OFFICE of INSPECTOR GENERAL
UNITED STATES DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

HUD Underestimated Rising Property Charges for an Estimated 1,237 HECM Borrowers

Report Number: 2026-KC-0003

May 5, 2026

Office of Audit and Evaluation | Office of Inspector General
U.S. Department of Housing and Urban Development

Highlights

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What We Audited and Why

We conducted an audit on the effectiveness of the U.S. Department of Housing and Urban Development's (HUD) Home Equity Conversion Mortgage (HECM) program's Life Expectancy Set Asides (LESA). The LESA is a set aside portion of the HECM mortgage that makes property tax, hazard insurance, and flood insurance payments on behalf of certain financially vulnerable borrowers. While not guaranteed, the LESA funds are intended to last for the full duration of the borrower's life expectancy. We initiated this audit because of recent federal reporting on rising nationwide property tax and hazard insurance costs, paid for by LESA funds. Analysis of LESA fund availability in active HECM loans indicated that some LESAs were depleting at an accelerated rate. Our audit objective was to determine whether LESAs were meeting the intent of the program for financially vulnerable borrowers.

What We Found

An estimated 1,237 HECM borrowers will need to begin making property charge payments out of pocket because their LESAs will deplete in significantly less time than HUD estimated they would last.

This occurred because HUD did not evaluate whether LESA calculations were effective or whether LESAs would be available for the borrowers' estimated life expectancy. If borrowers cannot make these property charge payments out of pocket, their HECM loans would default, resulting in a projected loss of $258 million to HUD.

What We Recommend

We recommend that the Deputy Assistant Secretary for Single Family Housing periodically evaluate the sufficiency of the LESA formula and whether active LESAs are being depleted at an accelerated rate, to address $258 million in funds that could be put to better use.

Table of Contents

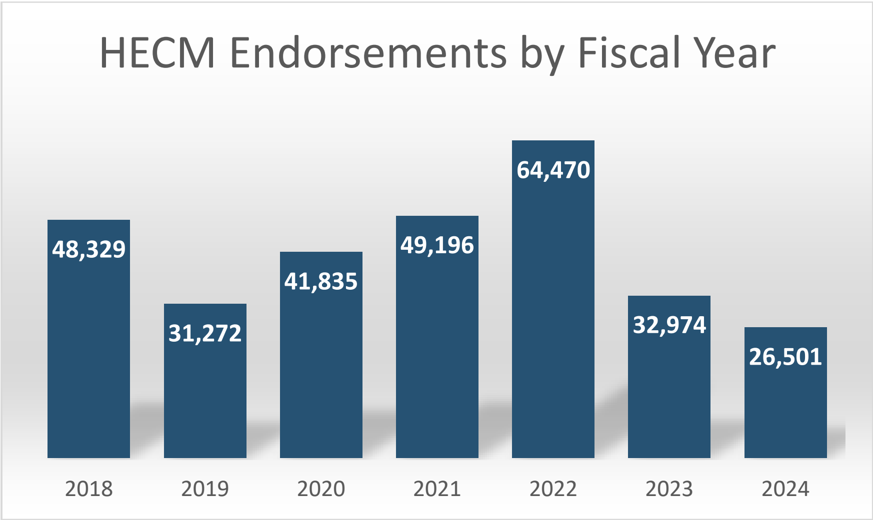
Background and Objective

The Federal Housing Administration (FHA), a part of HUD, provides mortgage insurance on loans made by FHA-approved lenders throughout the United States and its territories. The FHA insurance program is one of the largest insurers of mortgages in the world, insuring more than 50 million mortgages since its inception in 1934. This insurance allows lenders to bear less risk because FHA will pay a claim in the event of a homeowner default. FHA's Single Family mortgage insurance programs protect mortgage lenders against losses from default, encouraging lenders to provide mortgage financing to eligible homebuyers, including first-time and low-to-moderate income homebuyers. HUD's Office of Single Family Housing supports affordable homeownership and refinancing opportunities for qualified borrowers through the FHA Single Family mortgage insurance programs.

FHA insures HECM reverse mortgages which provides federally insured financing to eligible borrowers, 62 years of age and older, who want to convert the equity in their homes into liquid assets. HECM borrowers may reside in their homes indefinitely if property taxes and homeowner's insurance are kept current.

