

# How Much Could Reverse Mortgages Contribute to Retirement Incomes?

Sheila Zedlewski,  
Brendan Cushing-Daniels,  
and Eric Lewis

Financially strapped older homeowners may be able to use the equity in their homes to shore up their retirement incomes (Munnell et al. 2007; Kohl 2007), and they don't need to sell their homes to do it. Retirees who want to stay in their homes can tap into home equity through a reverse annuity mortgage (RAM) that pays them a tax-free monthly payment. Even taking into account the recent decline in house prices, RAMs can significantly boost homeowners' incomes, but by how much? And what should homeowners watch out for when relying on retirement income through RAMs?

For many older adults, home equity represents their largest financial asset (Weller and Wolff 2005). Traditionally, older households have not tapped into their home equity unless some adverse event, such as the death of a spouse, forces a sale (Venti and Wise 2004). However, as home equity values have increased substantially over the previous decade, even accounting for the recent downturn, retirees may be more tempted to turn to their homes to help finance their retirement.

While only 400,000 reverse annuity mortgages have been originated through 2007, they are increasing in popularity—more than 100,000

loans originated in 2007 compared with some 6,600 in 2000 (NRMLA 2008). Many more older households use a home equity line of credit (HELOC) to tap into property value, but these loans need to be repaid right away. RAMs, in contrast, continue to generate income and do not need to be paid off until the house is sold. RAMs, therefore, may be the only solution for low-income older retirees who are less likely to qualify for a loan or line of credit that requires repayment to begin immediately.

In this brief, we use data from the Health and Retirement Survey (HRS) and estimate the potential for RAMs to increase older adults' annual household income. The HRS data show that home equity values, after adjusting for inflation, have increased dramatically for older households from 1998 to 2006. Increases for homeowners have been uneven, favoring whites and Hispanics relative to blacks, and high-income homeowners relative to those in lower-income brackets. Homeowners in the lowest-income groups would receive relatively higher-percentage income gains from RAMs, as would single homeowners over married couples. RAMs provide the largest relative benefit to homeowners in the oldest age groups (since there are fewer years of payout). However, relatively low homeownership rates for low-income, single and the oldest seniors dampen the median boost to income for all older households in these groups.

## How Does a Reverse Annuity Mortgage (RAM) Work?

RAMs, which are available to homeowners only after age 62, provide a way to convert home equity savings into cash.<sup>1</sup> These loans are secured by the home and do not have to be repaid until the borrower sells the home or moves out permanently. Loans can be structured as lump sums at closing, credit lines for periodic withdrawals, or monthly payments either for a specified period or for the duration of the loan. The federal Home

Equity Conversion Mortgage (HECM) insurance program, started in 1988 and administered by the Federal Housing Administration (FHA), accounts for 90 percent of these loans (Redfoot, Scholen, and Brown 2007).

The amount of money that can be borrowed through RAMs depends on the borrower's age and the value of the home. Payout also depends on the share of equity that a homeowner can borrow, prevailing interest rates, and closing costs. Mayer and Simons (1994) estimate that RAMs can boost retirement incomes by 10 percent on average. The authors make the simplifying assumptions that all retirees can borrow 75 percent of their equity and would pay 3 percent of the loan value in closing costs. Estimates from online RAM calculators, however, show that the share of equity that households can borrow varies with age. Sinai and Souleles (2007) estimate that homeowners age 62 to 69 can convert about half of their equity, while adults age 91 and older can consume about 76 percent of their equity. Online calculators also indicate that borrowers must pay substantial closing costs to obtain a RAM.

We estimate the potential RAM values for all households on the HRS that meet the minimum age requirements using the calculator available through the National Reverse Mortgage Lenders Association (NRMLA).<sup>2</sup> We assume that all homeowners borrow the maximum amount available to them and take the lifetime payment option.<sup>3</sup> The calculator indicates that homeowners age 62 with \$100,000 in home equity can borrow up to 62 percent of their equity and pay about 18 percent (\$11,745 including fees, insurance, and closing costs) of the loan value to obtain the mortgage. Adult homeowners age 72 with the same equity can borrow up to 71 percent and pay 16 percent of the loan value in closing costs. (Appendix A shows these examples.)

