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MEMO

Re: **PlanAhead for Retirement® Assumptions**

PlanAhead is a financial planning tool designed by Milliman, Inc. with the primary goal of helping individuals to understand how much income they might need in retirement, and how to plan and save for that income today. In addition to being a financial planning tool, PlanAhead aims to educate individuals about their sources of income in retirement, and the various financial risks inherent in retirement planning including not saving enough.

This letter documents the key assumptions and projection methods of PlanAhead.

PlanAhead Setup and Projection Methods

PlanAhead is programmed with the provisions of your retirement programs as provided to us.

PlanAhead projects income needs and sources from the user's current age over the remainder of the working lifetime of the user and spouse, and the period of time over which the user and spouse are assumed to be retired. All income needs and income amounts are shown in terms of the dollars that are needed and received in a specific future year.

PlanAhead calculates the percentage of income needs that can be met over the joint life expectancy (see below) of the user and spouse. Any excess or shortfall of income over needs is reflected as an excess or shortfall in each retirement year, rather than projecting a single point in time when savings run out, or projecting a residual balance upon the second death of the user and spouse.

PlanAhead Assumptions

PlanAhead makes several assumptions, all of which may be changed or modified by the user. Financial assumptions should reflect the user's "long term" average annual expectations. A list of the main assumptions follows:

- Retirement age

The default retirement age for the user and spouse is 65.

The user's earliest retirement age is based on the provisions of your pension plan, but no earlier than one year from the user's current age. The user's maximum retirement age is 72. The permitted range for the spouse's retirement age is within 15 years of the date of the



user's retirement date, but no greater than 72 and no earlier than one year from the spouse's current age.

- Compensation and annual salary increases

Current compensation is assumed to be a reasonable basis for projecting future compensation. The default rate of annual salary increases is 2.0%.

- Annual rate of inflation (CPI)

The default rate of annual inflation that is applied to non-medical income needs is 2.0%.

- Annual rate of medical inflation

The default rate of annual medical inflation is 4.5%.

- Percentage of income needed by the surviving spouse

PlanAhead assumes that the last surviving spouse will have an annual income need (excluding medical needs) in the first year after the death of the first spouse equal to 80% (plus CPI) of the annual income needs (excluding medical needs) in the prior year.

Financial medical needs are assumed to be 50% (plus medical inflation) of their respective amount in the year prior to the first spouse's death.

- Average annual rate of return on investments

The default annual rate of return on investments in the years prior to retirement is assumed to be 6.0%, and the default annual rate of return in the years after retirement is assumed to be 5.0%. This reflects a shift in investment strategy for individuals as they move from employment into retirement.

- Life expectancy

Life expectancy is based on a published table of mortality rates. As a conservative measure, we assume the user will live seven (7) years longer than his life expectancy.

As an example, we assume that a 65 year-old male has a life expectancy of approximately 22 years (before the addition of the conservative assumption), and that a 65 year-old female has a life expectancy of approximately 24 years (before the addition). This basis assumes that for a couple who are currently both aged 65, one of them will live to age 100.

- Amount of income needed postretirement as a percentage of preretirement income

PlanAhead uses a "replacement ratio" to estimate the amount of postretirement income (as a percentage of preretirement income) the user will need that allows him (and his spouse) to maintain their preretirement standard of living. The necessary replacement ratio is specific to an individual and should take account of the specifics of that individual's (and their spouse's) financial situation. The default replacement ratio assumed by PlanAhead 85% of preretirement income before accounting for postretirement medical costs.



PlanAhead includes assumptions for postretirement medical expenses. Postretirement medical needs may be a significant portion of preretirement income and are in addition to the non-medical replacement ratio stated above.

- Taxation

Taxation is handled broadly in PlanAhead through the replacement ratio, and all comparisons of income pre and postretirement are on a gross-to-gross basis. Additionally, all preretirement savings are assumed on a before-tax basis.

Taxes today are not necessarily representative of taxes in the future and may vary substantially between individuals.

- Social Security

All users are assumed to receive social security. All users are assumed to have a full career of covered employment. Current compensation is a reasonable basis for projecting future earnings and past earnings history for social security calculations. Future National Average Earnings (NAE) growth is assumed to be 0.5% higher than CPI (see above).

PlanAhead projections assume no future changes to current social security law.

All users are assumed to start receiving social security benefits at their retirement date, but no earlier than age 62 and no later than age 70, unless the user chooses a different start date.

- Medicare / Medical (Financial) Needs

All users are assumed to be eligible for Medicare at age 65. All users/spouses are assumed to receive medical benefits from an employer until they retire. For retirement after becoming eligible for Medicare benefits, users are assumed to purchase supplemental medical insurance. For years in retirement before becoming eligible for Medicare benefits, users are assumed to purchase comprehensive medical insurance.