In fiscal year 2024, FHA provided mortgage insurance for 26,501 HECMs totaling $13.36 billion in maximum claim amount (MCA), as shown in figure 1.[1]

Figure 1. FHA HECM Endorsement Activity



Source: US Department of HUD/FHA, October 2024

In 2015, HUD introduced a requirement for lenders to perform a financial assessment of new HECM borrowers to evaluate the borrower's ability to pay their property taxes, hazard insurance, and personal living expenses while residing in the home. The financial assessment is also used to determine if the HECM will be a sustainable solution to the borrower's financial circumstances. For financially vulnerable

[1] The MCA represents FHA's maximum risk exposure of the portfolio and serves as a cap on the amount of insurance claims that FHA will pay the lender for unassigned loans.

borrowers whose credit or property charge payment history did not meet HUD standards, HUD requires a LESA account to be attached to their HECM loan at the time of closing.[2] See appendix C of this report for relevant criteria. The lender calculates the amount of the LESA using the borrower's current age, property tax and hazard insurance costs, and a formula provided by HUD. With a LESA in place, the lender pays property taxes, hazard insurance, and flood insurance on behalf of the borrower for the duration of the borrower's estimated life expectancy or until the LESA account is exhausted. Generally, the depletion of the LESA will require the HECM borrower to pay these costs from their own funds. This is important because failure to pay property taxes, hazard insurance, or flood insurance costs for the property will result in a default of the HECM loan.[3]

Our audit objective was to determine whether LESAs were meeting the intent of the program for financially vulnerable borrowers.

[2] The financial assessment can require the borrower to have a mandatory fully funded LESA or a voluntary partially funded LESA for less financially vulnerable borrowers. We focused on mandatory, fully funded LESAs.

[3] The HECM will be considered in default resulting in due and payable status if: 1) the Set-Aside account has been exhausted, 2) the borrower fails to remit the property charge payment in full within 30 days as required after being notified, and 3) the principal limit is exhausted.

Results of Audit

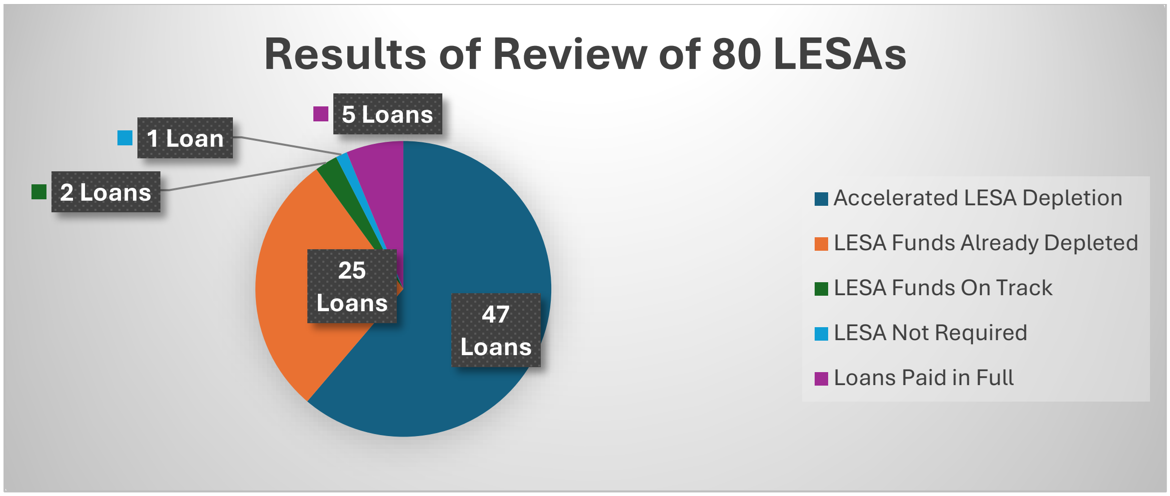
HUD Underestimated Rising Property Charges for an Estimated 1,237 HECM Borrowers

LESAs are depleting significantly faster than calculated for an estimated 1,237 HECM borrowers, who will need to be informed that they must make additional payments from their own funds. This occurred because HUD did not evaluate whether its LESA formula was effective. In addition, there is no requirement that active LESAs be evaluated to ensure that they last for the borrower's estimated life expectancy. As a result, if borrowers cannot make these payments, their HECM loans will default, resulting in a projected loss of up to $258 million.

LESA Funds Depleted Faster than HUD's Estimations

We identified a universe of 1,462 HECM loans with a total MCA valuation of $357 million that closed between 2018 and 2022. These loans were selected because they showed indications that they could be at risk of early depletion in their LESA accounts. We selected a statistically representative sample of 80 loans from this universe and found that 72 out of 80 loans had LESAs that were either already fully depleted or were on track to fully deplete an average of 6 years before HUD estimated they would last. When statistically projected to our universe, the sample results show an estimated 1,237 HECM borrowers depleting their LESA accounts significantly sooner than HUD calculated they would last. Figure 2 below shows the results of our review of the 80 HECM loans with LESAs.

Figure 2. Results of LESA Review



LESAs for 47 loans were not on track to last for the duration of the borrowers' life expectancies due to accelerated depletion. Twenty-five LESAs had already fully depleted at the time of our audit work. Five LESAs were paid in full, making them no longer applicable to our review, and 2 LESAs were on track to last for the borrowers' life expectancies. We also found one LESA with no distributions from it because the LESA was created in error.

Of the 47 loans not on track to last for the duration of the borrowers' life expectancies, 15 of those borrowers would have needed to make property charge payments out of pocket in 2026, and 9 of those borrowers would need to make property charge payments in 2027. Additionally, 23 of those borrowers would need to make payments starting in 2028 and thereafter. All these borrowers would need to make payments prior to when HUD estimated the LESA funds would be depleted.

