The Future of Defined Benefit Plans Will Change Dramatically — For The Better

A WHITE PAPER BY

Pentegra Retirement Services
2 Enterprise Drive, Suite 408
Shelton, CT 06484-4694
800.872.3473 tel 203.925.0674 fax
www.pentegra.com

PENTEGRA

Executive Summary

The last 10-15 years have been difficult for employers who have maintained a Defined Benefit plan as part of their overall retirement program. This is all about to change. The factors and economics that caused significant increases in required contributions to Defined Benefit plans are showing signs of slowing down and reversing themselves. The impact of the Pension Protection Act of 2006 (PPA) is behind us, as the provisions of this law have been fully phased in.

Historically low interest rates, which cause plan liabilities to increase every time they drop, appear to have nearly hit bottom and are poised to begin rising as soon as the Federal Reserve suspends the accommodative support of growth through an expansionary monetary policy. Other underlying macroeconomic trends such as the 30 -year bull market in bonds, the decade-long stagnation in the equity markets and the lack of viable options to extend duration for pension investment managers, all exhibit signs of changing for the better.

What Does All This Mean? It Means The Future Of Defined Benefit Plans Is Bright; And Lower, More Stable Funding Requirements Are Ahead.

Most Defined Benefit plan sponsors have struggled with the costs of maintaining these plans for several years. Various actions have been taken by employers to reduce and control the cost increases. These actions included reducing benefits, "soft freezes" and "hard freezes." But these trends are slowing down, and recently we had a client elect to "unfreeze" its plan and begin enrolling new employees.

Why? Because Employers Are Beginning To Realize That There Is No Better Tool To Attract And Retain Employees And Prepare Them For Retirement Than The Defined Benefit Plan.

The financial crisis that began in 2008 caused sponsors of retirement programs to begin to rethink their strategies. It became clear that relying solely on defined contribution plans like 401(k) plans provided inadequate retirement benefits and resulted in participants being unprepared for their retirement years. In addition, terminating the Defined Benefit plan at this time was, and still is, analogous to selling out of the market after a major downturn. What we have all needed was a change in the influences impacting employer costs and those changes are underway.

Even Congress recognizes the importance of Defined Benefit plans as a recent bill passed by Congress will permit plans to use a higher liability interest rate in determining Minimum Required Contributions, thus lowering employer contributions. See below for a further discussion of this newly enacted legislation.

At Pentegra, it is our responsibility to help clients make educated and informed decisions. Understanding what has driven Defined Benefit plan costs to the historically high levels is paramount in making those decisions. The economic conditions over the last 10-15 years have been the principal driving force behind the cost increases. **We firmly believe the Defined Benefit plan economics are shifting and will afford employers the opportunity for lower funding costs, thereby positioning Defined Benefit plans to once again become one of the most cost effective methods of providing adequate retirement income to your employees.**

We encourage you to take the time to read this white paper and, more importantly, let our expertise and experience help you address both the concerns of your management and your Board of Directors. The remainder of this paper provides further insights as to why we believe conditions are changing for the better for Defined Benefit plans, why these types of plans are so vital for the future retirement of your employees, and how different types of Defined Benefit plan structures assist employers in meeting their retirement goals.

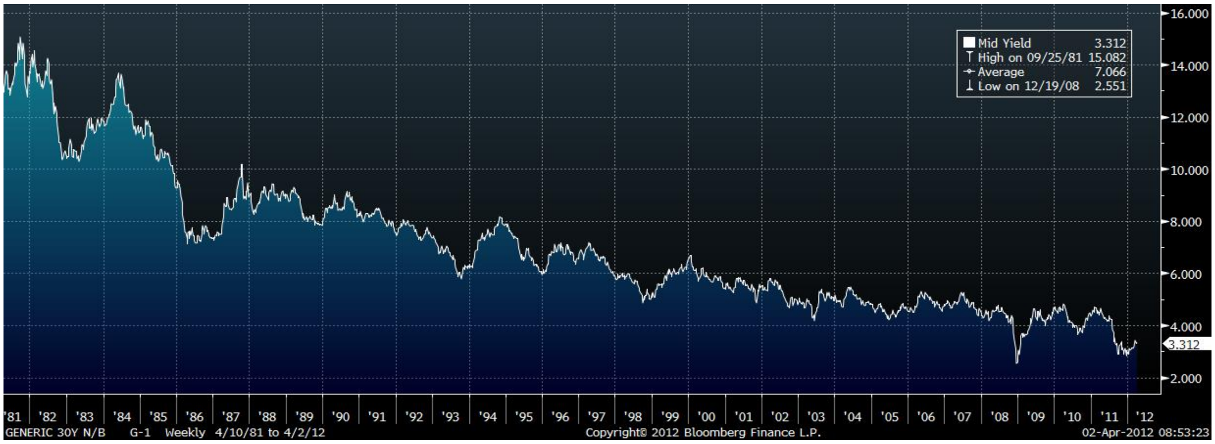
Why Defined Benefit Plan Costs Will Be Lower In The Future

