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Success Stories From Buck Consultants

## Reducing Risks Through Asset Liability Management

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### CLIENT ISSUE

As part of the ongoing financial management of its pension plan, a long-term actuarial client sought to understand the financial risks that the pension plan posed to its organization. In addition, to fulfill its fiduciary obligations, the client needed to know what ongoing steps it must take to ensure the benefit security of plan participants.

Clearly, the Pension Protection Act of 2006 (PPA) introduced some new risks to the plan:

- Financial risk created by increased volatility due to marking assets and liabilities closer to market with less smoothing than had been allowed in the past
- HR/employee relations risk resulting from benefit payment and plan amendment restrictions and notification requirements — if the plan's funded status were to drop below particular funded-level thresholds

Given the current funded status of the plan, the client's objective was to determine if its current investment and funding strategies aligned with the financial goals of the organization and was within the organization's risk budget.

### SOLUTION

The client engaged Buck Consultants to perform asset liability modeling to evaluate alternative asset allocations, new investment strategies, and alternative funding policies.

To address the full range of our client's objectives, Buck modeled:

- Several combinations of an array of traditional pension investments — including U.S. and international equities and bonds as well as alternative investments such as private equity, real estate, and hedge funds — with the goal of determining the best overall mix across primary asset classes
- Two liability-driven investment (LDI) strategies — a restructuring of the bond portfolio and an interest rate swap overlay — intended to reduce surplus volatility (and thereby cost volatility) by achieving a desired degree of match between the dollar changes in plan liabilities resulting from changes in interest rates and the dollar changes in plan assets

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- A funding policy intended to prevent the imposition of benefit restrictions by maintaining the desired funding level; this analysis enabled us to determine whether it would be cost-prohibitive to use the funding policy as the means to avoid benefit restrictions

Buck quantified the financial impact on the plan of the various asset mixes, investment strategies, and funding policies in terms of specific financial metrics that best represented the financial risks facing the organization, specifically:

- Annual and accumulated cash contributions
- Annual and accumulated GAAP pension expense
- PPA funded ratio
- GAAP balance sheet asset/liability

We also evaluated the potential cost of any hedging strategies that the client might adopt.

## RESULTS

Based on the results of our analysis and our recommendations, our client was able to modify its investment strategy and funding policy to keep the financial and other risks within its risk budget.

Specifically, the client:

- Chose to systematically reduce its portfolio interest rate risk over time by increasing its bond exposure through future contributions to the plan, and by changing the bond portfolio to respond to changes in interest rates in a manner that better mirrors the interest-rate-driven changes in the liabilities
- Did not implement a swap overlay to further hedge interest rate risk
- Implemented a new funding policy because the anticipated cost of the new policy presented less risk to the organization than the risk of falling below the PPA benefit restriction funded-level triggers

## CONTACT US

For more information about Buck's ALM solutions, email us at [ALMGroup@buckconsultants.com](mailto:ALMGroup@buckconsultants.com).