HUD's LESA Estimations Were Impacted by a Rise in Property Taxes and Hazard Insurance Costs

HUD's LESA formula already provides for a 120 percent multiplier to consider expected property charge increases.[4] However, 31 of the 72 borrowers experienced a higher increase in property taxes and hazard insurance costs than estimated. For those 31, the average amount of increased property charges was about 192 percent with most of them in California, Florida, Colorado, Texas, and Arizona.[5] The chart below shows the increase in property charges experienced by borrowers in our sample from the year the HECM loan began until 2024.

Figure 3. Examples of Individual Property Charge Increases

California
A HECM borrower with a LESA had original property tax and insurance amounts of $2,103 in 2021. As of 2024, the current property tax and insurance amounted to $12,262. This represents an increase of 483%.

Arizona
A HECM borrower with a LESA had original property tax and insurance amounts of $1,397 in 2018. As of 2024, the current property tax and insurance amounted to $4,092. This represents an increase of 193%.

Florida
A HECM borrower with a LESA had original property tax and insurance amounts of $1,658 in 2020. As of 2024, the current property tax and insurance amounted to $6,112. This represents an increase of 268%.

Colorado
A HECM borrower with a LESA had original property tax and insurance amounts of $909 in 2019. As of 2024, the current property tax and insurance amounted to $2,572. This represents an increase of 183%.

Texas
A HECM borrower with a LESA had original property tax and insurance amounts of $2,362, in 2020. As of 2024, the current property tax and insurance amounted to $8,012. This represents an increase of 239%.

[4] See appendix C for relevant criteria.
[5] See appendix D for details on the percent annual increases.

HUD Did Not Periodically Evaluate the Effectiveness of LESAs

HUD did not periodically evaluate whether its LESA formula was updated with the most current and appropriate data, was accurately applied, or whether LESAs were lasting for the borrower's estimated life expectancy.

HUD's LESA formula used the U.S. Decennial Life Table for 1979-81 which was published in August 1985. The U.S. Decennial Life Tables were published by the Department of Health and Human Services based on deaths in a period of 3 years and are published on a 10-year basis. The Life Tables have been updated a few times since 1985, but HUD did not update the LESA program guidance.[6]

In addition, we found 27 loans in our sample of 80 where the LESA calculation may not have properly rounded the borrower's age to the nearest whole year, according to HUD's Handbook 4000.1 Appendix 9. This added an additional year to the LESA calculation's projections which may have resulted in inaccurate estimation results. HUD Handbook 4000.1 requires the life expectancy of the youngest borrower, with the borrower age rounded up to the nearest whole year if the next birthday is less than 183 days after the estimated date of closing.

With respect to monitoring LESA depletion rates, HUD routinely assessed defaulted and foreclosed upon HECMs to identify systemic risks, concerns, or trends in its portfolio of reverse mortgages. However, it did not periodically assess active HECMs to determine whether their LESA accounts were showing signs of accelerated depletion.

In addition, HUD did not periodically evaluate the effectiveness of its LESA formula or conduct monitoring of its active LESAs' depletion rates because such evaluations were not part of the original design of the policy. While HUD periodically evaluated the success and effectiveness of the HECM program, it did not include a formal examination of its LESA program, nor did it have measurable goals for LESA performance.

HECM Borrower Defaults Could Total Up to a Projected $258 Million

If the 1,237 depleted LESAs result in borrowers defaulting on their HECMs, then HUD's losses on these loans could total up to a projected $258 million.[7]

Rising property charges and a lack of evaluating LESA effectiveness could result in more HECM borrowers experiencing accelerated depletion of their LESA accounts. After the LESA is depleted, financially vulnerable HECM borrowers may have only 30 days of notice before they need to begin making property charge payments out of pocket.

HUD currently holds 41,002 HECMs with LESAs in its portfolio. As economic factors continue to change, more HECM borrowers could experience difficulties keeping their reverse mortgages in good standing.

Recommendations

We recommend that the Deputy Assistant Secretary for Single Family Housing

[6] See appendix C for relevant criteria.
[7] See appendix E for details on the statistical sample selection and projection.

1A. Periodically evaluate the sufficiency of the LESA formula and whether active LESAs are depleting at an accelerated rate to address $258 million in funds to be put to better use.

Management Response

Single Family agreed to evaluate the current LESA formula to determine whether early LESA fund depletion poses a risk to HUD. However, Single Family disagreed with the OIG's projected loss to HUD of $258 million. It also disagreed that LESA depletion means the HECM will default or that depletion demonstrates that the formula is ineffective.

Single Family disagreed with the OIG's methodology of using a 72.3 percent loss rate to calculate the projected loss to HUD. Single Family stated the projected loss rate was overstated and provided loss rate data from its Office of Risk Management (ORM) that indicated an average loss rate of 33.2 percent for HECM real estate owned properties and 26.9 percent for HECM note sales.

Single Family disagreed with the OIG's conclusion that borrower age was calculated incorrectly and stated that it is reasonable for the mortgagee to round up in case the estimated closing date does not align with the actual closing date.