Over the last 10-15 years, employers have found it increasingly difficult to provide their employees with pension benefits as costs have risen to levels that many find difficult, if not impossible, to adequately fund. Controlling these costs has taken many forms, including reductions in benefits, both 'soft' and 'hard' freezes on plan participation, and plan terminations. Although employer responses to this crisis have received much press, far less attention has been paid to some of the most important underlying macroeconomic trends that drove costs higher in the first place.
These include:

- A 30-year bull market in bonds, driving the discount rate lower and pension liabilities higher, and rapidly increasing the present value of future benefits
- A lack of viable options to extend duration for pension investment managers for most of the period
- A decade-long stagnation in equity market returns
- Bond and Equity market correlations that increase the volatility of the funding ratio rather than mitigate it

We believe each of these secular trends may be coming to an end, and that to the extent they reverse, or revert to a long-term median level, funding costs for Defined Benefit pension plans should fall over the coming years.

The most obvious reason for increases in long-term pension liability costs is the tremendous decrease in the value of the discount rate used to value plan liabilities. As illustrated in the graph below, the yield on long-term US Treasury bonds has fallen steadily for some 30 years, from a high in excess of 14% in 1982 to a low of 3% in the last few months. Note as well that the trend has been remarkably consistent; rates in 1990 hovered around 8%, moving to 6% in 2000, and finally falling below 4% during the financial crisis of 2008.



As an example, a 30-year liability of $100 discounted at 14% semi-annually results in a present value of only $1.72 today. If the discount rate is decreased to 8%, the prevailing 1990 rate, then the present value of the $100 liability rises to $9.51. In other words, a 43% decrease in the discount rate creates a 553% increase in the value of the liability—and subsequently in the cost to the employer of providing that $100 benefit.

What is the impact on pension plan liabilities if discount rates increase? Consider this- for every 100 basis points increase in discount rates, plan liabilities are reduced by 12-14%, while Target Normal Cost (TNC) is reduced by 14-16%. For a plan with $10M in liabilities and a TNC of $500K, rates moving from 5.5% to 6.5% will reduce liabilities by $1.2-1.4M and TNC will decrease by $70-80K. Amortizing the liability reduction over 7 years, as required by PPA, will result in an additional annual decrease in the employer's Minimum Required Contribution of $190-220k. The table below illustrates these cost savings at various increases in interest rates.

Discount Rate	Liabilities	Reduced Amortization	Reduced Target Normal Cost	Total Reduced Employer Contribution
1% Increase	$8.7M	$200K	$75K	$275K
2% increase	$7.4M	$400K	$150K	$550K
3% Increase	$6.1M	$600K	$225K	$825K

Comparing Defined Benefit (DB) And Defined Contribution (DC) Plan Costs

In the current economic environment there appears to be a clear cost advantage to maintaining the typical DC plan compared to the typical DB plan. Based on our cost data, our typical DC plan cost is 5-6% of plan payroll versus 17% for the typical DB plan. Keep in mind however; the typical DB plan is providing greater retirement benefits to participants. But what happens if interest rates change? The table below illustrates the impact of changing interest rates on Funding Targets, Target Normal Cost and Funding Ratios.

Interest Rate	Impact on Funding Target (Liability)	Impact on Target Normal Cost	Funded Ratio (if 80% at 5.89%)	Target Normal Cost as Percent of Pay
4.89% (-1%)	+14%	+18%	70%	21%
5.89% (current)	**0%**	**0%**	**80%**	**17%**
6.89% (+1%)	-12%	-14%	91%	15%
7.89% (+2%)	-21%	-26%	101%	13%
9.89% (+4%)	-36%	-44%	125%	10%
11.89% (+6%)	-47%	-56%	151%	8%

We examined the impact of interest rate changes on the DB pension liabilities, employer contributions (Normal Cost) and Funded Ratios. No material changes in markets were assumed. The results were eye-opening:

- A 100 basis point increase in interest rates decreases liabilities by 12% and increases Funded Ratios by 11%
- A 200 basis point change takes a plan with a Funded Ratio of 80% to 100% fully funded
- This same 200 basis point change also reduces the employer's Normal Cost by 26%
- In a rising interest rate environment the DB plan becomes more cost effective very quickly
- Funded Ratios exceeding 100% create a surplus which is used by the employer to reduce its out-of-pocket plan contribution and may even reduce employer contributions to zero (a common occurrence in the late 1980s and 1990s).
- Factor in improved market conditions and investment returns, DB plans become even more cost effective in a shorter amount of time

At What Point Does A DB Plan Become More Cost-Effective Than A DC Plan?

