Adequacy Issues Paper
Retirement USA is a national initiative that is working for a new retirement system, which, along with Social Security, will provide universal, secure and adequate income for future retirees. The initiative has developed 12 Principles for a New Retirement System to provide a framework for a future system in which employers, workers, and the government would share responsibility for the retirement security for all American workers. The Principles are included as an appendix to this paper.

Retirement USA was convened by five organizations – the AFL-CIO, the Economic Policy Institute, the National Committee to Preserve Social Security and Medicare, the Pension Rights Center, and the Service Employees International Union. Twenty-one other organizations support the Retirement USA principles and are coming together to raise awareness about the need for comprehensive reform for the future. A list of conveners and supporters is attached.

These issue papers are part of Retirement USA’s effort to promote discussion on a range of proposals that could lead to a universal, secure, and adequate retirement system. The issue papers cover five broad topics – universality, adequacy, security, design, and administration – and present options for designing features of a system that can provide an adequate and secure retirement for all American workers.

The papers were prepared for Retirement USA by Pension Rights Center staff and consultants. The principal authors were Jane T. Smith, Policy Associate; Norman P. Stein, Senior Policy Advisor; and John A. Turner, Consulting Economist. Editors were Henry Rose, Special Counsel; Nancy Hwa, Communications Director; and Karen Ferguson, Director. Invaluable insights and technical comments were provided for individual papers by Monique Morrissey, economist at the Economic Policy Institute; Alicia Munnell, director of the Center for Retirement Research; Daniel Halperin, professor at Harvard Law School, and Ben Veghte, research associate at the National Academy of Social Insurance.

The Pension Rights Center gratefully acknowledges the support of the Rockefeller Foundation and The Atlantic Philanthropies for the preparation of these papers.
This paper is one of five focusing on issues to be addressed in meeting Retirement USA’s 12 Principles for a New Retirement System. These papers address the topics of universality, security, adequacy, design, and administration.

A core Retirement USA principle is that everyone should be able to have an adequate income after a lifetime of work: “The average worker should have sufficient income, together with Social Security, to maintain a reasonable standard of living in retirement.”

This paper focuses on ways of measuring adequacy. Other R-USA principles relate to ways of achieving adequacy, such as required contributions, payouts only at retirement, and shared responsibility among employees, employers, and the government. These principles are discussed in the paper on design.

Policy experts differ on how to measure the amount of income necessary to maintain a reasonable standard of living in retirement. The goal of this paper is to provide tools and context to pave the way for discussion of – and ultimately build a consensus on – a benchmark for measuring adequacy. The paper summarizes current thinking on alternative ways of defining retirement income adequacy.

I. INTRODUCTION - ALTERNATIVE APPROACHES TO MEASURING ADEQUACY

Choosing an adequacy measure is a two-step process that requires selecting a method for measuring adequacy and then identifying a specific benchmark within the selected method.

The two methods most commonly used in this country to measure adequacy are (1) comparing on a percentage basis a person’s income pre- and post-retirement, which yields a “replacement rate,” and (2) establishing a dollar amount deemed to be sufficient to support a retiree’s basic needs. Both approaches include Social Security benefits in the calculation of adequacy.

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Experts who advocate a “replacement rate” approach of measuring adequacy seek to maintain an approximation of the typical retiree’s pre-retirement standard of living. Experts who use a dollar amount approach seek to ensure that a retiree will have sufficient income to maintain a uniform standard of living that will be sufficient to cover “basic needs.”

A variation on the dollar amount approach is to define basic needs as a percentage of median household income. The Organisation for Economic Co-operation and Development, for example, sets the poverty level at 50 percent of the national median disposable income of working-age households. The paper treats this approach—defining basic needs as a percentage of national income—as a third framework for defining adequacy.

The replacement rate method and the dollar method can also be combined for a hybrid approach. For example, a retiree might receive either a target replacement rate or a basic-needs benefit, whichever is greater.

This paper discusses these methods of measuring adequacy and the considerations that go into selecting benchmarks or targets within those methods. It also discusses factors relevant to choosing benchmarks in the three methods.2

II. REPLACEMENT RATES AS A METHOD OF MEASURING ADEQUACY

Replacement rates are “standard of living” measures. They attempt to identify the income necessary for an individual (or household) to maintain pre-retirement living standards by replacing a specified percentage of pre-retirement income. Discussion of replacement rates is complicated by the lack of a standardized definition of pre- and post-retirement income.

The replacement rate that many experts consider to be appropriate for the average worker is 70 to 90 percent of pre-retirement earnings.3 But others have suggested

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target replacement rates as low as 65 percent and higher than 100 percent for such workers. Often, the recommended replacement rate for low earners is higher than the recommended rate for average earners, in part because fewer of their costs are reduced in retirement.

