Retirement & Investment

Comprehensive Pension Plan Management

Delegated Pension Manager

Aon
Empower Results®

20180928-616108

The Changing Retirement Plan Landscape

The decline of the defined benefit plan as the primary source of employer-provided retirement income in the U.S. is well documented. The trend has accelerated in the past decade due to the business pressures created by a prolonged period of slow global growth and notable regulatory changes impacting pension plan management. The majority of pension plans are significantly underfunded, which makes near-term plan termination an expensive proposition. In addition, the regulatory environment has become more complex, requiring organizations to dedicate more effort to managing their pension obligations. Whether your company's pension plan is open, closed or frozen, the key challenges facing all plan sponsors include:

- **PBGC premium increases:** PBGC premiums have increased by more than 300 percent over the past 13 years and will continue to increase. This creates a significant drag on plan assets and encourages plan sponsors to consider alternative strategies to mitigate these cost increases — such as lump sum windows, annuity purchases and discretionary cash contributions.

- **Participant longevity:** Life expectancies have increased significantly over the past two decades and are expected to continue to increase in the future. New mortality assumptions increase pension liabilities and put plan sponsors further away from plan full funding.

- **Volatility of plan costs:** Pension plan costs including cash contributions, administration costs, expenses and balance sheet liability have traditionally been difficult to predict. As temporary regulations begin to phase out with equity markets near all-time highs, volatility is expected to increase. Many plan sponsors are using investment and funding strategies to mitigate volatility as interest rates begin to rise.

- **Historically low Interest rates:** Despite strong equity returns, the funded status of most pension plans has only recently started to improve as interest rates have started to increase. Many pension plan sponsors are using dynamic hedging strategies to take advantage of interest rates as they rise.

- **Government plan audits:** Both the IRS and the DOL have increased the frequency of pension plan audits. Penalties and fines are being assessed for breaches of fiduciary duty. Plan sponsors are reviewing the key focus areas of these audits and putting processes in place to make their plan's more compliant.

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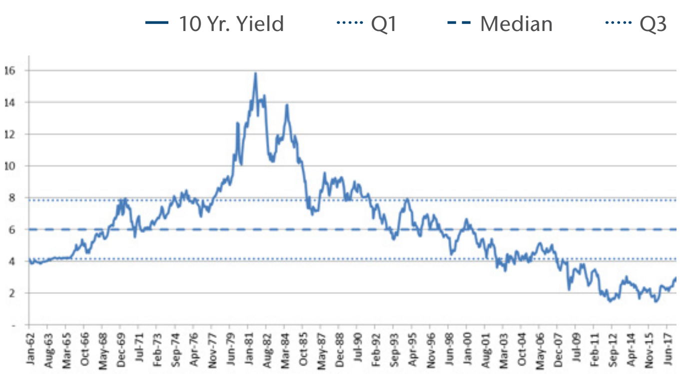
The Current Pension Environment

Current Challenges

Interest Rates Remain at Historically Low Levels

Despite a rise in rates since late 2017, interest rates are still near historic lows.[1]

U.S. 10 Yr. Treasury Yield



1 Source: Barclays Live: U.S. 10 Year Treasury Bellwether Index
2 Future PBGC premiums assume 3% annual increase in National Average Wages
3 Source: https://pensionrisktracker.aon.com/

Sharply Increasing PBGC Premiums

Increasing PBGC premiums result in a significant drag on assets for plan sponsors. Aon projects that approximately 50% of plans will pay a 2018 PBGC premium of at least 0.5% of assets.

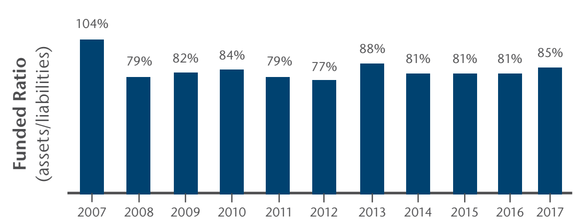
PBGC Premium Increases[2]

	2014	2018	2027 (projected)
Flat Rate (per person)	$49	$74	$85
Variable Rate (per $1K unfunded)	$49	$38	$44

$1,600	Present value of future flat rate PBGC premiums for a 45-year-old participant

Funded Status Has Made Little Progress Since The Financial Crisis

The chart below shows the funded ratios for S&P 500 pension plan sponsors from the Aon Pension Risk Tracker.[3]



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Actions Taken

Mitigating Plan Costs

Employers are looking for ways to mitigate increased plan costs through liability settlements and increased contributions. Liability settlements, including lump sum windows and annuity purchases, continue to be an effective strategy for reducing PBGC premiums. Increasing discretionary contributions has the effect of reducing PBGC premiums, reducing funded status volatility and maximizing tax deductions (prior to new tax rules).