As it turns out, the answer is very quickly assuming interest rates rise 200 basis points and market conditions improve. Recall that one of the major differences between a DB and a DC plan lies in the ownership of risk. In DC plans, investment risk and underfunding risk have been off-loaded to employees. In a DB plan, the plan sponsor or employer owns the risk – that is, the employer 'owns' (at least economically) the surplus or the deficit in plan assets over plan liabilities. Today, most DB plans are underfunded due to the factors outlined in this paper, and employers who keep these plans must make up the deficits. However, in the cases above where rates rise and the funded ratios exceed 100%, employers will be able to use plan surpluses to fund the annual Target Normal Cost (calculated in the far right column). Rising rates mean deficits turn into surpluses for DB plans, surpluses that employers will economically own.

As can be seen in the chart above, interest rate increases of 300 to 400 basis points (roughly equivalent to rates that prevailed in 2006-2007) would put the typical plan in a surplus of 115% to 125% of liabilities. **At that point, plan sponsors would have reduced their normalized costs by 30% or more and would be able to use excess plan assets to fund these costs for several years – eliminating required contributions for the plan sponsor, and making the DB plan far cheaper than a DC plan where costs are locked in. To the extent that investment returns also return to a more 'normalized' long-term level, the crossover to cheaper-to-offer DB plans would occur even sooner.**

The National Institute on Retirement Security released a paper titled, "A Better Bang for the Buck," which further discusses the economic efficiencies of DB plans. The entire article can be viewed by clicking here.

A lost decade of sub-par equity market returns and a historic 30-year bull market in bonds, driven by steadily declining interest rates, have conspired to produce a perfect storm of cost increases for Defined Benefit pension plans. There is strong evidence that both of these secular trends have nearly run their course.

Interest rates might already be rising if not for the Fed's accommodative monetary policy. To the extent this policy remains in effect into 2014, it is likely that interest rates will not rise materially. Nevertheless there is very little room for further interest rate declines and the downside risk of larger funding obligations due to falling interest rates is largely capped.

To the extent that plan sponsors believe that interest rates will rise (or at least stop falling) and that equity markets are poised to at least begin making some headway after more than a decade of 0% real returns, it stands to reason that the costs of Defined Benefit plans will decrease. The challenges that plan sponsors have faced for the last decade are subsiding and a return to normalcy would make Defined Benefit plans one of the most cost effective and attractive employee benefits. For a further explanation on the anticipated economic impact on Defined Benefit plans, please refer to our white paper, "Headwinds No More,"

Funding Relief

As indicated above, Congress passed new legislation which President Obama signed on July 6, 2012, providing pension funding relief. The new law titled *Moving Ahead for Progress in the 21st Century (MAP- 21)* significantly increases both liability interest rates and PBGC premiums.
Recognizing that historically low interest rates have caused dramatic increases in the value of pension plan liabilities and minimum required contributions, the new law provides funding relief in the form of interest rate stabilization. The primary impact of the new legislation is summarized below:

1. Effective interest rates are projected to increase by 140-170 basis points
2. The 24 month segment rates are replaced by a 25 year average
3. The value of plan liabilities is estimated to decrease by 15-20%
4. Minimum Required Contributions are estimated to decrease by 15-25% or more
5. Funded ratios will increase
6. The new rates are optional for 2012, mandated for 2013 and beyond

Pension funding relief and interest rate stabilization are good news for defined benefit plan sponsors. For the next several years they provide reduced plan liability values and lower contribution requirements. More importantly, they provide additional time for the Federal Reserve to allow rates to rise and further favorably impact funding requirements. Despite lower required contributions as a result of the new law, some employers may want to consider contributing more than the new minimum. The new law does not change the ultimate cost of a plan which is equal to the benefits paid plus administrative expenses less investment earnings. Paying less now in accordance with the new interest rates could mean paying more later. Employers should carefully consider what course of action is in their best interests.

Why Defined Benefit Plans Remain The Most Effective Way To Provide Retirement Benefits For Your Employees

The dilemma: Millions of workers today may not have enough money to sustain themselves during their retirement years. Studies continue to show that even with 401(k) plans and Social Security, many Americans will not have enough retirement income to meet reasonable lifestyle goals. The causes are multiple—longer lifespans, fewer/lower pension benefits, reliance on defined contribution plans and volatile markets. Add the threat to our Social Security program and the future retirement of our aging population looks bleak. Experts feel we will need 70-90% of our preretirement income to maintain our lifestyles in retirement. The question: Who is going to pay for this shortfall?

