

# HOW TO DESIGN RETIREMENT PLANS THAT WILL BENEFIT YOUR ORGANIZATION

**Kien Liew**, EA, FCA, MAAA  
Investment Advisor & Actuary  
PensionAssets

**Mark Cavazos**, ASA  
Consulting Actuary  
PensionBenefits

**Bill Schroeder**, EA, FSA, MAAA  
Investment Advisor & Actuary  
PensionAssets

July 31, 2009  
Copyright 2009 PensionBenefits

## INTRODUCTION

The right retirement program should not only provide sufficient retirement income to your long-term employees but also help your organization achieve its goals.

A successful organization needs to be able to retain its experienced employees and continue to attract new talent. Such organization typically has an excellent working environment, a well thought out communications program and a good total compensation package. Total compensation comprises cash compensation and benefits. Key benefits include healthcare, retirement, life insurance and disability benefits.

This article focuses on the role of retirement plans as part of a total compensation package; and how to use retirement programs to retain experienced employees and also which will help to attract young talent.

We will explain the appropriate use of defined benefit (DB) and defined contribution (DC) plans, how to design a new program or fine-tune an existing program to maximize their value. We will also discuss how employees should share the funding requirements of these plans, and how to get the employees involved with planning for their retirement.

The paper discusses these key ideas:

- Review your organization's goals;
- Identify retirement goals and your target group;
- Determine their retirement income needs;
- Implement – add or fine-tune your current plans, include the funding arrangement;
- Get employees involved with effective communicating tools (such as total compensation statements; what-if tools; investment advice).

Special adjustments are needed for

- Plans outside of the U.S.;
- Governmental or public sector plans; and
- Small plans.

## **REVIEW YOUR ORGANIZATION'S GOALS**

Different organizations have different goals. It will be helpful to have a copy of your organization's goals in front of you.

If your organization does not have a written goals statement, you may want to establish a committee to draft a goals statement. You can start by reviewing your organization's vision and mission statements; talk to your top management; ask your key customers how they benefit from your organization's products and services. Before proceeding, make sure that your management agrees with your written goals.

## **IDENTIFY RETIREMENT GOALS AND YOUR TARGET GROUP**

For discussion purposes, let's assume that you are a professional organization; perhaps an IT or engineering firm with the following retirement program goals. Note that these retirement program goals are intended to support organization goals as discussed above.

1. Establish a retirement program so that a long-term employee will have sufficient retirement income to maintain the same standard of living.
2. As you design your retirement program for your target group, it is important to study all other groups to ensure that there are no groups receiving either windfalls or shortfalls.
3. In designing the retirement program, it is assumed that the employee contributes the maximum DC contribution required to receive the maximum employer matching contribution.
4. Because of the current complex DB laws in the U.S., there will be no employee contributions required or permitted in the DB plan.
5. Consideration should be given to a proper normal retirement age based on your company goals regarding when it is best that employees retire.
6. Be careful when defining pensionable earnings for both DB and DC plans. Consideration should be given to ease of administration.
7. For a DB plan, the definition of final average earnings (FAE) can significantly impact its financial status. Consideration of potential abuses should be taken when defining FAE.

Based on these retirement program goals, your initial target group might be your professional staff. However, as discussed in item 2 above, it is important to study all other groups to ensure that there are no groups receiving either windfalls or shortfalls.

## **DETERMINE RETIREMENT INCOME NEEDS**

The Aon/Georgia State University 2008 Replacement Ratio Studies show that one needs approximately 75% – 90% of pre-retirement salary to maintain a similar lifestyle after retirement. For plan design purposes, targeting a minimum replacement ratio of 80% of pre-retirement salary for a long-term employee is a good starting point. This target includes income from governmental retirement programs such as Social Security in the U.S. and the employer-sponsored retirement plans.

## **IMPLEMENT**

In this section we will provide an implementation example for an organization that does not have any retirement plans. In the next section, we will describe how to fine-tune the existing retirement program.

### **Key Facts**

Name of organization: ABC Company

#### **Organization Goals:**

1. To provide value-added professional services to our clients;
2. Maintain a staff which is comprised of both well-experienced professionals and also younger professionals who bring new technology and new ideas to the organization;
3. Provide an environment where young employees can learn from experienced professionals;
4. Maintain a retirement program which supports our goals;
5. Maintain an HR policy of always being fair and honest with our employees;
6. Clearly communicate our goals and objectives to employees and review each employee's progress at least annually;
7. To provide an environment where our associates can be their best;
8. To be a responsible citizen of the community.

