

Pension Protection Act of 2006

DB Killer or Just Misunderstood?

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A MILLIMAN GLOBAL FIRM



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Consultants and Actuaries

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- Background – 3 Problems
 1. The Perfect Storm
 2. Uncertainty caused by temporary fixes to the funding rules
 3. Lack of clarity in the law for hybrid plans



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- Plan sponsors saw the problems of having a DB plan
 - High Cost
 - Unpredictability of Cost
 - Employee desires and understanding
 - Changing demographics of workforce



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1. The Perfect Storm is over
 2. Temporary fixes have been replaced with permanent ones
 3. The legality has been clarified for hybrid plans
- Volatility can be managed
 - The funding rules are not that bad



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The Value of DB Plans

- Provide retirement security through predictable lifetime incomes for retirees, no matter how long they live
- Efficient at investing
- Can be as flexible and creative as their designers want them
- Helps employers better manage their workforce



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What's become Law



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- Signed into law August 17, 2006
- Simplifies Defined Benefit (DB) Funding Rules
 - Single and Multiemployer Plans
- Generally effective with plan years beginning in 2008.
- It requires a specific funding method with the goal of the DB plan being 100% funded
- Will this help or hurt DB plans?



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Simplifying the Funding Rules

- Funding target is 100%
- In general, minimum contribution is the sum of the plan's normal cost and a shortfall amortization charge



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New Minimum Funding Requirement

- Target normal cost
 - Present value of benefits expected to be earned in the current year, including increase in benefits due to:
 - Salary increases during the current plan year
 - Plan amendments



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New Minimum Funding Requirement

- Shortfall amortization charge
 - Equal to the amount by which the plan is less than 100% funded.
 - 7-year period
- No funding shortfall amortization for a year will exist if plan assets reduced by credit balance, equals or exceeds the funding target for the year.



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New Minimum Funding Requirement

- Transition Relief: No shortfall amortization charge if the funded percentage is
 - 92% in 2008
 - 94% in 2009
 - 96 % in 2010 and 100% thereafter.



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- Ultimately, the PPA will bring a plan up to 100%
- No obvious answer to the question of the advantage of increasing contributions to meet the transition funding thresholds or funding up to 100% over a seven year period. It depends on plan's/company's unique situation.
- Various scenarios can be modeled.



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Simplifying the Funding Rules – Other details

- Credit Balance
- Smoothing of asset values
- Treatment of contributions made after the end of the plan year
- Risk Assessment



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Credit balances

- Will reflect the investment performance of plan years (rather than using the valuation rate assumption).
- They will be split into two pieces, pre (called carryover balance) and post 2008 (called pre-funding balance).
- The plan may use its credit balance to meet the minimum funding requirement if the plan is at least 80% funded based on assets reduced by the pre-funding balance



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Plan Assets

- **Smoothing of Assets** - Market value or a 24 month smoothing (but within 90-110% of the market value).
- **Contribution deadlines** - Due date for contributions remains 8 ½ months after the close of the plan year, but adjusted for interest if made after the valuation date up to actual payment date.
- **Quarterly contributions** - Quarterly contributions are required only if there is a funding shortfall in the prior year.



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Mandated Assumptions for Funding Target

- Interest rates
- Mortality table



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Interest rates

- Derived from corporate bond yield curve
 - **Using 3 segments**
 1. Benefits expected to be paid within 5 years
 2. Benefits expected to be paid within 5-20 years
 3. Benefits expected to be paid after 20 years
 - **Or using a single blended rate.**



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New Non-disabled Mortality Table



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Overview of Mortality Change

- IRC Section 412(I) mortality table for computing the current liability is updated;
- Impacts calculation of current liabilities for plan years beginning on or after January 1, 2007, and “target liability” thereafter ;
- PBGC variable premium calculation and 4010 filings won't be impacted until plan years beginning in 2008 (PBGC “snapshot date” is day prior to the plan year)



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- GAM 83 tables to RP-2000 based tables (both gender distinct)
- No mortality table improvement under OLD basis to RP-2000 tables that are projected from 2000 until the current plan year and beyond
- Originally for 2007 plan year, plans with 500 or more participants would use annuitant/nonannuitant tables while those with less than 500 could use “Optional Combined Table” (blend of RP-2000 “employees” table and “annuitant” table)
- Relief for 2007 in that ALL plans may use Combined Table