### Most Older Adults Own Homes

Nearly 8 in 10 households headed by individuals age 55 and older owned a home in 2006, but only

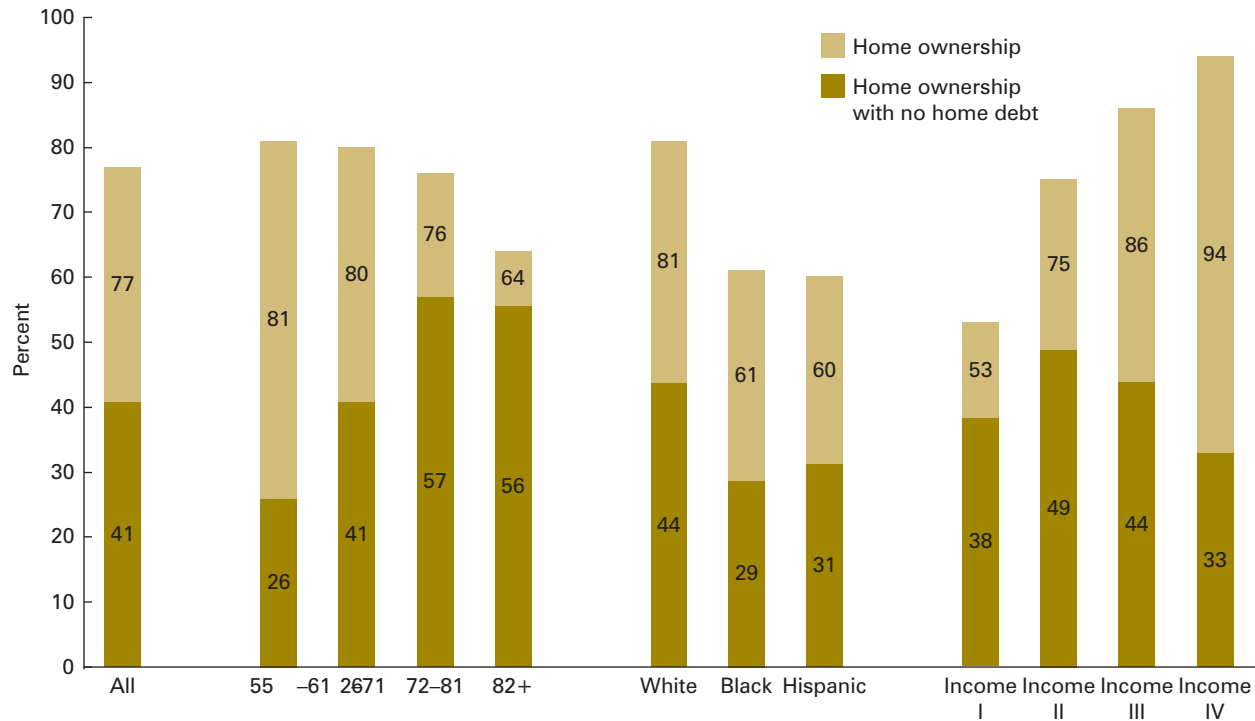
about 40 percent owned their homes free of debt (figure 1). Homeownership tends to decline with age due to differences in home purchase rates across these age groups and because some older adults sell their homes when a spouse dies (and move in with their children or into a rental unit) or when increasing frailty makes it difficult to own and care for a home (Venti and Wise 2004). Homeownership increases with income, but the top income quartile carries mortgage debt more often than those with lower incomes. Debt-free homeownership increases with age. Whites more often own homes than either blacks or Hispanics, and their homes are more likely to be mortgage free.

Home equity values in 2006 vary by age, race, and income among homeowners age 55 and older. Whites and higher-income groups have significantly more equity than younger, non-white, or lower-income households (table 1). These values reflect the dramatic increases in real home values from 1998 through 2006.<sup>4</sup> Real median home equity increased by 41.5 percent for homeowners age 55 and older, with a large share of the growth occurring between 2002 and 2006. Black homeowners, though, realized only a 14 percent gain during this period. And older homeowners in the bottom half of the income distribution saw much less growth than higher-income homeowners. The growth rates in home equity values across the groups reflect changes in mortgage debt over time (especially as older homeowners near the end of their mortgages pay down larger shares of principal) as well as price variation across geographic areas.<sup>5</sup>

### The Potential Effect of Reverse Annuity Mortgages on Older Adults' Incomes

The recent run-up in home equity highlights the significance of homeownership for older families and suggests its potential for boosting retirement incomes. So far, recent reductions in home prices since 2007 pale compared with recent gains. Based on 2006 home values, homeowners age 62 and older could realize an 18 percent increase in

FIGURE 1. Homeownership Rates for Households Headed by Adults Age 55 and Older, 2006



Source: 2006 Health and Retirement Survey.