Defined contribution plans, such as the 401(k) plan, were never intended or designed to replace the Defined Benefit plan—they were meant to complement it. 401(k) plans permit access to funds while employed and experience shows that many employees draw on these plans to pay for college education, medical expenses and even home ownership. Couple these limitations with the fact that 401(k) plans place all the investment risk on the employees. We have asked today's employees to not only shoulder the responsibility for their own retirement well-being but to become professional money managers at the same time. Ask the baby boomers, who were planning on retiring in 2008-2010 and relying on their 401(k) plans, how well that worked out. It is simply unrealistic to assume the average American is, or ever will be, an investment expert.

The solution: Defined Benefit plans provide an ideal way to help your employees build a secure future because they provide a known level of guaranteed income at retirement. **There is simply no better plan in terms of meeting the goal of income replacement at retirement, particularly when you look at how much employees would have to save on their own to match the benefits provided by a pension plan. A pension plan provides a guaranteed secure income that you cannot outlive and it places the responsibility of managing the assets into the hands of professional money managers. A recent "Issue Brief" published by the National Institute on Retirement Security underscores these points and suggests several solutions and policy changes which can revitalize Defined Benefit plans. The entire article can be viewed by visiting clicking here.**

Historically, Defined Benefit plans have been the mainstay of corporate retirement efforts. These plans still provide retirement income to a significant percentage of retirees nationwide. Beyond that, these plans provide important advantages to the employer.

Defined Benefit plans:

- Reduce employee turnover, thereby reducing costs to acquire new talent
- Attract and retain employees
- Provide significant advantages to highly compensated, longer service employees
- Provide inflation protection and lifetime income
- Provide PBGC insured benefits
- Can be used to maximize tax shelters
- Provide more comprehensive benefit coverage
- Offset employer costs by favorable investment performance
- Facilitate orderly retirement and succession by providing employees with the financial ability to retire

Defined Benefit Plans Provide Considerable Design (And Cost) Flexibility

We have discussed how market conditions are poised to change, which will help stabilize and reduce future costs. In addition, employers still have considerable design flexibility that can help reduce plan costs today. There are a number of different plan design options available to you. Each of the plan's features—plan salary definition, benefit formula, early retirement, death, disability and post-retirement features—adds a different dimension to the program's costs.

In reviewing benefit programs, employers should consider their current and future needs, employee demographics, and benefit objectives. Maintaining a Defined Benefit plan can provide the best of both worlds for the employer and the employee. The Defined Benefit plan provides employees guaranteed retirement security while giving the employer a vehicle to allocate the greater portion of plan contributions to higher paid, longer service employees.

Developing the right "benefits blend" for your organization involves addressing not only adequacy and competitive considerations but also cost considerations. If you find that your costs have risen beyond the range you planned for, and are hesitant to wait for the inevitable improvement that will result from the aforementioned changes in the market conditions, there are many redesign options that can be employed. Benefit programs can be restructured and modified to meet your organization's cost and benefit objectives.

Trends In The Retirement Industry—Multiple Employer Plans (MEPs)

When it comes to plan costs—particularly Defined Benefit plan costs—one of the most effective ways to control plan costs is through the use of a multiple employer plan. Interestingly, MEPs are the most compelling trend in the retirement industry today. Historically, the majority of workers without retirement plan coverage are those who work for small and medium size businesses. Retirement plan management for these companies is an administratively burdensome prospect. Lack of in-house benefits expertise, coupled with the fiduciary and legal issues surrounding a complex regulatory environment, often make it difficult for these employers to sponsor a plan. Yet the absence of adequate benefits is often cited as a reason for high turnover among organizations, with employees leaving these jobs for positions with organizations that offer more comprehensive benefits packages. MEPs offer an ideal solution to these challenges and address the complexities these businesses face in offering a retirement plan—especially where common businesses can take advantage of economies of scale by participating in these types of programs.

MEPs are not a new concept and these plans have been in existence for many years. What has changed, and why is there renewed interest in these programs? Today, fewer employers sponsor Defined Benefit pension plans. With small businesses expected to generate the greatest percentage of job growth in the future, the need for retirement plan coverage for employees of these businesses takes on an even greater urgency.

How Does A MEP Work?

A MEP is a retirement plan that covers employers that are not commonly owned. These employers become “Adopting Employers” when they elect to join the MEP. These plans can be Defined Contribution or Defined Benefit plans.