Several factors must be considered when calculating a benchmark or target within the replacement rate method. The most important factors require identifying (1) pre-retirement expenses that do not need to be replaced in retirement; and (2) new and increased expenses likely to be incurred in retirement.

(1) **Costs that are often lower in retirement** are taxes, mortgage payments, work-related expenses, child-rearing expenses, and savings set aside for retirement. The reduction in these costs leads most experts to conclude that the replacement rate needed to maintain the pre-retirement standard of living for average workers is below 100 percent.

(2) **Expenses that may increase with age** include health costs and costs of long-term care. Health care and long-term care costs depend in part on the insurance coverage the household has for those expenditures, but even with insurance, the cost of deductibles and co-payments may increase.

Other factors can affect the calculation of a benchmark or target replacement rate:

- **Whether pre-retirement income is measured immediately before retirement or is based on average earnings throughout a retiree’s career.** If pre-retirement income is based on earnings just before retirement, when pay is typically higher, the benchmark is likely to be higher than if pre-retirement income is defined as average income over working years (adjusted for changes in earnings levels).

- **Whether different income levels require different replacement rates.** Most experts believe that lower-income workers need higher replacement rates than

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5 The change in housing costs may be uneven among retirees. Some may have completely paid off their mortgages or have only small balances remaining. Others may be renting. Moreover, the effects of having paid down a mortgage will have different effects of pre-retirement standard of living depending on when the mortgage was paid off. If it were paid off years before retirement, mortgage payments will not be a pre or post-retirement cost.

6 Also, older persons also incur increased costs for services, such as lawn mowing and household repairs -- activities that they can no longer do themselves.
higher-income workers to maintain their standard of living, because a larger percentage of a low-wage worker’s income must be used to purchase basic necessities.

- **Whether any adjustments are made for increases in the cost-of-living as retirees age.** Replacement rate studies generally do not track income and expenditures at older ages. Pension benefits often decline in purchasing power over the years because many are not inflation-indexed. At the same time, some expenses, such as health care, tend to rise as the retiree ages.

Examples of replacement rate benchmarks

1. The Center for Retirement Research at Boston College calculates replacement rates for a “National Retirement Risk Index” by comparing pre-retirement and post-retirement costs. This yields target replacement rates that would maintain the standard of living by household type and income levels. The resulting target replacement rates range from 65 percent for higher-income individuals to 81 percent for lower-income individuals.7

2. The Retiree Income Replacement Project of the Center for Risk Management and Insurance Research at Georgia State University has developed models for measuring the amount of income needed by families at retirement. The 2008 report suggested replacement rates ranging from 77 percent to 94 percent, depending on the level of income of the family.8

3. Hewitt Associates’ Real Deal Study in 2008 calculated that when increased medical care costs in retirement are factored in, a household needs a replacement rate of 126 percent on average.9

Using a simulation model, the Employee Benefit Research Institute has calculated a range of replacement rates needed to provide adequate income in retirement for four income levels. Unlike typical replacement rate studies that use average and median figures, this model includes probability calculations: A 50 percent chance of having an adequate retirement income requires a lower replacement rate than a 90 percent chance of having an adequate income in retirement. The model takes into account the

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8 Aon Consulting provides financial support for this project. The study can be found at [http://micr.gsu.edu/Papers/RR08-1.pdf](http://micr.gsu.edu/Papers/RR08-1.pdf)

risk of living longer than expected and risks as to medical care expenditures and yields higher replacement rates than those in most other studies.10

III. “BASIC NECESSITIES” AS A METHOD OF MEASURING ADEQUACY

Basic necessities or cost-based measures are designed to allow a person to meet basic needs and not necessarily to allow a person to continue a pre-retirement standard of living. A basic necessity measure can be designed narrowly for a minimum benefit level or more broadly to allow for contingencies.

In a basic-needs approach, the benchmark or target is a dollar amount. Selecting the benchmark involves considering questions such as (1) how to define and price basic needs; (2) whether there should be geographic or other variations in the cost of meeting basic needs; and (3) how to measure and adjust for post-retirement increases in the cost of living.

Examples of basic necessities benchmarks

1. The federal poverty threshold is based on the cost of a low-cost but adequate diet for an individual age 65 and over, multiplied by three. The poverty threshold is based on a formula created by the Social Security Administration in 1965, when the cost of food represented a much larger part of a household’s budget than it does today.