Single Family disagreed with the OIG's conclusion that HUD does not have measurable goals for LESA performance.

Management's full comments are in Appendix B.

OIG Evaluation of Management Response

We appreciate Single Family's receptiveness to our recommendation to periodically evaluate the sufficiency of the LESA formula and whether active LESAs are depleting at an accelerated rate to address $258 million in funds to be put to better use. We carefully considered Single Family's comments and made some changes to the report for clarity; however, the report largely remains unchanged due to the reasons listed below. During the audit resolution process, OIG will continue to work with Single Family in its efforts to assess the effectiveness of LESAs.

We disagree with Single Family's comment that the 72.3 percent loss rate is overstated. We requested and received the HECM loss rate data from HUD's Single Family Acquired Management System's (SAMS) Case Management Profit and Loss by Acquisition Cost data report. We acknowledge that HUD's Office of Risk Management provided loss rate data with their Management Response; however, the data provided did not align with the SAMS data. In addition, the ORM data did not include certain foreclosure and holding costs, such as acquisition costs, repair costs, taxes, maintenance and operation expenses, and sales expenses. This relevant information was present in the SAMS data.

With respect to rounding the borrower's age, our review found 27 loans in our sample of 80 where the lender may not have properly rounded up to the nearest whole year if the borrower's next birthday was less than 183 days after the estimated date of closing, as required by the Handbook. However, our review did not include an analysis of LESA funding allocations depending on rounding outcomes, nor did it include alignment of estimated closing date to actual closing date.

We acknowledge Single Family's comment that LESA depletion does not guarantee the HECM will default. However, HUD identified these borrowers as high risk without the assistance of a LESA as stated in the Background section: "For financially vulnerable borrowers whose credit or property charge payment history did not meet HUD standards, HUD requires a LESA account to be attached to their HECM loan at the time of closing." A significant percentage of the borrowers in our sample will have their LESAs fully depleted before previously expected, which could lead to defaults of up to $258 million.

We acknowledge that HUD monitors the performance of the overall HECM portfolio. However, we did not obtain evidence that HUD performs current and projected assessments to determine whether active LESAs are on track to last for the borrowers' life expectancies.

Scope and Methodology

We performed our audit work from November 2024 through September 2025. We conducted our fieldwork off site for this audit. Our audit period covered January 2018 through December 2024.

To accomplish our objective, we:

- reviewed relevant laws, regulations, and HUD's guidance;
- interviewed HUD's HECM staff to gain an understanding of the LESA procedures and requirements;
- communicated with servicers to understand the process and procedures for managing LESA funds;
- selected and reviewed a statistical sample of HECM loans with fully funded LESAs to determine compliance with LESA requirements; and
- reviewed HECM loan documents provided by the servicers, including property charge records, loan histories, monthly statements, loan origination documents, and correspondence to the borrowers.

We used and relied on data from HUD's Single Family Data Warehouse (SFDW) system to achieve our objective. SFDW is a large and extensive collection of database tables, organized and dedicated to support the analysis, verification, and publication of single family housing data. We used SFDW to identify active HECM loans that had a fully funded LESAs that closed between January 2018 and December 2022.

We then identified LESAs that were currently depleted more than 10 percent above HUD's projected depletion for October 2024. This resulted in an audit universe of 1,462 active LESAs with a total MCA valuation of $357 million. From the universe, we selected a statistical sample of 80 loans with a total MCA of $25.2 million. As a result of our review of these sample loans, we estimated funds to be put to better use using a 72.3 percent loss rate of the $357 million MCA valuation, which totaled $258 million. See appendix E of this report for an explanation of the method used to statistically project the results.

We requested and received the HECM loss rate data from SAMS's Case Management Profit and Loss by Acquisition Cost data report. HUD provided the HECM loss rate data for our audit period of 2018-2022 and additionally, the most current HECM loss rate as of May 2025. The May national report included 1,144 properties, along with their acquisition, rent, repair, taxes, maintenance and operations, and sales costs over the last year, resulting in a total annual loss rate of 72.3 percent.

We used and relied on the data in the Home Equity Reverse Mortgage Information Technology (HERMIT) system. The HERMIT system is HUD's HECM servicing platform for collecting mortgage insurance premiums, managing all servicing activities, and paying insurance claims. We used HERMIT to obtain current LESA balances along with past transactions.

We also used and relied on the Neighborhood Watch system, which contains origination and servicing data to verify accuracy of data obtained from SFDW.

For each loan in our sample, we requested documentation from the borrower's servicer. These documents included notes to the loan file; financial assessment worksheets; loan agreements, payment plans; property tax, hazard insurance, and flood insurance records; borrower communications; and other relevant documents. We reviewed each loan's LESA calculation at origination to determine whether it was properly calculated, and we compared original property charge amounts to current amounts.

We also compared current property charges to projected charges made by the LESA calculation. We analyzed the borrower's current property charges, as well as their remaining LESA balances to estimate the remaining number of years the LESA would last before becoming fully depleted.