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- For 2008 plan years, plans with 500 or more employees NOT likely to be able to use Combined table.
- Change in mortality table for a typical plan may increase liabilities 5% to 10%
- Current tables likely to be improved each year with an additional year of mortality improvement (less than .5% increase in liabilities)
- For DRC contribution, increase in the current liability due to new table can be amortized over 10 years rather than under normal DRC schedule)



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Example of DRC for 2007

- Assume plan is 88% funded in 2007 under GAM83 table and NOT eligible for DRC exception test.
- If total 1-1-2007 Unfunded Current Liability (UCL) calculated under GAM 83 is \$1,000,000 and new combined table creates UCL of \$1,070,000.
- Regular DRC schedule would have created EOY DRC of \$212,787 if applied to total new UCL, versus \$208,278 EOY under 10 year amortization.



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Mortality Table for 2008 and beyond

- Plan specific table can be adopted if the plan data is credible (period reviewed and participant count is important)
- Table must be submitted to the Secretary of the Treasury “seven months prior to when it is to apply”



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- Simplifying the Funding Rules – Other restrictions tied to funded status of the plan
 - Amendments to increase benefits
 - Limitations on lump sums
 - Limits on accruals



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Restrictions on benefits for plans under the PPA, beginning in 2008:

- If the plan is less than 80% funded (taking into account a plan amendment), then the plan cannot be amended to provide for benefit improvements.
- If the plan is less than 60% funded, employees cannot earn additional benefits.



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Additional funding required for At-Risk Plans

- Increased funding targets may apply if plan deemed “at-risk”.
 - A special calculation must be made for plans with more than 500 participants (treating all defined benefit plans of an employer as a single plan).
 - A plan is “at risk”, if, as of the prior valuation date, the plan liabilities are less than 80% funded (without the “at risk” assumptions) and less than 70% (with “at risk” assumptions) and subtracting the credit balance.



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Hybrid Plan Clarity



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Hybrid Plans

- Clarifies legal status of hybrid pension plans
 - **Hybrids** not inherently age-discriminatory prospectively
 - No age discrimination as long as annual credits are the same for similarly situated employees without regard to differences in age; and
 - “Whipsaw” rule – DB plan can define the accrued benefit as the account balance (CB plan) if using market rate of return or as an accumulated percentage of final average compensation (in a pension equity plan)



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Hybrid Plans

- Clarifies legal status of qualified cash balance (CB) plans
 - Prospective basis only
 - Legalizes cash balance plans going forward
 - Must use A + B approach for future CB conversions
 - Accelerated vesting (from 5 to 3 years)
 - Similar treatment for other hybrids



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What are plan sponsors doing?



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- Towers Perrin Survey
 - Online survey in August, 2006
 - 126 large corporations with DB plans
 - 85% have final average pay plans, 35% over cash balance plans
 - Most view costs and financial risks as manageable and acceptable in view of important role pensions play in workforce management.
 - Likely to maintain current plans



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- Towers Perrin Survey
 - Expect higher contributions may be required now, but lower in the future
 - Volatility can be minimized by funding proactively and through asset/liability matching



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Milliman 2007 Pension Funding Survey

- 100 Corporations – File 10-K with SEC
- Major Excluded Sets –
 - Private Corporations
 - Mutual Insurance Companies
 - U.S. Subsidiaries of Foreign Companies
- Pension Assets –
 - About 85% of S&P500
 - Over 70% of Total Qualified Plans



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Milliman 2007 Pension Funding Survey

- PBO Funded Ratio increased from 91.0% to 99.6%
- Companies with pension assets in excess of PBO increased from 20 to 40



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Milliman 2007 Pension Funding Survey

- Actual Rate of Return – 12.9%, up from 11.4% in 2005
- Fourth consecutive year of gains in excess of expected rate of return
- Investment Allocation – Equity / Fixed mix remains about 61%/29%
- Expected decreased contributions for 2007