The Company believes in creating win-win situations for clients, employees and community. The Company also believes that clients are best served when the employees are treated fairly.

#### **Challenges:**

The Company has a high turnover rate partly due to the nature of its industry. Currently, the Company does not sponsor any retirement plans and is seeking advice how to setup a retirement program. The Company is concerned about retention, and now that the company is fairly successful, it wants to make sure long-term employees will have sufficient income to maintain the same standard of living at retirement.

#### **Other statistics:**

Number of employees:	1,000
Annual Revenue:	\$125,000,000
Average annual compensation:	\$50,000
Average age:	40
Normal retirement age:	65
Average years of service:	5

**Target Group:**

The Company wants to make sure an employee making average compensation of \$50,000 who retires at age 65 after 25 years of service, has sufficient retirement income to maintain the same standard of living. This will help achieve the second organization goal stated above.

**Sources of Retirement Income:**

An employee earning \$50,000 at age 65 would require approximately \$40,000 (80%) to maintain the same standard of living after retirement.

Organizations should consider various approaches to help employees meet their retirement needs. Below is an example based on the three-layered model: governmental program such as Social Security in the U.S., Defined Benefit (DB) Plan, and Defined Contribution (DC) Plan.

Social Security provides a base retirement income to most employees in the U.S. Because this is a social program, it is tilted in favor of lower-paid employees.

The DB pension plan provides a stable second layer of retirement income to an employee when properly designed. Because plan sponsor is responsible for contributing to the pension funds and is responsible for investment returns of the pension funds, it introduces contribution volatility\*. However, pension plans do provide key advantages when compare to DC plans: delivery efficiency, benefits are provided as an annuity thus avoiding outliving a person's savings, and benefits under private-sector pension plans are guaranteed by the Pension Benefit Guaranteed Corporation (PBGC). Also, usually employers are more sophisticated asset investors than individual employees and may be able to handle market volatility better than individual employees.

The DC plan provides a stable third layer of retirement income to an employee when properly designed. DC plans may include §401(k)/§403(b)/§457 and/or profit sharing features. DC plans are generally more flexible and have less contribution volatility. The key advantages of a DC plan are (i) employees have the flexibility to determine how much they want to save for retirement to supplement what is provided by Social Security and Company-provided benefits, (ii) they can invest their funds (most employees realize investing is not so easy), (iii) it is easier to understand, and (iv) it is portable. In a DC plan the employee shoulders the mortality and investment risk, whereas in a DB plan the employer takes on the mortality and investment risk.

Whenever feasible, we recommend using both DB and DC plans to their individual strengths. DB can provide a more reliable monthly pension similar to Social Security. When used in combination with Social Security and a DC plan, a 1% of FAE for each year of service is a good starting point. However, many companies integrate their DB plan with Social Security by providing a larger benefit percent for final average compensation in excess of the average Social Security wage base. If your organization does not participate in Social Security, then a higher benefit such as 2% formula may be appropriate.