We conducted the audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

Appendices

Appendix A – Schedule of Funds to Be Put to Better Use

Recommendation Number	Funds to be put to better use 1/
1A	$258,046,380

1/ Recommendations that funds be put to better use are estimates of amounts that could be used more efficiently if an Office of Inspector General (OIG) recommendation is implemented. These amounts include reductions in outlays, deobligation of funds, withdrawal of interest, costs not incurred by implementing recommended improvements, avoidance of unnecessary expenditures noted in preaward reviews, and any other savings that are specifically identified. In this instance, if HUD implements our recommendation, it could avoid potential losses for the loans that have depleted or will deplete its LESA funds earlier than HUD projected. We estimated funds to be put to better use at a 72.3 percent loss rate of the maximum claim amount valuation.

Appendix B – Management Response

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OFFICE OF HOUSING

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-8000

MEMORANDUM FOR: Kilah White, Assistant Inspector General for Audit, GA

Signed by:
Matthew Jones
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FROM: Matthew Jones, Deputy Assistant Secretary for Single Family Housing, HU

SUBJECT: Discussion and Comments on Draft Audit: HUD Underestimated Rising Property Charges for an Estimated 1,237 HECM Borrowers
OIG Audit Report Number: 2026-XX-XXXX

The Office of Inspector General (OIG) conducted an audit on the effectiveness of the U.S. Department of Housing and Urban Development's (HUD) Home Equity Conversion Mortgage (HECM) program's Life Expectancy Set-Aside (LESA) formula and HUD's evaluation of LESA funds. The OIG audit objective was to determine whether LESAs were meeting the intent of the HECM program. The OIG projects the early depletion of LESAs for 1,237 HECM borrowers and a potential loss of $258 million to HUD. The OIG states that HUD did not evaluate the effectiveness of LESA calculations. The OIG provided a draft audit report to the Office of Single Family Housing (Single Family) for comment.

Single Family appreciates the OIG for its continued efforts to provide oversight into HUD programs and provides the following comments in response to the draft audit report.

Recommendation 1A:

Periodically evaluate the sufficiency of the LESA formula and whether active LESAs are depleting at an accelerated rate to address $258 million in funds to be put to better use.

Single Family Response:

Single Family agrees to evaluate the current LESA formula to determine whether early LESA fund depletion poses a risk to HUD. Single Family disagrees with the OIG's conclusion that there is a projected loss to HUD of $258 million. Specifically, the OIG's projected loss amount assumes that the depletion of LESA funds is equivalent to a loss to HUD. This conclusion is not supported by observed outcomes.

The depletion of LESA funds is a result of the set-aside balance reaching zero under actual disbursement patterns and is not a direct indicator that the borrower will default on tax and insurance obligations. HUD data shows that the majority of HECMs with depleted LESA funds remain active and in good standing even after the set-aside funds are exhausted and do not necessarily terminate due to a tax and insurance default. HUD data, as of February 28, 2026, shows 90% of non-terminated HECM borrowers with a depleted LESA balance have not reported a tax and insurance default. Therefore, depletion should not be categorically interpreted as a terminal event or as evidence that the set-aside formula is ineffective.

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While borrowers required to have a LESA are generally identified through the financial assessment as presenting a higher potential risk for future nonpayment of property charges, this designation should not be interpreted as a certainty that the borrower will default once LESA funds are exhausted. The LESA functions as a preventive safeguard, not a prediction of inevitable failure. The financial assessment requirements were originally developed in response to performance issues observed in earlier HECM portfolios, where insufficient evaluation of a borrower's capacity to meet ongoing obligations contributed to higher default rates. While the policy effectively addresses those risks, its implementation has also had a broader behavioral impact. By emphasizing the importance of property charge obligations during the origination process, the policy has increased borrower awareness and accountability. As a result, even borrowers identified as higher risk may demonstrate improved payment behavior over time.

In addition, Single Family disagrees with the OIG's methodology of using a 72.3% loss rate to calculate the projected loss to HUD. HUD data, provided by the Office of Risk Management, indicates an average loss rate of 33.2% for HECM real estate owned properties and 26.9% for HECM note sales. Therefore, the projected loss identified by the OIG is overstated.

Single Family recognizes the OIG has identified a proactive approach to analyzing potential tax and insurance defaults through the evaluation of LESA fund depletion. While the depletion of LESA funds may be a useful indicator of potential risk, the presence of depleted LESA funds is an inherent occurrence when using a formula to project future property charge payment amounts for a borrower's projected life expectancy and does not demonstrate that the formula is ineffective. In determining the appropriate set-aside formula, Single Family considers not only refinements to the assumptions underlying the formula, but also the broader implications for the HECM program to ensure alignment with program intent while maintaining program viability.

<u>OIG Identified Areas of Deficiency</u>:

1. **The current LESA formula underestimated future property charge costs.**
   (Refer to page 4 of draft report)

   <u>Single Family Response</u>:
   It is reasonable to expect the LESA formula to underestimate future property charge payment amounts for some HECM borrowers. Formulas relying on assumptions will contain some degree of expected error. Further analysis is needed beyond identifying cases where LESA funds were underestimated. Single Family will evaluate the current LESA formula to determine whether refinements are necessary.