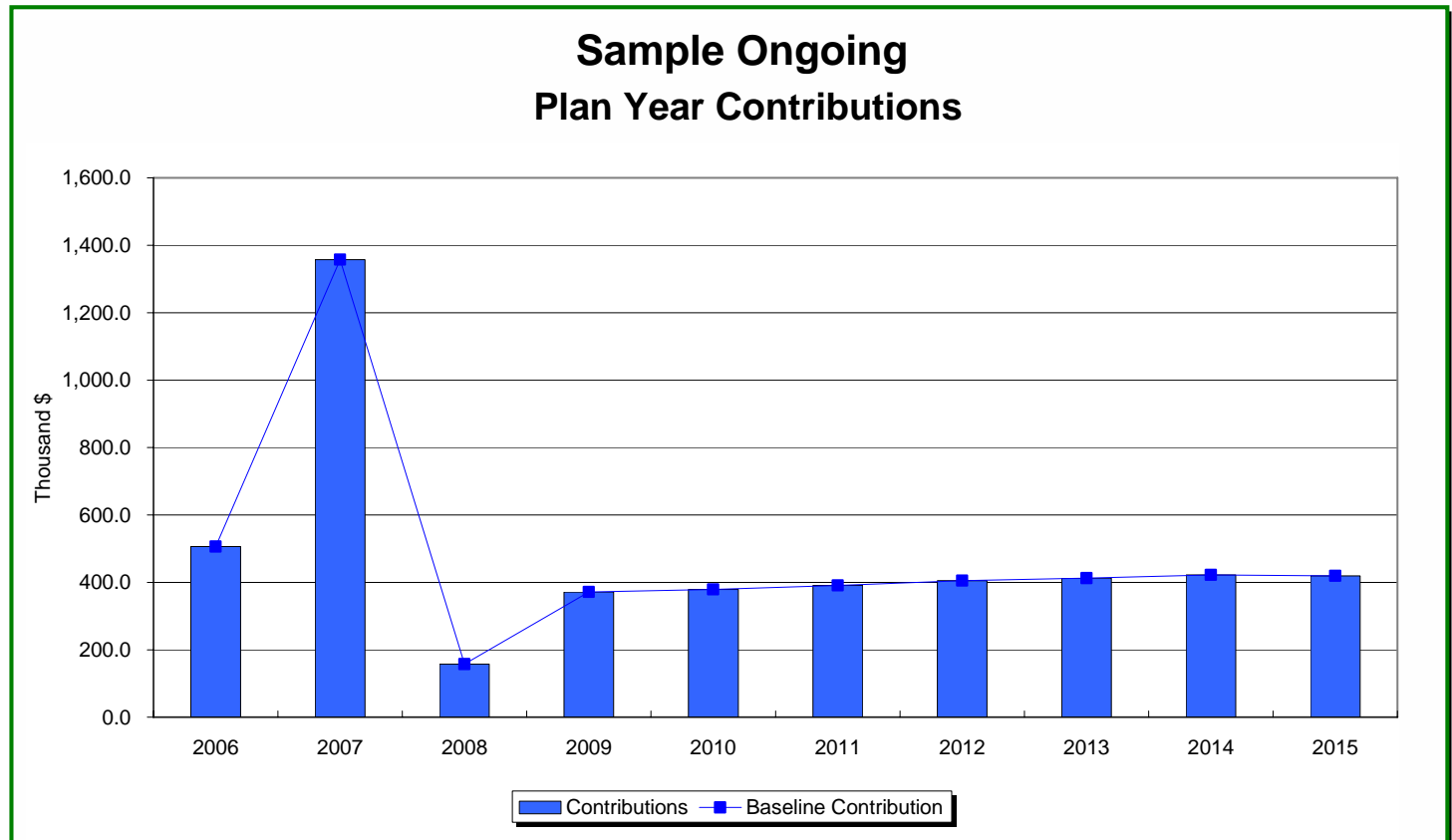


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- Effect on Funding for a single employer plan
 - Three examples:
 - Subject to DRC
 - 90% as of 1/1/07, eligible for transition relief
 - Smoothed contributions



Case 1 – Ongoing Plan with DRC



Case 1 – Ongoing Plan with DRC

Sample Ongoing Numerical Summary of Results Deterministic Projection

(All numbers except amortization period in Thousand \$)