Notes: Includes all HRS households headed by a person age 55 and older; head defined as financial respondent. The sample size is 11,399, representing about 47.0 million households.

median annual income if they all took out the maximum RAM loan (table 2). About 31 percent of homeowners would gain less than 10 percent in income (including 4 percent that would not qualify for a positive payment because their equity does not exceed the cost of the loan). At the other extreme, one in five homeowners could realize an income increase of 40 percent or more by converting home equity to income through a RAM.

The effects of RAMs on income vary by age, race, and income, reflecting differences in home equity, income, and expected period of payout. Homeowners age 82 and older could receive a median income boost of 36 percent; nearly half (46 percent) would realize an income gain of 40 percent or more. Of course, these households can only expect a short payout from the RAM and might choose this option only as a last resort, especially given the high loan costs. Black home-

owners would realize the lowest payout from a RAM, primarily reflecting the relatively low home equity discussed earlier. More than one in 10 black homeowners does not have enough equity to generate a positive RAM payment. Also, 36 percent would realize a boost in income of only 1 to 9 percent.

RAMs would boost the incomes of homeowners in the lowest income quartile by 37 percent, compared with 10 percent for those in the top income quartile. Low-income homeowners have a lower starting point, so the relative income boost is greater. Also, since the oldest households in the sample disproportionately fall in the lowest-income group, the high annuity payment due to relatively short remaining lifespans also increases the relative income gains.

Of course, RAMs can only increase income for homeowners with sufficient equity in their

TABLE 1. Home Equity for Homeowners Age 55 and Older in 2006

	Home Equity 2006	Changes in Median Equity (inflation adjusted)		
	\$2006 dollars	1998–2002	2002–2006	1998–2006
<b>All</b>	\$140,000	13.3%	24.9%	41.5%
<b>Age</b>				
55–61	\$125,200	14.8%	17.6%	35.0%
62–71	\$150,000	8.7%	31.2%	42.7%
72–81	\$150,000	6.6%	33.9%	42.7%
82+	\$140,000	24.1%	24.9%	55.1%
<b>Race/Ethnicity</b>				
White	\$150,000	11.9%	27.5%	42.7%
Black	\$65,000	10.3%	3.6%	14.2%
Hispanic	\$100,000	15.3%	27.5%	47.0%
<b>Income Quartile</b>				
1st	\$80,000	10.5%	17.0%	29.4%
2nd	\$105,000	5.1%	17.1%	23.0%
3rd	\$145,000	6.6%	29.4%	37.9%
4th	\$220,000	14.2%	30.9%	49.5%

Source: 2006 Health and Retirement Survey.

Notes: Includes all HRS homeowner households headed by a person age 55 and older; head defined as financial respondent. The sample size in 2006 is 8,393, representing 36.3 million homeowner households.

homes to qualify for a reverse mortgage. The income effect for all older households is more limited since some do not own a home (figure 2). Households age 62 and older in 2006 could realize a 10 percent median increase in income from the maximum use of RAMs.<sup>6</sup> However, the typical older-adult household in the bottom income quartile would not realize an income increase because just under half do not own homes and, for those that do, a significant number do not have enough equity to qualify for an RAM.<sup>7</sup> Also, the median income increase for black households would be less (2 percent) than white households (12 percent), reflecting lower homeownership rates.

### Implications of Recent Housing Price Declines

Recent declines in home values may raise questions about older homeowners' continued ability

to use home equity to help finance retirement. However, the huge run-up in home equity from 1998 to 2006 should cushion older homeowners from the recent downturn in house prices. For the average homeowner, the decline in house prices to date has been small, especially compared with the recent gains. The Office of Federal Housing Enterprise Oversight (OFHEO) price index reports that home prices fell about 3.9 percent nationwide from January 2007 to May 2008.<sup>8</sup> In contrast, the more broadly publicized Standard and Poor's Case-Shiller 20-city index of home prices in metropolitan areas reports that home prices fell about 16.7 percent over the same period.<sup>9</sup>

Even a price decrease of 10 percent for all homeowners since 2006 (the last year of our data) would have a limited effect on older homeowners since many have substantial equity in their homes. Assuming a 10 percent housing price decline, median equity would drop from \$140,000

TABLE 2. *Distribution of Potential Percentage Increase in Income from Reverse Mortgages for Homeowners Age 62 and Older, 2006*