2. **The current LESA formula uses an older version of the U.S. Decennial Life Table.**
   (Refer to page 5 of draft report)

   <u>Single Family Response</u>:
   The existence of an updated U.S. Decennial Life Table does not necessitate updating the current LESA formula. Further analysis is needed to evaluate the impact of updating life expectancy assumptions. Single Family will evaluate the current LESA formula to determine whether refinements are necessary.

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3. **The OIG sample of cases contained rounding errors in calculating borrower age.**
   (Refer to page 5 of draft report)

   Single Family Response:
   HUD policy requires mortgagees to use the estimated date of closing to calculate the borrower's age (see Section II.B.5.i.vii.(B)(4) of HUD Handbook 4000.1, FHA Single Family Housing Policy Handbook). The OIG found that in some cases the mortgagee rounded up for borrower age and withheld more LESA funds than required. Single Family disagrees with the OIG's conclusion that borrower age was calculated incorrectly. It is reasonable for the mortgagee to round up in the event that the estimated closing date does not align with the actual closing date.

4. **HUD does not have measurable goals for LESA performance.**
   (Refer to page 5 of draft report)

   Single Family Response:
   Single Family disagrees with the OIG's conclusion that HUD does not have measurable goals for LESA performance. HUD actively monitors the performance of the HECM portfolio, including the incidence of tax and insurance defaults. The HECM financial assessment, which established the LESA requirements, was introduced to mitigate increasing tax and insurance defaults. Evaluating LESA fund depletion may provide an approach to forecast future tax and insurance defaults, but it is the incidence of tax and insurance defaults that is the key metric for monitoring LESA performance.

   Single Family will propose and submit a Management Decision to respond to the audit recommendation after the issuance of the final audit report. Single Family will provide action plans and final action target dates in its Management Decision.

Appendix C – Criteria

HUD Handbook 4000.1, FHA Single Family Housing Policy Handbook (Issued April 29, 2024)

II.B.5.iii. (2) Credit Payment History Requiring Additional Analysis

If a Borrower's credit history does not reflect satisfactory credit, the borrower's payment history requires additional analysis. Where the borrower has not met the requirements for satisfactory credit, and no extenuating circumstances can be documented, the mortgagee must, at a minimum, require a fully funded LESA.

vii. B Standard (4) Calculation for Projected Life Expectancy Property Charges

Mortgagees must calculate projected life expectancy property charges for each HECM using:

- 120 percent of the projected sum of:
  - current property taxes;
  - hazard Insurance premiums; and
  - flood Insurance premiums;
- the HECM Expected Rate;
- the annual MIP rate; and
- the life expectancy of the youngest borrower, with the borrower age rounded up to the nearest whole year if the next birthday is less than 183 days after the estimated date of closing.

The formula used to calculate projected life expectancy property charges is: $\{1.2 \times (PC \div 12)\} \times \{(1 + c)m+1 - (1 + c)\} \div \{c \times (1 + c)m\}$

PC (Property Charges) divided by 12 is the current total monthly property charge for property taxes, hazard insurance, and flood insurance.

(5) Calculation for Fully Funded LESA: The formula to calculate the amount of the fully funded LESA is the same as the projected life expectancy property charges.

Appendix 9.0

(a) Required tables. In calculating the total annual loan cost rates, creditors shall assume three loan periods, as determined by the following table.

(b) Loan periods.

(1) Loan Period 1 is a two-year loan period.

(2) Loan Period 2 is the life expectancy in years of the youngest Borrower to become obligated on the reverse mortgage loan, as shown in the U.S. Decennial Life Tables for 1979–1981 for females, rounded to the nearest whole year.

(3) Loan Period 3 is the life expectancy figure in Loan Period 2, multiplied by 1.4, and rounded to the nearest full year (life expectancy figures at 0.5 have been rounded up to 1).

(4) At the creditor's option, an additional period may be included, which is the life expectancy figure in Loan Period 2, multiplied by 0.5, and rounded to the nearest full year (life expectancy figures at 0.5 have been rounded up to 1).

vii. Life Expectancy Property Charges (A) Definitions

Projected life expectancy property charges refer to the amount of HECM proceeds necessary to pay property taxes, hazard insurance, and flood insurance, if applicable, based on the life expectancy of the youngest borrower.

Life Expectancy Set-Aside (LESA) refers to a set-aside account that is established for the payment of property taxes, Hazard Insurance, and, if applicable, flood insurance until expended or while the HECM is not in due and payable status. LESA funds cannot be held in an escrow account.