	Contributions					Assets/Liabilities				
	<u>Min after Cred Bal</u>	<u>Min before Cred Bal</u>	<u>Max.</u>	<u>Actual</u>	<u>Old Rules Add'l Min</u>	<u>BOY Cred Bal</u>	<u>Market Value</u>	<u>Actuarial Value</u>	<u>Current Liability*</u>	<u>Funded %</u>
2006	-	506.6	5,817.0	506.6	-	1,416.7	5,749.0	6,308.0	7,609.6	82.9%
2007	-	1,357.8	6,428.8	1,357.8	792.0	1,522.9	6,392.4	6,875.8	8,379.4	82.1%
2008	157.9	453.3	4,472.2	157.9	-	279.3	7,135.5	NA	8,157.9	87.5%
2009	371.5	371.5	5,026.6	371.5	-	-	8,743.9	NA	8,802.2	99.3%
2010	378.9	378.9	5,398.5	378.9	-	-	9,234.2	NA	9,491.5	97.3%
2011	390.9	390.9	5,795.1	390.9	-	-	9,956.8	NA	10,218.8	97.4%
2012	404.9	404.9	6,233.1	404.9	-	-	10,747.8	NA	11,020.4	97.5%
2013	412.9	412.9	6,677.9	412.9	-	-	11,567.6	NA	11,846.6	97.6%
2014	422.3	422.3	7,144.6	422.3	-	-	12,430.7	NA	12,711.1	97.8%
2015	419.0	419.0	7,562.7	419.0	-	-	13,236.9	NA	13,507.9	98.0%

*Equals PPA Target Liability for 2008 and thereafter.



Case 1 – Ongoing Plan with DRC

Sample Ongoing Cost Projection Program

Fill in Variables for Deterministic Projection

Current Input	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Portfolio Actual Return	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Bond Yield Beginning of Year	5.77	5.77	5.77	5.77	5.77	5.77	5.77	5.77	5.77	5.77	5.77
Funding Interest Rate	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
CL Int Rate % of Corridor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Funding Salary Scale	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Actual Salary Increases	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

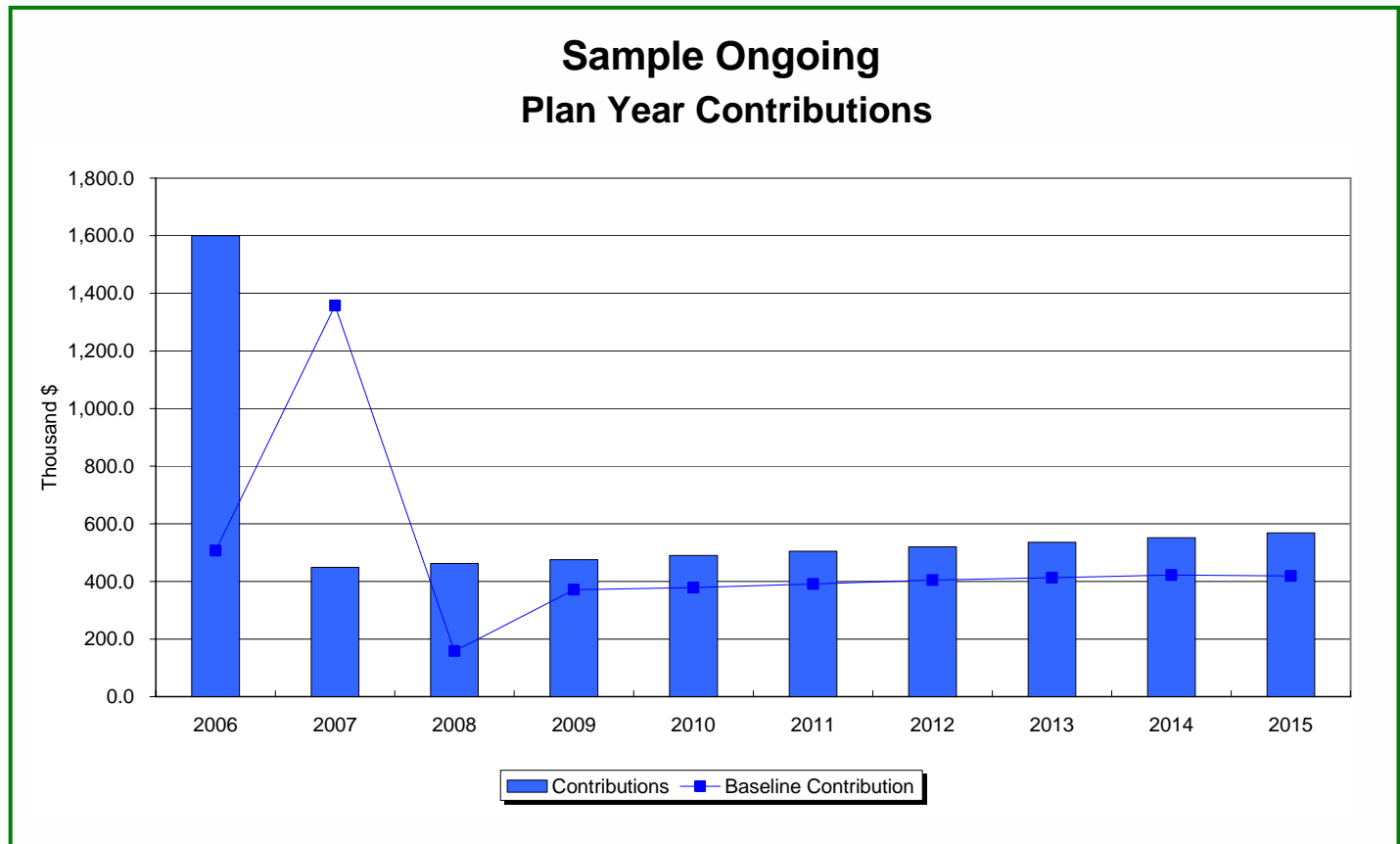
Funding Policy (place an X beside the policy)