The threshold is adjusted annually by the Census Bureau to reflect changes in prices. Most experts regard the measure as too low to measure the poverty threshold today, and indeed today most anti-poverty programs are available to people whose income exceeds the poverty threshold, an implicit recognition that the threshold is too low.11

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10 For example, a low-income single male earning less than $15,000 a year retiring at age 65 would need a replacement rate of 124 percent in order to have a 50 percent probability of meeting required expenditures over his lifetime, whereas a high-income single male earning over $40,450 per year retiring at age 65 would need a replacement rate of just 52 percent to have a 50 percent probability of meeting required expenditures. For a 75 percent probability of having an adequate retirement income for life, the lower-income worker would need to replace 229 percent of income and the higher income worker would need to replace 78 percent of income.

11 In 2008, the poverty level (or threshold) for individuals age 65 and over was $10,326. Patrick Purcell, Income and Poverty Among Older Americans, Congressional Research Service, October 2, 2009.
http://www.census.gov/hhes/www/poverty/data/threshld/thresh09.html
2. Recently the Office of Management and Budget’s Chief Statistician formed a Working Group to develop a Supplemental Poverty Measure (SPM), which is expected to be more nuanced, accurate, and complex than the standard federal poverty threshold. The Working Group is expected to use recommendations from the National Academy of Sciences as a starting point for developing the SPM.

The SPM is likely to be based on a broader range of expenditures than the official poverty threshold, including health care and in-kind benefits, and to include adjustments for geographic differences. Some experts believe that this new poverty measure will almost double the share of seniors considered to be living in poverty, even exceeding the rate for children, the age group with the highest poverty rate under the current measure. The SPM, scheduled to be released in the fall of 2011, will be designed to supplement, not replace, the federal poverty threshold.

3. The Elder Economic Sufficiency Index was developed by Wider Opportunities for Women and the Gerontology Institute at the University of Massachusetts. The Index is based on current costs and takes into account health, food, housing, and transportation expenses.

This measure attempts to capture the amount of money older adults need to cover basic expenses (for example, a bare-bones nutritionally adequate diet and no health insurance other than Medicare) and to live independently. The Index is varied for housing status and in some cases is adjusted for geographical cost-of-living differences. It results in a higher figure for basic independent living than the federal poverty threshold.


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14 For example, the Elder Economic Sufficiency Index for individuals 65 and older who owned their homes and did not have a mortgage was $15,134 a year in 2006. For renters it was $19,541.
http://www.wowonline.org/ourprograms/eesi/documents/NatlEESIIndexFAQs.pdf
based on the Bureau of Labor Statistics' Consumer Expenditure Survey. It would allow for the purchase of basic physical necessities, primarily food, clothing, shelter, and personal items.

Congressman McDermott’s bill also calls for a panel to make recommendations on a “decent living standard” that would be higher than the Modern Poverty Measure.

### IV. “Relative Poverty” as a Method of Measuring Adequacy

Another method compares the income of persons 65 and older, most of whom are retired, with the income of the working population. The Organisation for Economic Co-operation and Development (OECD) uses this approach to define poverty. This measure allows poverty to be defined in terms of a country’s standard of living, which changes over time, and permits comparisons among countries with different living standards.

The OECD benchmark or target for defining poverty is a percentage of median income measure. The OECD is currently using 50 percent of the median household disposable income as the standard for poverty in each country. This standard compensates for size of household and uses net income figures.

### V. Factors Relevant to All Three Methods of Measuring Adequacy

In addition to the specific factors relevant to calculating adequacy benchmarks within the three methods of measurement – replacement rate, basic needs, and relative poverty – there are factors common to all three.

**Definitions of income.** There are multiple ways to define income when calculating adequacy.

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1. Income can be gross or net (after taxes and transfers).\textsuperscript{18} Net income figures are often used for determining replacement rates since they reflect the amount of income available for spending and account for the degree to which tax and social policies level the differences between low and higher income earners.

2. Income can be measured at the individual or household level. When studies use household income in retirement rather than individual income, the income can be adjusted to equalize the effects of different household sizes.

3. Retirement income can be defined narrowly to include only Social Security, pensions, and income from retirement savings accounts or more broadly to include income from investments, personal savings, rental income, earnings from work, and in-kind benefits, such as food stamps.

**Treatment of financial wealth.** Financial wealth includes investments, personal savings, and retirement accounts. Financial wealth can be converted to lifetime stream of payments and included in income figures. However, unless assets are actually converted into a lifetime stream of payments, this assumption can misrepresent the actual income that might eventually be available to a retiree. Financial assets are subject to investment risk and the risk of spending down the asset either too quickly or too slowly.

