679
2015	Oct–Dec	678	669	669	676
	Jan–Mar	678	673	675	677
	Apr–Jun	681	678	679	680
	Jul–Sep	682	677	674	682
2016	Oct–Dec	682	676	672	681
	Jan–Mar	681	676	672	680
	Apr–Jun	679	677	673	679
	Jul–Sep	680	677	672	679
2017	Oct–Dec	679	677	672	678
	Jan–Mar	679	675	668	678
	Apr–Jun	676	672	666	675
	Jul–Sep	676	670	664	674

NOTE: Credit scores are cobranded between the three major credit repositories (Equifax, Experian, TransUnion) and Fair Isaac Corporation (FICO). Values can range from 300 to 850. FHA policy permits credit scores of 580 and above, except for mortgages 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 mortgage underwriting. The decision score represents the weakest borrower on a mortgage application when there are multiple applicants. Streamline refinance mortgages do not require full underwriting; therefore, they are not represented here.

^a These include only fully-underwritten mortgages and exclude streamline refinancing.

SOURCE: U.S. Department of HUD/FHA, October 2017.

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

Fiscal Year	Quarter	LTV Ratio ^a			
		Up to 80	81-90	91-95	96-98
2010	Oct-Dec	5.82	14.83	10.11	69.24
	Jan-Mar	6.86	16.89	10.89	65.37
	Apr-Jun	5.73	12.94	9.53	71.81
	Jul-Sep	5.97	13.88	9.95	70.20
2011	Oct-Dec	6.21	15.87	10.95	66.97
	Jan-Mar	7.58	16.88	10.40	65.14
	Apr-Jun	6.21	13.08	9.00	71.70
	Jul-Sep	5.21	11.03	8.80	74.97
2012	Oct-Dec	5.85	12.02	9.33	72.80
	Jan-Mar	7.52	12.50	9.27	70.72
	Apr-Jun	7.67	11.34	8.96	72.04
	Jul-Sep	5.08	9.31	9.59	76.02
2013	Oct-Dec	5.17	9.99	10.14	74.70
	Jan-Mar	5.97	11.52	10.78	71.73
	Apr-Jun	5.63	10.27	9.75	74.35
	Jul-Sep	5.26	9.71	8.94	76.10
2014	Oct-Dec	5.58	9.95	9.00	75.47
	Jan-Mar	6.08	10.91	9.41	73.59
	Apr-Jun	5.63	9.61	9.04	75.72
	Jul-Sep	5.46	9.46	9.14	75.95
2015	Oct-Dec	6.70	10.79	8.93	73.57
	Jan-Mar	7.10	11.65	8.97	72.28
	Apr-Jun	6.14	11.59	8.76	73.52
	Jul-Sep	6.44	11.13	8.35	74.08
2016	Oct-Dec	7.53	12.56	8.25	71.67
	Jan-Mar	8.10	13.24	8.22	70.44
	Apr-Jun	6.80	11.68	7.67	73.85
	Jul-Sep	6.83	11.95	7.76	73.47
2017	Oct-Dec	8.02	13.89	7.66	70.43
	Jan-Mar	9.59	15.97	7.62	66.82
	Apr-Jun	7.97	13.80	7.54	70.69
	Jul-Sep	7.95	14.42	7.48	70.15

NOTES: Shares are based on mortgage counts. Excludes streamline refinancing. ^a In accordance with statutory requirements for determining eligibility of mortgages for FHA insurance, HUD measures loan-to-value (LTV) ratio without including any financed mortgage insurance premium in the mortgage balance.

SOURCE: US Department of HUD/FHA, October 2017.

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

Fiscal Year	Quarter	Mortgage Purpose			
		Home Purchase	Conventional Mortgage Refinance	FHA-to-FHA Refinance ^a	All
2010	Oct–Dec	95.6	86.1	85.2	93.3
	Jan–Mar	95.5	86.2	87.1	92.9
	Apr–Jun	95.6	85.4	86.9	93.6
	Jul–Sep	95.6	86.0	88.0	93.5
2011	Oct–Dec	95.6	87.1	88.9	93.2
	Jan–Mar	95.6	85.7	87.7	92.7
	Apr–Jun	95.7	85.0	86.9	93.7
	Jul–Sep	95.9	85.3	87.5	94.3
2012	Oct–Dec	96.0	85.3	88.8	94.1
	Jan–Mar	96.0	83.4	88.4	93.4
	Apr–Jun	96.0	81.8	87.9	93.3
	Jul–Sep	96.0	83.7	87.7	94.4
2013	Oct–Dec	96.0	84.4	87.8	94.3
	Jan–Mar	95.9	84.6	87.5	94.0
	Apr–Jun	95.9	84.0	86.5	94.1
	Jul–Sep	95.8	82.9	85.4	94.3
2014	Oct–Dec	95.7	82.1	83.8	94.2
	Jan–Mar	95.7	82.2	83.4	94.0
	Apr–Jun	95.7	81.2	83.6	94.2
	Jul–Sep	95.7	80.7	83.2	94.2
2015	Oct–Dec	95.6	79.9	82.9	93.7
	Jan–Mar	95.7	80.0	84.6	93.5
	Apr–Jun	95.7	81.1	85.7	93.7
	Jul–Sep	95.7	80.1	83.5	93.7
2016	Oct–Dec	95.7	79.4	82.6	93.2
	Jan–Mar	95.7	78.9	82.1	92.9
	Apr–Jun	95.8	79.3	82.3	93.4
	Jul–Sep	95.7	79.1	82.0	93.4
2017	Oct–Dec	95.7	78.9	82.0	92.9
	Jan–Mar	95.8	78.6	81.4	92.3
	Apr–Jun	95.8	78.1	81.3	92.9
	Jul–Sep	95.7	78.0	81.3	92.8