Actions to Decrease PBGC Premiums[1]

50%
No action

34%
Reduce count through settlements action

32%
Increase cash contribution

5%
Borrow to fund

Updating Procedures in Light of Government Audits

With the IRS and DOL increasing audit activity, about one in five employers are planning to change their procedures for locating missing participants.

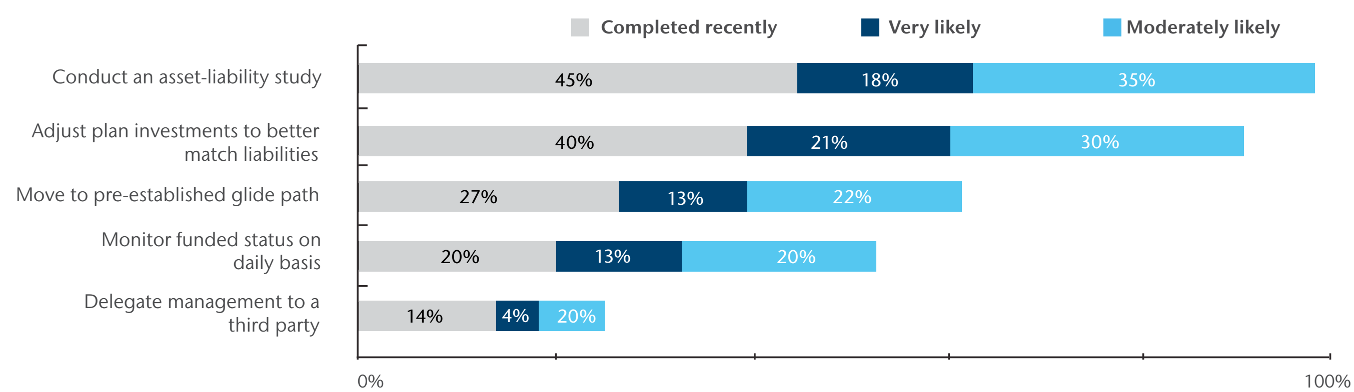
Sponsor's Plans for Changing Search Procedures[1]

- **81%** Address search more frequently
- **29%** Certified letter
- **19%** Outreach via phone
- **14%** Outreach via first-class U.S. mail
- **5%** Email

Plan Sponsors are More Actively Managing Their Asset/liability Mismatch

More plan sponsors are adopting investment strategies to reduce volatility by taking a more dynamic approach to matching assets and liabilities.

Top Actions for Defined Benefit Plan Asset Portfolio[2]