**Treatment of housing.** A home is a large part of the assets of many households – 83 percent of older households owned their own homes in 2004 and 70 percent of those homes were mortgage-free.\textsuperscript{19} For this reason, some calculations of poverty, sufficiency, replacement rates, and other measures of adequacy take home equity into account.

A question is how to treat home equity. At one extreme, it could be assumed that retirees take reverse mortgages, allowing a substantial portion of home equity to be available to finance retirement consumption.\textsuperscript{20} At the other extreme, it could be assumed that homes are often illiquid or subject to such strong bequest motives, and therefore that none or little of their equity is available for retirement consumption. An intermediate position might be that at some point households downsize, and at that point a portion of the home equity is available to finance consumption.\textsuperscript{21}

\textsuperscript{18} The calculation of a replacement rate will, of course, be sensitive to which definition of income is being used, since a definition of income net of taxes will have backed out what would be an expense if income is defined as gross income.

\textsuperscript{19} Alicia H. Munnell, Mauricio Soto, and Jean-Pierre Aubrey, *Do People Plan to Tap their Home Equity in Retirement?*, Center for Retirement Research at Boston College, Issue in Brief Number 7-7, May 2007. http://crr.bc.edu/images/stories/Briefs/ib_7-7.pdf?phpMyAdmin=43ac483c4de9f51d9eb41. It is important to note that the recent collapse of the housing market may cause more people to enter retirement with mortgages on their primary residence.

\textsuperscript{20} Only two percent of eligible Americans have taken a reverse mortgage. The NRRI and the House, NRRI Fact Sheet No. 1, March 2010. http://crr.bc.edu/images/stories/Just_the_Facts/nrri_fact_sheet.pdf

\textsuperscript{21} In 2004, 17 percent of older American households rented their homes, and 30 percent had a mortgage on their homes. Prior to the collapse of the housing bubble, non-traditional mortgages and home equity withdrawals
Assumptions about Social Security. Finally, adequacy benchmarks or targets necessarily include assumptions about public retirement programs.

In the United States, Social Security is the most important component of retirement income for the majority of retirees. The Social Security Administration calculated that a worker who retired at age 65 in 2007 with a lifetime career working at the average wage would receive a Social Security benefit that replaced 40 percent of that worker’s (wage-indexed) average wage.

If an overall target income replacement rate were to be set at 80 percent of pre-retirement income for a typical retiree, a new private retirement system, together with income from personal savings and investments, would have to replace roughly 40 percent of income for that retiree.

In this context, it is important to note that Social Security replacement rates are expected to decline over the next two decades. The decline will occur for three reasons:

1. The so-called normal retirement age will increase from 66 to 67. That change brings an across-the-board benefit cut at every retirement age.

2. Medicare Part B premiums are projected to continue to rise faster than Social Security benefits because health costs are rising rapidly.


23 The Social Security Administration computes retirement benefits replacement rates as a fraction of pre-retirement earnings indexed for labor income growth. This widely used replacement rate measure differs from most other measures in its use of earnings-indexed wages. Furthermore, most workers retire before age 65, receiving reduced benefits. In 2005, the average benefit paid to new retirees replaced about 33 percent of the average wage of workers in the previous year. Social Security Board of Trustees, Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds. Tables VI.F10, V.C.1., and III.A3. Washington, DC: Social Security Administration.

24 The Social Security replacement rate is based on career-average earnings, while the term “replacement rate” in some adequacy measures is based on career-end compensation, which typically will be higher. Moreover, Social Security replaces a much larger percentage of low-wage earner’s income than it does of higher-wage earners. First, the Social Security replacement rate is progressive, i.e., in 2010, it replaced 90 percent of the first $761 in average indexed monthly wages; 32 percent of the next $4,586 in indexed monthly earnings; and 15% of the excess of average indexed monthly earnings. Second, Social Security replaces 0 percent of average indexed monthly earnings about the Social Security wage base, which in 2010 is $106,800.
3. Social Security benefits will be taxable under the personal income tax for more people because the exempt amounts are not indexed to keep pace with inflation.

For all of these reasons, an average earner retiring at 65 in 2030 will have net Social Security income that replaces only about 29 percent of prior earnings.25

VI. DISCUSSION

Each approach to measuring adequacy has advantages. A replacement rate measure is an efficient way of ensuring that middle-income workers will be able to maintain their living standards in retirement, and is consistent with the approach taken by Social Security and private pension plans, which tie benefits to lifetime earnings and contributions.