Appendix D – Total Years LESA Fund Available

Loan	Increase Percentage*	State	HUD Projected Life Expectancy	Total Years LESA Fund Available
1	188%	CA	20	6
2	54%	GA	18	11
3	98%	SC	18	7
4	163%	UT	18	8
5	107%	CO	16	9
6	224%	FL	17	6
7	221%	FL	16	4
8	259%	FL	13	4
9	57%	LA	15	9
10	97%	TX	15	6
11	116%	CO	11	7
12	20%	CO	13	9
13	183%	CO	13	5
14	373%	CA	12	2
15	32%	NY	12	6
16	250%	AL	8	4
17	84%	CA	10	5
18	55%	CO	8	5
19	51%	WA	10	6
20	21%	WA	8	6
21	116%	FL	7	2
22	20%	CA	5	4
24	-36%	MI	6	2
25	33%	VA	7	4
26	193%	AZ	18	7
28	84%	GA	18	10

Loan	Increase Percentage*	State	HUD Projected Life Expectancy	Total Years LESA Fund Available
29	121%	IN	21	9
30	189%	KS	19	7
31	184%	LA	18	6
32	62%	NC	19	10
33	34%	PA	20	5
34	43%	TX	19	11
35	144%	AR	16	6
37	76%	CO	14	8
38	231%	FL	16	5
39	135%	GA	14	5
40	144%	CA	16	7
41	143%	LA	16	7
42	127%	LA	13	7
43	73%	NE	15	9
44	17%	NY	17	11
45	86%	TX	16	8
46	100%	TX	13	6
47	141%	TX	14	7
48	142%	FL	12	6
49	268%	FL	12	4
50	64%	IN	10	6
51	483%	CA	13	3
52	123%	CA	12	2
53	35%	MS	10	6
54	87%	NC	12	6
56	16%	TX	11	7
57	176%	TX	12	4
58	132%	VA	12	7

Loan	Increase Percentage*	State	HUD Projected Life Expectancy	Total Years LESA Fund Available
59	136%	FL	10	3
60	80%	FL	8	5
61	180%	ID	9	2
62	89%	IL	9	5
63	107%	IA	9	4
64	130%	MD	10	4
66	53%	OR	8	6
67	74%	SC	10	7
68	239%	TX	10	4
69	147%	TX	9	4
70	48%	AZ	6	3
71	112%	GA	8	4
72	41%	GA	6	4
74	116%	CA	6	3
76	37%	NY	7	5
77	69%	OR	6	4
78	5%	TX	5	3
80	171%	WA	5	2

*These loans were originated in 2018 through 2022 and are based on the original property charges compared to 2024 property charges. We omitted loans with no exceptions during our loan file review.

Appendix E – Sample Projection – Results and Methodology

Projections: HUD HECM Life Expectancy Set Aside Calculations Audit
Method: Stratified Systematic Random Sample
Confidence Interval: One-sided 95%

Findings:
Based on a stratified random sample designed to minimize error, we can say the following statement:

Dollars of Maximum Claim Amounts:
We found that in 72 out of 80 loan records reviewed, there were deficiencies. Of these loans with deficiencies, this amounts to a weighted average by measurement of the maximum claim amount of $281,329.02 per loan. Deducting the statistical margin of error to accommodate for the uncertainties inherent in statistical sampling, we can say – with a one-sided confidence interval of 95 percent – that this amounts to at least $244,124.91 per loan. In the context of the universe of 1,462 loans, this amounts to at least $356,910,622.70 in maximum claim amount valuation, and it could be more.

Dollars of Maximum Claim Amounts with Loss Rate Applied:
We found that in 72 out of 80 loan records reviewed, there were deficiencies. Of these loans with deficiencies, this amounts to a weighted average by measurement of the maximum claim amount utilizing the loss rate of 72.3 percent of $203,400.88 per loan. Deducting the statistical margin of error to accommodate for the uncertainties inherent in statistical sampling, we can say – with a one-sided confidence interval of 95 percent – that this amounts to at least $176,502.31 per loan. In the context of the universe of 1,462 loans, this amounts to at least $258,046,380.21 in maximum claim amount valuation using the 72.3 percent loss rate figure, and it could be more.

Counts of LESA Deficiencies:
We found that in 72 out of 80 loan records reviewed, there were deficiencies. This amounts to a weighted average of 90.06 percent of the records. Deducting the statistical margin of error to accommodate for the uncertainties inherent in statistical sampling, we can still say – with a one-sided confidence interval of 95 percent – that this amounts to at least 84.65 percent of the records in the universe have this same characteristic. Extending this percent to the total universe count of 1,462 loans - we can say, there were at least 1,237 loans with the same deficiency, and it could be more.

Methodology
Stratified Systematic Random Sample: We identified a stratified systematic random sample of 80 records for auditing among the audit universe for sampling. We used a systematic design to help control differences that may be present across the age groups. To do this, we sorted the data by the strata and the age of the youngest borrower at endorsement. The sample size equation with a finite population correction factor calls for 65 records to sample. However, to ensure accurate sampling coverage, we added 15 more records to make the sample count 80.