- Section 413(c) of the Internal Revenue Code and the regulations thereunder establish guidelines for MEPs. A MEP is essentially a single qualified trust established by the plan sponsor that allows unrelated co-adopters to adopt the plan. Under a MEP, each adopting employer can maintain an individual plan design. Compliance testing is also performed on an individual basis for each adopter, but a single Form 5500 is filed for all participating employers.

There are significant advantages gained by participating in a MEP, including:

- Elimination of primary fiduciary responsibility
- Investment fiduciary protection—relief of responsibility for selecting and monitoring plan investments

- Economies of scale in the form of buying power of a single large plan vs. smaller plans and greater negotiating power when buying investment and other plan services
- Cost savings
- Simplified Accounting Treatment- no need for separate FAS 87 Valuation Report
- Eliminates need for annual plan audit for individual employers
- Eliminates 5500 filing for individual employers
- Only a single plan document is maintained
- Single source solution for plan services
- Ease of use for participating employers

Administrative Ease

MEPs deliver administrative ease for employers, as nearly all of the administrative tasks relating to the Adopting Employer's plan can be shifted to the Plan Sponsor. With a single plan document that participating employers adopt on an individual basis, a MEP approach eliminates the need for individual plan audits and government filings, including individual Form 5500s. Also, for Defined Benefit MEPs, generally there is no need or cost associated with separate FASB Expense reporting.

Typically, MEPs provide the adopting employer with a comprehensive package of plan services. These services include fiduciary protection, plan design and document support, plan consulting, administration and recordkeeping, legal and technical support, regulatory compliance and government reporting, investment management and sponsor and participant communications. Because administration is streamlined, participating employers can also realize significant economies of scale that may result in lower plan costs.

Another Key Benefit –The MEP Sponsor's Fiduciary Role

Today's regulatory environment and compliance challenges make fiduciary oversight more important than ever. One of the key benefits of a MEP is fiduciary relief— the MEP sponsor (in our case, Pentegra's Board of Directors) assumes the principal fiduciary responsibilities associated with sponsoring a retirement plan. The MEP sponsor also ensures that the plan remains in full compliance with IRS and DOL regulations, providing plan amendments and regulatory updates as needed. The level of ERISA fiduciary protection a MEP offers not only relieves plan sponsors of the due diligence and ongoing monitoring of plan investments but also protects advisors—acknowledging their role with their clients.

Typical Multiple Employer Plan Administrative And Fiduciary Services

- Comprehensive Fiduciary Relief
- Plan Design & Document Support
- Conversion & Implementation
- Administration & Recordkeeping
- Regulatory Compliance & Government Reporting
- Legal & Technical Support
- Investment Management
    - Investment Policy Statement
    - Investment Valuation and Selection
    - Ongoing Monitoring of Funds
    - Performance Reporting
- Advisor & Plan Sponsor Reporting
- Education & Communication Materials

How Are Plan Investments Typically Handled?

Under a MEP, typically the sponsor also serves as the investment fiduciary. As the investment fiduciary, the MEP sponsor evaluates, identifies, selects and monitors plan investments, offering a fiduciary process that includes an investment policy statement, investment evaluation and selection, and ongoing monitoring and performance reporting. As an investment fiduciary, MEP sponsors offer the benefit of careful oversight of the plan's investments that are regularly scrutinized for appropriateness, and the benefit of due diligence built around the fiduciary responsibility that the sponsor assumes to ensure that plan investments are appropriate for a qualified retirement program. A MEP provides a single Investment Policy Statement that covers all adopting companies. Fund monitoring is done at the MEP Trustee level on behalf of all adopters. Documentation of fiduciary decisions is critical due to increased scrutiny by adopters and regulators.

When Does A MEP Make Sense?

MEPs are an ideal retirement plan solution in many situations, particularly where fiduciary liability is an issue, when there is no current plan in place because of the complexities involved in offering one, for bona fide employer groups, where clients with multiple payrolls are looking for synergy, and in organizations looking for value-added services for members or affiliates.

Why Pentegra Should Be The Provider Of Choice For A MEP

Pentegra is one of the few providers, if not the only one, that offers more than 65 years of experience and expertise in administering MEPs. Not only is our Board the Plan Sponsor and principal fiduciary, but our President serves as the ERISA- named Plan Administrator. We offer a MEP solution with a tangible difference including the benefit of experienced professionals and experts in plan investments, administration and fiduciary services, and managing both Defined Benefit and 401(k) plans in accordance with the highest standards, which sets us apart from other MEPs.

Follow us on