A basic needs measure reflects a different philosophical approach, namely, that regardless of their income while working, all retirees are likely to have certain expenses that must be met if they are to have a decent standard of living. The concerns of individuals whose pre-retirement earnings were above this level are not addressed.26

The international method measures the adequacy of retirees' income in relation to the income of active workers. Since the benchmark assumes that the incomes of retirees should rise when the median incomes of workers rise, this approach has advantages for retirees in a growing economy. However, if the median income of workers were to fall, the benchmark for retirees would also fall.

Architects of a new private retirement system may well conclude that adequacy should be calculated using a hybrid rather than a single benchmark. For example, rather than choosing between a replacement rate and a basic needs standard, it may make sense to combine them. The adequacy of a retirement system could be judged according to


26 Many countries provide basic “old-age pensions” that provide the same amounts to everyone age 65 and over. These benefits are based on the assumption that most people cannot work into old age and that society has a responsibility toward the elderly. They often constitute a first tier of a retirement income system, and substitute for an earnings related social security-type system. However, these benefits are not considered to be “adequate.” They tend to be very low, and, in some cases, are means tested. These flat benefits are usually supplemented by a second tier of retirement benefits tied to contributions or years of work and earnings. The Supplemental Security Income system in the United States functions as an old-age pension for very low-income individuals with very limited assets. SSI payments are extremely small. In April 2010, the average SSI payment to individuals 65 and over was $4,843.20 a year. U.S. Social Security Administration, Office of Policy, "Monthly Statistical Snapshot, March 2010," Table 3.
the number of retirees who fall below some fixed “basic needs” benchmark and whether it achieves a target replacement rate for middle-income workers.27

There already is a significant amount of research on adequacy measures. The next steps will involve selecting the criteria to be used in evaluating the income adequacy of a new system and choosing the specific measures to be used in that evaluation.

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27 This was the approach adopted by the 1981 White House Conference on Aging, which recommended as “an immediate goal, that retirement income for all families should be brought up to the level of the intermediate budget for families produced by the Bureau of Labor Statistics” and that “total retirement income for all should be sufficient to maintain the preretirement standard of living.” White House Conference on Aging, 1981, Retirement Income, Report and Executive Summary of the Technical Committee, Bert Seidman, Director, Washington, DC, November 30 – December 3, 1981. p.2. http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/2f/db/22.pdf

Adjusted for inflation, the Bureau of Labor Statistics (BLS) "Intermediate Budget" for retired couples would be $26,234.64 a year in 2010 dollars. The Intermediate Budget for single elderly individuals would be $19,677.65. The Technical Committee noted that “one-third of couples and two-thirds of single people fell below those still Spartan measures.” p.92. The BLS Retired Couples Budgets were eliminated in 1982.
Principles for a New Retirement System

**Universal Coverage.** *Every worker should be covered by a retirement plan in addition to Social Security.* A new retirement system should include all workers unless they are in plans that provide equally secure and adequate benefits.

**Secure Retirement.** *Retirement shouldn’t be a gamble.* Workers should be able to count on a steady lifetime stream of retirement income to supplement Social Security.

**Adequate Income.** *Everyone should be able to have an adequate retirement income after a lifetime of work.* The average worker should have sufficient income, together with Social Security, to maintain a reasonable standard of living in retirement.

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**Shared Responsibility.** Retirement should be the shared responsibility of employers, employees and the government.

**Required Contributions.** Employers and employees should be required to contribute a specified percentage of pay, and the government should subsidize the contributions of lower-income workers.

**Pooled Assets.** Contributions to the system should be pooled and professionally managed to minimize costs and financial risks.

**Payouts Only at Retirement.** No withdrawals or loans should be permitted before retirement, except for permanent disability.

**Lifetime Payouts.** Benefits should be paid out over the lifetime of retirees and any surviving spouses, domestic partners, and former spouses.

**Portable Benefits.** Benefits should be portable when workers change jobs.

**Voluntary Savings.** Additional voluntary contributions should be permitted, with reasonable limits for tax-favored contributions.

**Efficient and Transparent Administration.** The system should be administered by a governmental agency or by private, non-profit institutions that are efficient, transparent, and governed by boards of trustees that include employer, employee, and retiree representatives.

**Effective Oversight.** Oversight of the new system should be by a single government regulator dedicated solely to promoting retirement security.
Retirement USA Steering Committee
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Service Employees International Union

Supporters of the Retirement USA Principles
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American Association of University Women (AAUW)
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National Consumers League
National Employment Law Project
National Retiree Legislative Network
National Senior Citizens Law Center
National Women’s Law Center
OWL- the Voice of Midlife and Older Women
Public Citizen
United Food and Commercial Workers International Union
Woman’s National Democratic Club
Wider Opportunities for Women