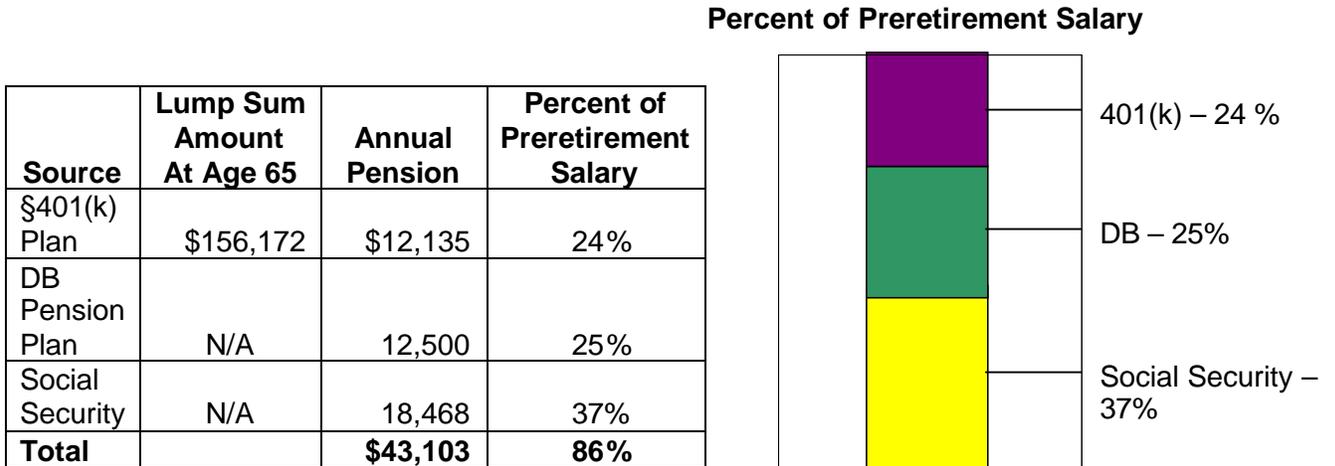
---

\* You may want to read our white paper "How to Reduce Contribution Volatility in Your Pension Plan" located at [www.pensionassets.com/resources](http://www.pensionassets.com/resources).

A DC plan such as §401(k) could be used to encourage employees to save to help meet their retirement goals. To encourage participation in a DC plan, a 25% employer match of the employee's first 6% of compensation is a good starting point especially if the employer sponsors a DB plan. For-profit companies may want to consider adding a profit sharing feature in the plan. Additional contributions could be made for each participant during the year when the company is profitable.

In our example, ABC Company employees contribute to Social Security. A DB plan can be used to encourage retention of long-term employees who can help your organization achieve its goals. This plan can be designed to provide 1% of FAE for each year of service. Total service could be limited to 25 years to contain costs.

The company also sponsors a DC plan with §401(k) feature. The company matches 25% of employee deferral and the maximum employee deferral is 6% of compensation. The retirement income for someone currently earning \$50,000 who retires 25 years from now is as follows:



**Assumptions:**

- No inflation was used since both salary and benefits will be proportionally higher so the replacement ratio is consistent.
- Social Security benefit is calculated based on today's law.
- §401(k) is calculated based on annual contribution of 7.5% of compensation (6% employee deferral, plus 1.5% employer match). We assume annual investment return of 4.0%. The projected lump sum is then converted to a monthly annuity using the 1994 GAR mortality table and 4.0% interest rate.

You can develop these scenarios by using our free Retirement Income Adequacy Calculator available at [www.pensionbenefits.com/calculators](http://www.pensionbenefits.com/calculators).

For plan design purposes, we recommend targeting the retirement income adequacy of 75% – 90%. Employees should be encouraged to supplement these company-sponsored retirement plans to suit their desired retirement lifestyles.

### **Fine-Tune Existing Retirement Plans**

If employers have existing retirement plan(s), they could fine-tune their retirement programs periodically to better meet their organization's goals using the above example. Changes to a DC plan can only be prospective. Improvements to a DB plan can be both retrospective and prospective.

Make sure to consult your plan's enrolled actuary before you fine-tune your DB plan. While you may grant benefit increases for past service, you need to be aware of the true costs. It is important to have realistic actuarial assumptions prior to performing any cost studies.

### **Funding Arrangement**

Providing adequate retirement income to your employees is a shared responsibility. At a minimum, employer should have the retirement plans in place for employees to participate; and contribute at least 50%, if possible, of the cost for a targeted employee's retirement income.

In our example, the split of the funding arrangement is as follows:

Retirement Plan	Employee Contribution	Employer Contribution
DC §401(k) Plan	6.0%	1.5%
DB Pension Plan	0.0%	6.1%
Social Security	6.2%	6.2%
<b>Total</b>	<b>12.2%</b>	<b>13.8%</b>

### **EFFECTIVE COMMUNICATION**

It is important to help your employees understand how to plan for retirement. Communication tools could include one or more of the following:

- Total compensation statements including projected retirement income;
- Annual employee meetings or seminars;
- What-if tools;
- Well written Summary Plan Descriptions.

### **CONCLUSION**

Regardless of whether your organization is well established or just getting started, it is important to a) review your goals periodically and b) make sure that your retirement program is supportive of your organization's goals. A well planned retirement program with a good balance of employer and employee contributions is important to your organization's survival and success.

*In order to keep the paper concise, we have simplified many of the factors discussed above. You are welcome to contact us for more information.*