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

^a These include only fully-underwritten mortgages and exclude streamline refinancing.

SOURCE: US Department of HUD/FHA, October 2017.

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

Fiscal Year	Quarter	Loss Rates (% Unpaid Principal Balance)			Disposition Counts			REO Alternatives Share of Dispositions (%)
		REO ^a	REO Alternatives ^b	Overall Loss Rate	REO	REO Alternatives	Total	
2010	Oct-Dec	65.6	39.0	60.8	18,508	2,721	21,229	12.8
	Jan-Mar	67.0	41.5	61.9	19,134	3,086	22,220	13.9
	Apr-Jun	64.9	41.6	60.2	24,073	4,137	28,210	14.7
	Jul-Sep	66.1	43.1	60.7	21,440	4,413	25,853	17.1
2011	Oct-Dec	66.9	47.4	60.9	13,597	4,081	17,678	23.1
	Jan-Mar	71.9	46.7	61.3	10,421	5,240	15,661	33.5
	Apr-Jun	71.4	48.6	64.2	24,256	7,365	31,621	23.3
	Jul-Sep	72.3	47.8	64.8	30,118	8,587	38,705	22.2
2012	Oct-Dec	72.1	47.0	63.2	25,342	9,389	34,731	27.0
	Jan-Mar	70.9	47.8	62.7	22,011	8,022	30,033	26.7
	Apr-Jun	69.2	48.7	61.3	23,908	10,138	34,046	29.8
	Jul-Sep	67.8	48.2	60.6	27,307	11,164	38,471	29.0
2013	Oct-Dec	66.1	55.4	61.6	25,246	12,966	38,212	33.9
	Jan-Mar	63.9	49.6	58.4	26,165	11,361	37,526	30.3
	Apr-Jun	60.3	54.1	57.0	28,097	22,931	51,028	44.9
	Jul-Sep	59.3	51.5	55.0	27,744	27,766	55,510	50.0
2014	Oct-Dec	61.1	47.6	54.0	23,649	19,664	43,313	45.4
	Jan-Mar	62.6	50.8	55.0	19,525	24,713	44,238	55.9
	Apr-Jun	58.9	45.3	50.9	15,615	17,040	32,655	52.2
	Jul-Sep	57.3	46.7	49.6	12,599	25,167	37,766	66.6
2015	Oct-Dec	59.4	45.1	50.1	12,720	18,678	31,398	59.5
	Jan-Mar	60.8	45.4	53.5	13,519	9,320	22,839	40.8
	Apr-Jun	57.8	43.0	51.5	15,464	8,925	24,389	36.6
	Jul-Sep	58.2	47.8	52.5	16,365	14,440	30,805	46.9
2016	Oct-Dec	60.8	49.0	54.6	15,983	13,868	29,851	46.5
	Jan-Mar	62.1	47.7	54.6	14,302	12,115	26,417	45.9
	Apr-Jun	58.5	49.7	53.7	12,630	11,742	24,372	48.2
	Jul-Sep	58.1	53.7	55.5	12,500	14,249	26,749	53.3
2017	Oct-Dec	58.8	52.7	55.0	12,561	16,500	29,061	56.8
	Jan-Mar	59.4	44.1	52.0	11,485	9,287	20,772	44.7
	Apr-Jun	55.6	43.5	48.6	10,276	12,514	22,790	54.9
	Jul-Sep	54.8	43.8	47.3	4,980	9,345	14,325	65.2

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

^b REO alternatives comprise short sales, claims without conveyance of title (CWCOT), and note sales. Short sales refer to the sale of property where the defaulted borrower sells his/her home and uses the net sale proceeds to satisfy the mortgage debt even though the proceeds are less than the amount owed. Short sales are part of the pre-foreclosure sale (PFS) program. CWCOT is a program approved under Section 426 of the Housing and Urban-Rural Recovery Act of 1983. It is designed to reduce the number of single-family mortgages owned by HUD by authorizing the payment of claims to mortgagees without conveying (transferring) the title to the property to HUD. Note sale refers to the sale of defaulted mortgage notes in order to reduce foreclosure costs for borrowers. Note sales are conducted through the Distressed Asset Stabilization Program (DASP).

^c Data through August 2017.

SOURCE: U.S. Department of HUD/FHA, as of October 2017.