1 Source: 2018 Alight *Hot Topics in Retirement* report
2 Source: 2016 *Aon Hewitt Hot Topics in Retirement* report

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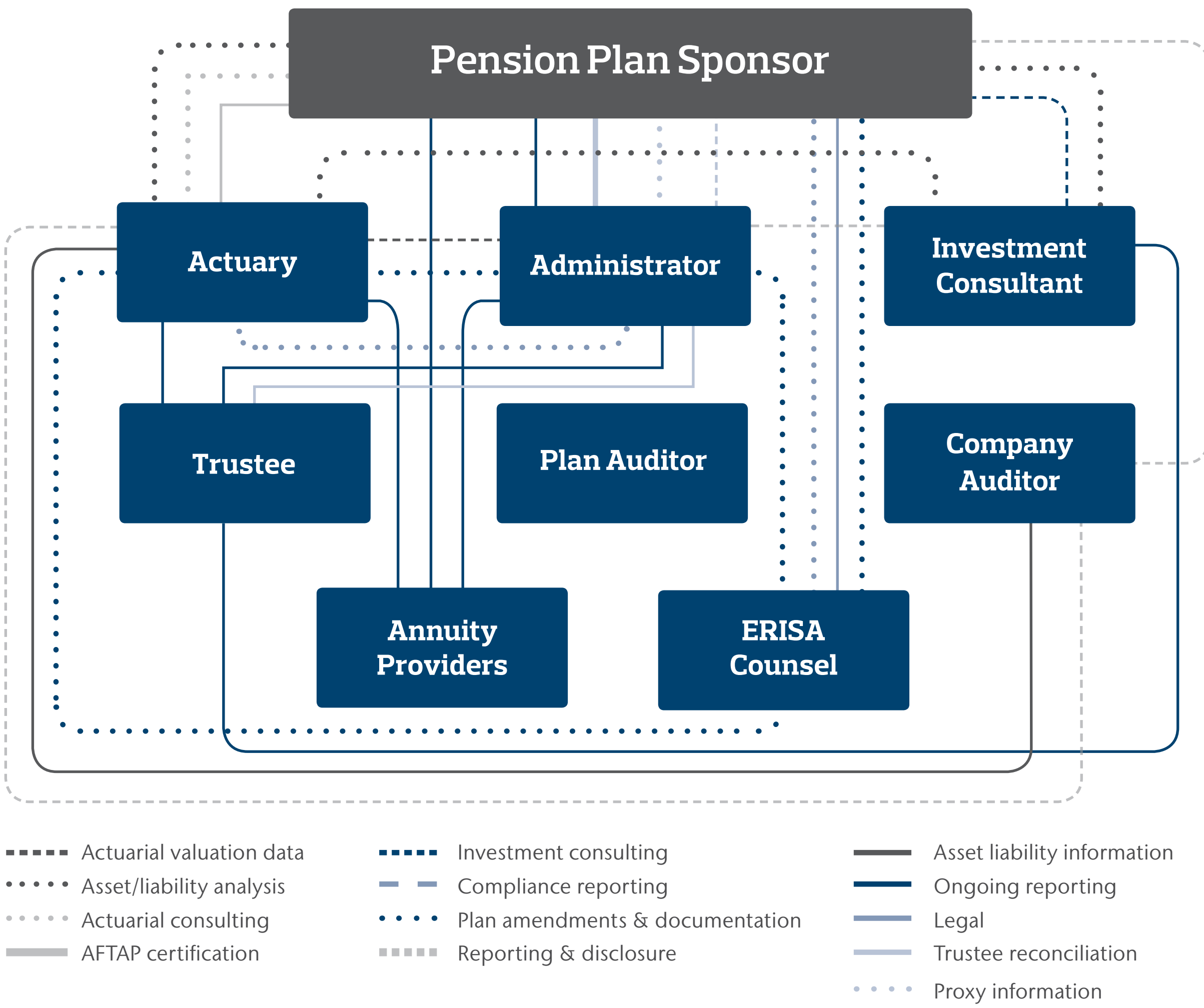
Pension Plan Management

The Traditional Approach

The traditional pension plan management approach has been predicated upon independent asset and liability strategies and multiple vendors providing support across the varying needs. This approach often lacks the dynamic qualities required to efficiently manage a plan through the complexities of today's landscape. Efficient plan management requires more resources, more attention and a more integrated strategy than ever before. Yet the role of the pension plan within the organization has typically diminished — which, all else aside, suggests that fewer resources should be devoted to managing the plan.



Drawbacks of Using the Traditional Approach

- **Isolated** investment strategy and liability profile
- **Static** asset allocation and long time horizon
- **Inconsistent** strategic advice
- **Multiple** hand-offs and **poorly coordinated** vendors
- **Slower** execution of your strategy