Sample Design Table			
Stratum Label	Total Count per Stratum	Sample Count per Stratum	Sampling Weight
Age 62 - 66	235	13	18.08
Age 67 - 71	346	19	18.21
Age 72 - 76	304	16	19.00
Age 77 - 81	289	16	18.06
Age 82 and Over	288	16	18.00
Total	**1,462**	**80**	**N/A**

We computed the percentage and number of counts of records for each result based on the sampling results and we extended this result to the population using the surveyfreq[8] procedure provided by SAS®[9]. We estimated the lower confidence interval using a Gaussian[10] sampling distribution, which is appropriate for error rates in this range. We extended these percentages to 1,462 records in the universe to get the total universe count of these records.

We used the surveymeans[11] procedure in SAS® to estimate the total dollars by calculating the mean and standard error for the average dollar of maximum claim amount with the loss rate applied. We reduced this amount by the margin of error (i.e. the standard error with a student's t factor) associated with this sample design and then extended that to the 1,462 universe.

The basic estimation calculations are as follows:

$$Amount_{LCL} = N * (\mu - t_{\alpha/2}\, SE_{\$})$$
$$Count_{LCL} = N * (pct - t_{\alpha/2}\, SE_{\%})$$

$Amount_{LCL}$ = total audit finding amount after deducting a margin of error.
$Count_{LCL}$ = total number of sampling units with the error after deducting a margin of error.
N = Number of sampling units in the universe.
μ = Weighted average value of the error per unit.

[8] The surveyfreq procedure produces one-way to n-way frequency and crosstabulation tables from sample survey data. These tables include estimates of population totals, population proportions, and their standard errors. Confidence limits, coefficients of variation, and design effects are also available. The procedure provides a variety of options to customize the table display. Please reference The SURVEYFREQ Procedure (sas.com) for more information.
[9] SAS (previously "Statistical Analysis System") is a statistical software suite developed by SAS Institute for data management, advanced analytics, multivariate analysis, business intelligence, criminal investigation, and predictive analytics.
[10] In statistics, a normal distribution or "Gaussian" distribution is a type of continuous probability distribution for a real-valued random variable.
[11] The surveymeans procedure estimates characteristics of a survey population by using statistics computed from a survey sample. It enables you to estimate statistics such as means, totals, proportions, quantiles, geometric means, and ratio Please reference The SURVEYMEANS Procedure (sas.com) for more information.

pct = Weighted percent of sampling units with the error in the sampling frame.
$SE_{\$}$ = Standard error per unit, as applies to projecting dollars.
$SE_{\%}$ = Standard error per unit, as applies to projecting proportions.
$t\alpha/2$ = Student's - t for projecting a one-sided confidence interval for a sample of this size.

Our findings with mathematical demonstrations are as follows:

<u>Dollars of Maximum Claim Amounts:</u>
We found that in 72 out of 80 loan records reviewed, there were deficiencies. Of these loans with deficiencies, this amounts to a weighted average by measurement of the maximum claim amount of $281,329.02 per loan. Deducting the statistical margin of error to accommodate for the uncertainties inherent in statistical sampling, we can say – with a one-sided confidence interval of 95 percent – that this amounts to at least $244,124.91 per loan. In the context of the universe of 1,462 loans, this amounts to at least $356,910,622.70 in maximum claim amount valuation, and it could be more.

Per Loan: $281,329.02 – 1.664 ✕ $22,339.10 ≈ $244,124.91 LCL
Universe of Loans: $411,303,025.51 – 1.664 ✕ $32,659,765.90 ≈ $356,910,622.70LCL

<u>Dollars of Maximum Claim Amounts with Loss Rate Applied:</u>
We found that in 72 out of 80 loan records reviewed, there were deficiencies. Of these loans with deficiencies, this amounts to a weighted average by measurement of the maximum claim amount utilizing the loss rate of 72.3 percent of $203,400.88 per loan. Deducting the statistical margin of error to accommodate for the uncertainties inherent in statistical sampling, we can say – with a one-sided confidence interval of 95 percent – that this amounts to at least $176,502.31 per loan. In the context of the universe of 1,462 loans, this amounts to at least $258,046,380.21 in maximum claim amount valuation using the 72.3 percent loss rate figure, and it could be more.

Per Loan: $203,400.88 – 1.664 ✕ $16,151.17 ≈ $176,502.31LCL
Universe of Loans: $297,372,087.44 – 1.664 ✕ $23,613,010.74 ≈ $258,046,380.21LCL

<u>Counts of LESA Deficiencies:</u>
We found that in 72 out of 80 loan records reviewed, there were deficiencies. This amounts to a weighted average of 90.06 percent of the records. Deducting the statistical margin of error to accommodate for the uncertainties inherent in statistical sampling, we can still say – with a one-sided confidence interval of 95 percent – that this amounts to at least 84.65 percent of the records in the universe have this same characteristic. Extending this percent to the total universe count of 1,462 loans - we can say, there were at least 1,237 loans with the same deficiency, and it could be more.

Percentage Calculation: 90.06% – (1.664 ✕ 3.25%) ≈ 84.65% LCL
Total Projection: 1,462 ✕ (90.06% – (1.664 ✕ 3.25%)) ≈ 1,237.63 LCL