Percent	0%	1–9 %	10–19%	20–29%	30–39%	40 + %	Median %
<b>All</b>	4.4	27.0	23.7	13.6	9.3	22.1	17.5
<b>Age</b>							
62–71	6.2	38.5	26.6	11.4	6.4	10.7	11.6
72–81	3.2	23.1	23.5	15.8	11.5	22.9	20.0
82+	2.3	8.2	17.3	14.5	11.5	46.1	35.9
<b>Race / Ethnicity</b>							
White	3.6	26.5	24.4	13.8	9.4	22.2	17.9
Black	11.3	35.5	19.3	11.3	5.6	17.7	11.3
Hispanic	6.7	24.0	20.0	11.4	11.1	26.8	18.7
<b>Income Quartile</b>							
Income I	7.5	10.6	14.7	8.7	10.7	47.8	37.4
Income II	6.9	14.6	17.1	14.4	10.9	36.2	27.9
Income III	3.4	23.4	24.4	16.5	13.9	18.4	19.5
Income IV	1.6	48.9	33.0	13.0	2.9	0.6	9.9

Source: 2006 Health and Retirement Survey.

Notes: Includes all HRS homeowners where all primary adults are age 62 and older. The estimates show the percentage increase in income if homeowners take the maximum reverse annuity mortgage in the form of a lifetime annuity (values based on March 2008 interest rates and deduct loan costs as explained in text). Those with a 0 percent increase in income own homes but do not have enough equity to qualify for an RAM. Estimates exclude households with zero incomes and 17 outliers based on extremely high equity-to-income ratios. The sample size is 6,643, representing 23.4 million households.

to \$124,500, about 11 percent. (Equity drops by slightly more than the change in home value because mortgage debt remains constant and equity values represent the difference between the value and debt.) Potential median annual RAM income for homeowners would decline by 12 percent holding interest rates constant (\$6,890 compared with \$6,060). The median boost in retirement income for homeowners would be about 16 percent compared with 18 percent, and the gain for all older adults would drop to 9.5 percent from 10 percent. Of course, the effect on individual homeowners will vary substantially around these averages since home price declines have varied dramatically across markets.