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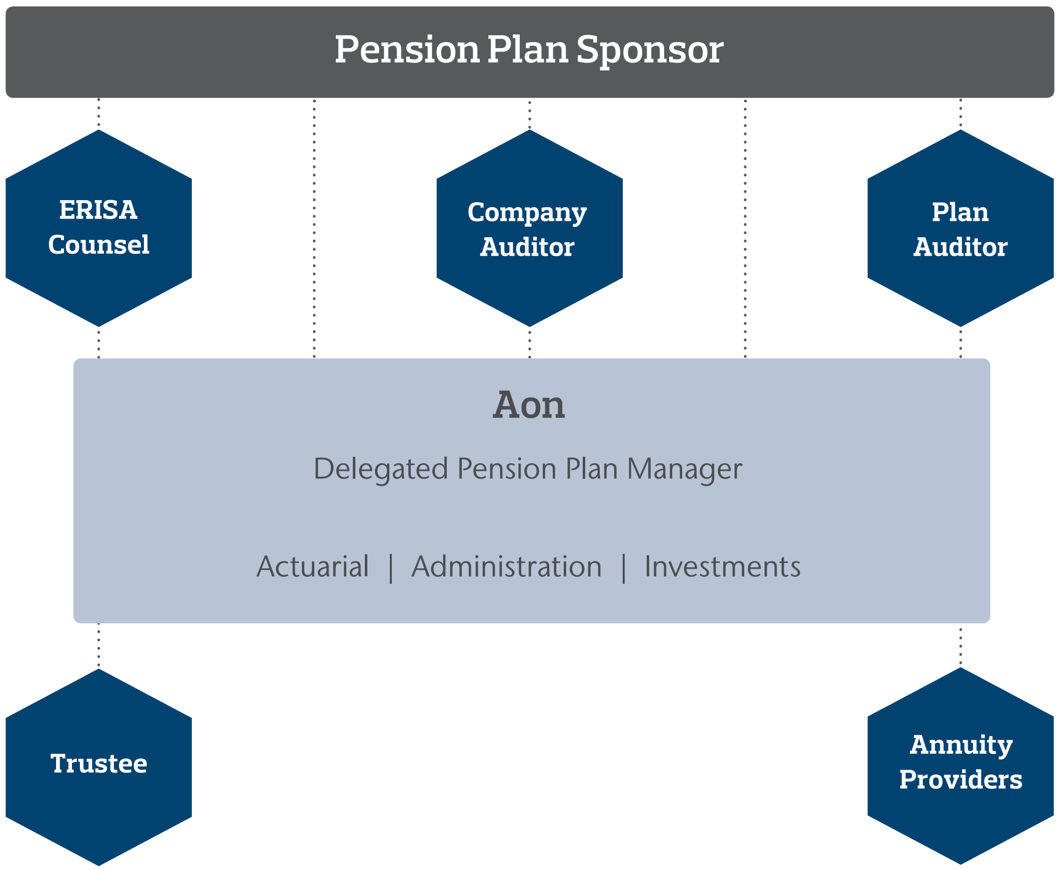
A New Approach: Delegated Pension Manager (DPM)

The new era of pension plan management finds a shift in objectives for most plan sponsors from plan sustainability to efficient execution of an exit strategy. Success hinges upon being able to integrate investments with the liability profile, adjust asset allocations as de-risking opportunities arise, settle liabilities opportunistically and coordinate strategies. As a result, Aon has designed the turnkey DPM approach to help plan sponsors overcome these obstacles. Aon's DPM approach provides plan sponsors with a single point of contact to integrate and execute the strategies needed to take them from today to their desired future state.



The Advantages of Using a DPM Approach

- **Integrated** investments with liability profile
- **Dynamic** asset allocation
- **Consolidated** vendors for efficiencies
- **Single** point of contact
- **Opportunistic** liability settlements

How We Do It—
Integrated Strategy Development

Under our Delegated Pension Manager approach, we begin every relationship with an objective-setting discussion. This discussion ensures that our recommendations are aligned with our clients' objectives — whether that's to fully fund and terminate their pension plan or maintain a more sustainable ongoing pension plan. The following graphic illustrates the key pension objectives for a typical plan sponsor:

Pension Objectives

Close funding deficit

- Contributions
- Stock market rising
- Interest rates rising

Reduce risk of further funding ratio volatility

- De-risk asset allocation
- Increase interest rate hedge

Prepare and manage portfolio toward settlement

- Partial liability settlements
- Completion portfolio management

Remove or reduce financial risk to the firm

- Manage and maintain with less risk
- Terminate plan

After we've established the objectives for the pension plan, we complete a customized pension risk analysis that integrates all aspects of plan management. We believe it's crucial for plan sponsors to integrate their investment policy (asset allocation and de-risking), funding strategy (when and how much to fund), liability management strategies (plan design and liability settlements) and the assumptions and methods used to allocate these costs. The outcome of the pension risk analysis and subsequent discussions is an integrated pension management strategy to guide our clients from today to the desired future state for their pension plan.

Integrated Pension Risk Management

Investment Policy

- Glide path/hedge path
- Diversifying asset classes
- Tactical adjustments
- Scale

Funding Strategy

- Opportunistic funding
- Borrow-to-fund
- Contributions in-kind

Liability Management

- Plan design/plan mergers or splits
- Lump sum windows
- Annuity providers

Assumptions and Methods

- Mark-to-market accounting
- Economic liability
- Full yield curve

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We begin every relationship with an objective-setting discussion.

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How We Do It – Strategy Execution

Two Dimensions of Risk Management — Glide Path and Hedge Path

Aon believes the optimal strategy for managing pension plans should be dynamic in nature, with funded status being the appropriate benchmark, and the management of assets occurring in tandem with the liabilities. Aon recommends that plan sponsors incorporate two dynamic elements — a custom glide path and a custom hedge path — into their investment policy statements.

First Dimension—Glide Path

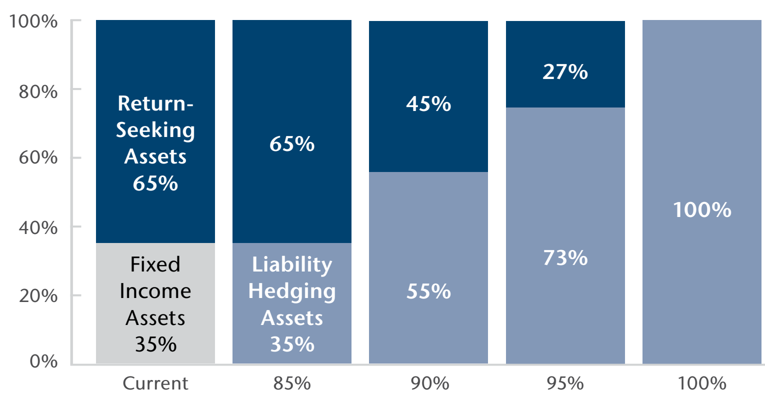
Second Dimension—Hedge Path

Illustrative Glide Path Strategy

The glide path establishes a policy for systematically moving from return-seeking assets to liability hedging assets as the plan's funded status improves. An illustrative glide path is shown below, with the asset allocation plotted on the vertical axis and the funded status plotted on the horizontal axis.

CURRENT	DESIRED
Plan Status Frozen	Plan Status Terminated
81% Funded	Funded % Well-Funded
Asset Allocation 65/35	Asset Allocation Immunized
Liability Hedging Assets 9%	Liability Hedging Assets 100% Hedged

ROADMAP



Funded %	Current	85%	90%	95%	100%
Asset Return	6.0%	6.5%	5.9%	5.2%	3.9%
Surplus Volatility	14%	13%	9%	6%	3%
Hedge Ratio	9%	30%	50%	69%	100%

Policy	Less Than 80% Funded	80%-95% Funded	95% Funded
Strategy	Decide status	Opportunistically settle	Prepare for termination
Investments	Efficient risk taking	Migrate to lower risk structure	Generate liquidity
Funding	Optimize contribution pattern	Migrate to minimum required	Minimize level and volatility
Governance	Document strategy	Oversee execution	Settlement oversight
Asset Smoothing	Smoothed	Transition	Market value

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Illustrative Interest Rate Hedge Path Strategy

While a glide path determines the allocation between return-seeking and liability hedging assets at any given time, a hedge path is used to determine how the liability hedging assets are invested. A hedge path establishes a framework for extending the duration of the plan's fixed income holdings as interest rates change. This allows the plan to both take advantage of a rising interest rate environment and reduce the ongoing risk left in the plan. An illustrative hedge path is shown below, where the percentages in the lighter shaded boxes represent the hedge ratio.

How much to invest in Liability Hedging Assets		How to Invest the Liability Hedging Assets					
Glide Path		Hedge Path					
Funded Ratio	L/H Allocation	<–125bps	–100bps	–75bps	–50bps	–25bps	Target
75%	35%	10%	14%	18%	22%	26%	30%
80%	35%	17%	22%	27%	32%	37%	42%
85%	35%	28%	33%	38%	43%	48%	53%
90%	45%	45%	49%	53%	57%	61%	65%
95%	73%	63%	66%	69%	72%	75%	78%
100%	100%	100%	100%	100%	100%	100%	100%

Path if funded ratio increases

Path if rate increases

Hedge Ratios

- Hedge path is a disciplined approach with the objective of reducing interest rate risk
- Intended to reflect clients' needs and views on future interest rates
- Flexibility on the timing of equity sale vs. bond purchase

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The Experience to Make it Happen

Trusted advisor in pension risk management with a strong track record built upon our integrated approach.