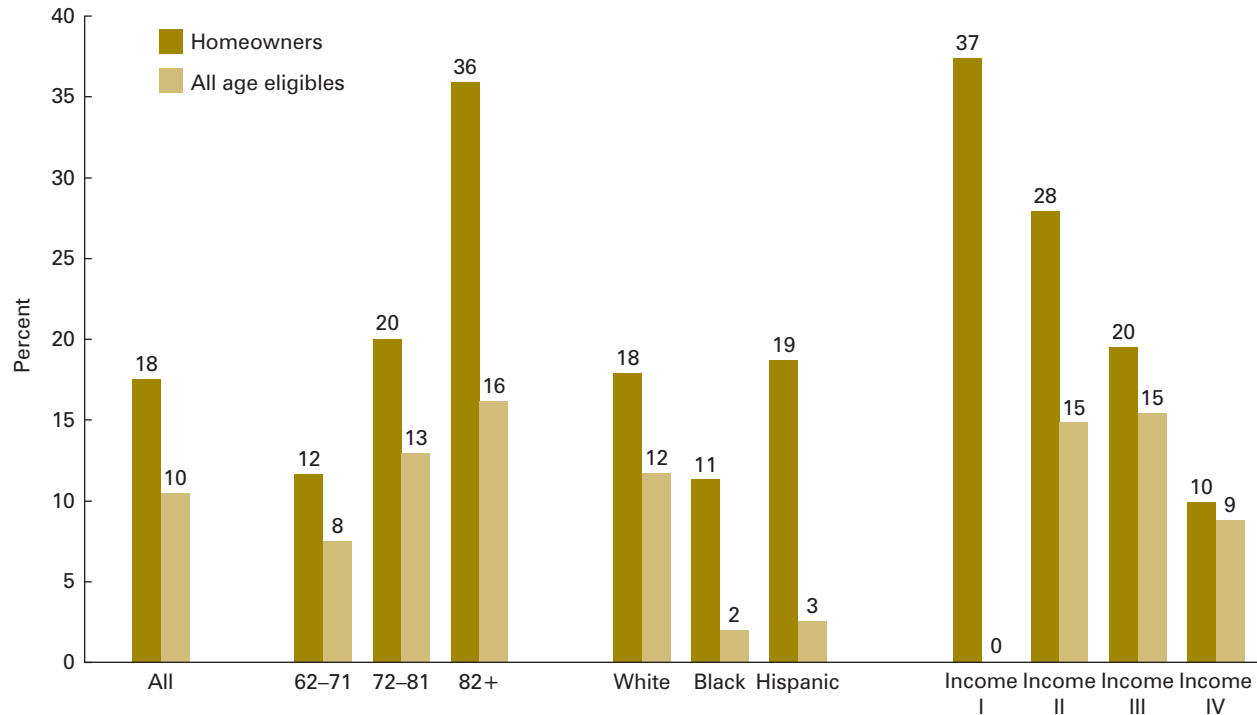
### Discussion and Policy Implications

Conversion of home equity into a reliable income stream in retirement could provide a sig-

nificant boost in retirement income, particularly for low-income homeowners with significant equity. The remaining question, then, is why more homeowners do not take advantage of this financial tool to boost retirement consumption. The early literature on home equity and retirement documents strong reluctance on the part of many elderly homeowners to tap home equity—preferring to treat the primary home as either as an implicit insurance policy in the event of a crisis later in life or as a bequest. While the use of RAMs has increased, a recent survey indicates that only 6 percent of homeowners age 50 to 65 report that they plan to use home equity to finance ordinary living expenses in retirement (Munnell, Soto, and Aubry 2007).

Some aspects of RAMs discourage participation. The fees associated with reverse mortgages are substantial. Redfoot, Scholen, and Brown (2007) report that a large majority of older adults

FIGURE 2. Potential Median Change in Income from RAMs for All Households Age 62 and Older, 2006



Source: 2006 Health and Retirement Survey.

Notes: Includes all HRS households where all primary adults are age 62 and older. This excludes households with zero income and 17 households with extremely high equity-to-income ratios. The sample size is 8,458, representing about 28.0 million households.

cite high loan costs as a primary reason for rejecting this option. Also, older homeowners may be reluctant to mortgage one of their largest assets. While the RAM helps older households that remain in their homes, it also limits their future housing choices. If homeowners with RAMs decide to downsize or move to assisted living, they will have to first pay off their mortgage along with accumulated compounded interest. Some financial planners present the RAM as a last resort option for older adults (for example, O'Shaughnessy 2008 and Kass 2008), while others tout its value (Savage 2008).

Our results indicate that RAMs offer substantial benefits for some homeowners, but at a high price. While the RAM provides an important option for asset-poor households, older homeowners must become fully informed of the high closing costs and long-term implications of the loan before making this decision. Policies that

would reduce the costs of these loans, such as the cap on fees for FHA reverse annuity mortgages included in the 2008 Housing and Economic Recovery Act, should be considered. However, if the uncertainty about future home values continues, the potential loan value of homes will decline since banks must be assured that the loans can be paid back when the house is sold. It will be important to watch these trends unfold as more baby boomers become eligible for reverse mortgages.

## Notes

1. In cases of joint homeownership, both owners must be age 62 or older. The estimates in this brief show effects for households, and age refers to the age of the younger spouse since that is the minimal qualifying age. However, we use the term "homeowners" as a shortcut referring to households in which both members are at least age 62.



2. The calculator illustrates loan limits and costs, given current loan interest rates, mortgage insurance requirements, and closing costs for different ages and geographic locations. We calculate illustrative loan values and closing costs for different ages and home equity values (using increments of \$50,000) and then apply these parameters to the home equity values and age of households eligible for RAMs in the HRS. State of residence is not available on the public-use version of the HRS. We include variation in RAM values by region but assume that the United States' 2008 maximum loanable amount of \$362,790 applies to all HRS households even though the limit is lower in some areas. The estimates reflect the RAM interest rate in effect in March 2008, 3.66 percent monthly or 5.26 percent effective annually. We calculate monthly-adjusting interest and use a lifetime annuity payout option.
3. Technically, loans are calculated based on home value rather than equity and the homeowner must pay off the existing mortgage with some of the proceeds of the loan. We approximate the lifetime payout option by calculating the value based on home value less outstanding mortgage debt.
4. All dollar figures for 1998 and 2002 have been converted to 2006 dollars using the consumer price index (CPI) for urban consumers.
5. The price run-up during this period was concentrated in high growth cities, such as New York, San Francisco, and Miami.
6. The average increase in income would be larger, about 22 percent for all older households and 30 percent for all homeowners. We show the medians as more representative of the typical change in income.
7. On average, incomes in the bottom income quartile would increase by 14 percent. However, we report the medians in the main body of the report because the distribution of gains is quite skewed.
8. Office of Federal Housing Enterprise Oversight (OFHEO) News Release, July 22, 2008. While this index covers the entire country, it only includes houses financed with mortgage loans of \$417,000 or less. (It represents about three-quarters of U.S. homes.) This index probably understates total price declines because it excludes higher-priced homes and homes financed with subprime loans, which have experienced the largest price drops.
9. [http://www2.standardandpoors.com/spf/pdf/index/CSHomePrice\\_History\\_072943.xls](http://www2.standardandpoors.com/spf/pdf/index/CSHomePrice_History_072943.xls). The Case-Shiller index focuses on larger cities where prices rose faster during the boom years, includes subprime loans, and excludes 13 states representing 11 percent of the U.S. housing stock. The index weights transactions by value so it is par-