$2.1T | Total Assets Under Advisement
U.S. retainer clients only, as of 3/31/18

391 | Clients in the Global Delegated Investment Consulting Practice
168 in the U.S., 223 non-U.S., as of 6/30/18

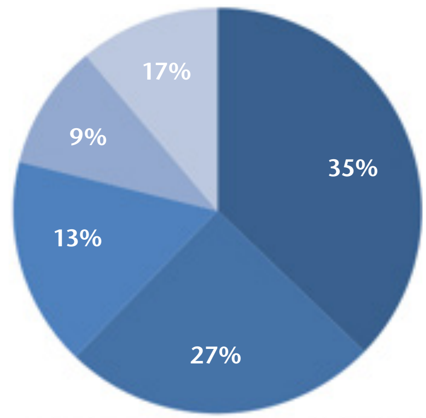
$144.2B | Assets Under Management in the Global Delegated Investment Consulting Practice
$115.4B in the U.S., $28.8B no-U.S., as of 6/30/18

800+ | U.S. Clients for Whom We are the Enrolled Actuary
As of 12/31/17

640+ | Pension Administration Clients
As of 12/31/17

2.2M | Participants that have Experienced Our Proven Administration Services
As of 12/31/17

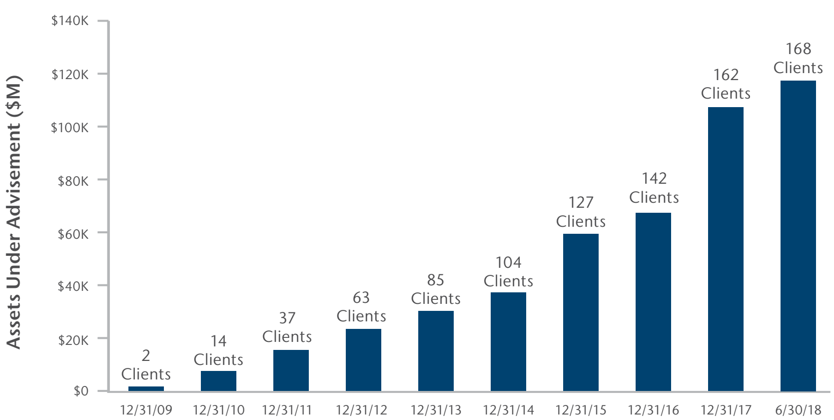
U.S. AHIC Delegated Client Distribution by AUM (as of 6/30/18)



- Less than $100 Million
- $100-$250 Million
- $250-$500 Million
- $500 Million to $1 Billion
- More than $1 Billion

It is not known whether listed clients approve or disapprove of Aon or the advisory services provided.

U.S. Discretionary Client Base



- Aon has advised Ford, General Motors, Verizon and Motorola Solutions, as well as hundreds of other clients of all sizes on their liability settlement strategies
- Execution of more than 425 lump sum window projects

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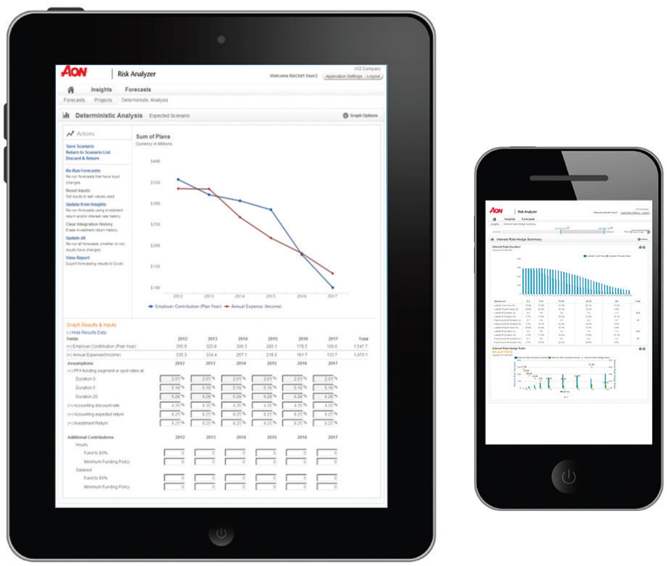
The Technology to Back It Up

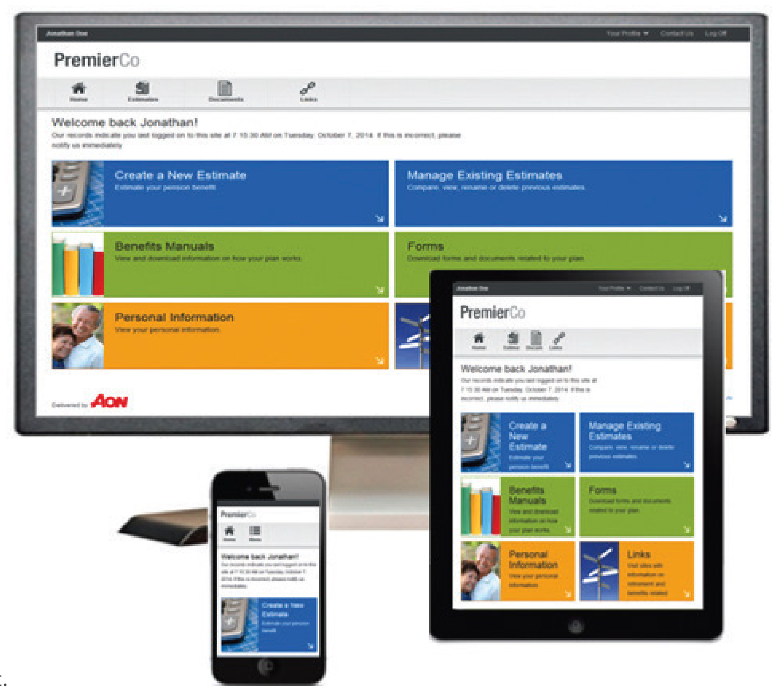
Risk Analyzer

A digital tool optimized for mobile devices, which provides plan sponsors access to current and forecasted information on asset allocation, funded status, accounting and contributions.



Your Pension Resources™

Online access for your participants to view and model their pension benefit[1].



1 Screenshots provided for illustrative purposes only
Your Pension Resources is a trademark of Aon Consulting, Inc.

Results to Tell the Story

Why Integrating Pension Services Can Add Value: A Case Study

Our Delegated Pension Manager (DPM) solution aims to help clients make better and more timely decisions by integrating real-time information on all aspects of plan management. Below is a case study of a client that recently implemented Aon's DPM approach to develop an integrated pension management strategy.

Pension Roadmap

January
Consolidates Service Providers

- **$500K+/year** in fee savings
- Improved Integration of services reduces burden on internal resources services

January
Cleans and Certifies Data

- Reduces compliance risk
- Allows company to position plan for settlement actions (e.g., lump-sum cash out)

April
Implements Dynamic Investment Policy

- $6 million reduction in present value of future contributions
- $17 million reduction in worst-case cost of deficit

June
Adopts New Funding Policy

- Refreshed policy reflects anticipated business cycle
- Alignment between cash requirements of pension and anticipated liquidity needs of the business

October
Decides to Pursue Initial Settlement

- Lump-sum offer to reduce pension obligations by $**20 million**
- **$200K+** reduction in future PBGC insurance premiums

December
Announces Global Pension De-Risking Strategy

- Adopts a plan to systematically de-risk its pensions through investment, settlement and funding actions
- Shareholders applaud actions, in step with broader corporate strategy

December
Finalizes Merger of Pension Plans

- **$80K+** in annual actuarial services fee savings
- Potential savings from ongoing audit and other operational costs

Long-Term Pension Roadmap

We also worked with our client to formulate a long-term plan toward its end-state pension objective. By developing a long-term plan, the client was positioned to proactively manage pension risk and capitalize on opportunities as they arise.

- Daily funded status monitoring and real-time execution of glide path and hedge path
- Execution of lump-sum window offers to terminated vested participants
- Consider restructuring plan to reduce PBGC premiums
- Evaluation of partial liability settlements
- Consider mark-to-market accounting for retirement purposes
- Assessment of alternative funding options in down-cycle years
- Position portfolio for plan termination
- Annuity purchase and plan wind-up

Not all clients may have the same experience. There is no guarantee that savings will be achieved if you should select AHIC and/or its affiliated entities to provide services to you.

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For more information, please visit **aon.com**.

Aon plc (NYSE:AON) is a leading global professional services firm providing a broad range of risk, retirement and health solutions. Our 50,000 colleagues in 120 countries empower results for clients by using proprietary data and analytics to deliver insights that reduce volatility and improve performance.

For further information on our capabilities and to learn how we empower results for clients, please visit **http://aon.mediaroom.com**.

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