ticularly sensitive to changes in the most expensive homes and in the highest-priced markets (Calomiris, Longhofer, and Miles 2008). This index overstates the loss in value experienced by all homeowners.

## References

- Calomiris, Charles, Stanley Longhofer, and William Miles. 2008. "Housing Collapse Ahead? Not According to the Data." *The Washington Post*, August 4.
- Kass, Benny. 2008. "Consider a Reverse Mortgage, But Only as a Last Resort." *The Washington Post*, June 28.
- Kohl, Herb. 2007. Opening Statement before U.S. Senate Special Committee on Aging. "Reverse Mortgages: Polishing Not Tarnishing the Golden Years." December 12.
- Mayer, Christopher J., and Katerina V. Simons. 1994. "A New Look at Reverse Mortgages: Potential Market and Institutional Constraints." *New England Economic Review* (March-April): 15–26.
- Munnell, Alicia H., Mauricio Soto, and Jean-Pierre Aubry. 2007. "Do People Plan to Tap Their Home Equity in Retirement?" *Center for Retirement Research Issues in Brief* no. 7-7. Boston: Boston College.
- National Reverse Mortgage Lenders Association (NRMLA). 2008. "Reverse Mortgages Show Significant Growth in 2007." <http://www.NRMLAonline.org>.
- O'Shaughnessy, Lynn. 2008. "Spending Safely." *Business Week*, July 14 and 21.
- Redfoot, Donald, Ken Scholen, and S. Kathi Brown. 2007. "Reverse Mortgages: Niche Product or Mainstream Solution?" Washington, DC: AARP Public Policy Institute.
- Savage, Terry. 2008. "Good News for Reverse Mortgages." *Chicago Sun-Times*, August 4.
- Sinai, Todd, and Nicholas Souleles. 2007. "Net Worth and Housing in Retirement." Federal Reserve Bank of Philadelphia Working Paper 07-33. Philadelphia: Federal Reserve Bank of Philadelphia.
- Venti, Steven F., and David A. Wise. 2004. "Aging and Housing Equity: Another Look." In *Perspectives on the Economics of Aging*, edited by David A. Wise (127–75). Chicago: University of Chicago Press.
- Weller, Christian, and Edward N. Wolff. 2005. *Retirement Income: The Crucial Role of Social Security*. Washington, DC: Economic Policy Institute.

APPENDIX TABLE 1. *Example Values from Simulation, Converting Equity into Monthly RAM Payments*

Age	62	62	72	72
Equity	100,000	150,000	100,000	150,000
Loan limit	62,311	93,467	70,746	106,119
Cost of loan	11,745	14,085	11,164	13,504
Loan fee	2,000	3,000	2,000	3,000
Mortgage insurance	2,000	3,000	2,000	3,000
Closing costs	2,062	2,402	2,062	2,402
Service fee	5,683	5,683	5,102	5,102
Cash available	50,566	79,382	59,582	92,615
Monthly advance	267	420	350	544

*Notes:* These calculations are based on the reverse mortgage calculator at <http://www.revmort.com/nrmla/index.asp>, using market rates from March 2008: the interest rate was 1.66 percent, with a 1.50 percent lender's margin and a 0.50 percent HUD mortgage insurance, giving an effective interest rate of 3.66 percent. These are based on zip code 82930, which gave the median closing costs from a sample of zip codes throughout the United States.

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2100 M Street, NW • Washington, DC 20037 • (202) 833-7200 • [paffairs@urban.org](mailto:paffairs@urban.org) • <http://www.urban.org>