Minimum Required Confs	<input checked="" type="checkbox"/>	Use Credit Balance? (Y/N)	<input type="checkbox"/>	n	(old law)								
Maximum Deductible Confs	<input type="checkbox"/>	Use FASB Phase 1 New Rules	<input type="checkbox"/>	1	(1=Yes)								
Normal Cost + N-Year Amort	<input type="checkbox"/>	Amortization Period (years)	<input type="checkbox"/>	0									
Benefit Payments	<input type="checkbox"/>	Apply PPA Funding Rules?	<input type="checkbox"/>	1	(1=Yes)								
X Percent of Payroll	<input type="checkbox"/>	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%		
PBGC Variable Exemption (old law)	<input type="checkbox"/>	PBGC Exemption and NC+N year amortization policies do not work after 2007 if PPA funding rules are applied.											
Flat Dollar Override (\$ million)	<input type="checkbox"/>	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
DB Plan	<input type="checkbox"/>												

Scenario Description: Baseline Scenario



Case 2 – Ongoing Plan with Transition Relief



Case 2 – Ongoing Plan with Transition Relief

Sample Ongoing Numerical Summary of Results Deterministic Projection

(All numbers except amortization period in Thousand \$)

	Contributions					Assets/Liabilities				
	<u>Min after Cred Bal</u>	<u>Min before Cred Bal</u>	<u>Max.</u>	<u>Actual</u>	<u>Old Rules Add'l Min</u>	<u>BOY Cred Bal</u>	<u>Market Value</u>	<u>Actuarial Value</u>	<u>Current Liability*</u>	<u>Funded %</u>
2006	-	506.6	5,817.0	1,600.0	-	1,416.7	5,749.0	6,308.0	7,609.6	82.9%
2007	-	569.0	5,937.1	448.6	-	2,616.3	6,170.4	7,916.7	8,775.8	90.2%
2008	-	456.7	5,046.4	462.0	-	2,243.5	8,011.1	NA	8,521.1	94.0%
2009	-	470.4	5,359.5	475.9	-	2,417.6	8,751.1	NA	9,211.7	95.0%
2010	-	484.5	5,691.1	490.2	-	2,604.8	9,546.8	NA	9,951.1	95.9%
2011	-	499.0	6,034.9	504.9	-	2,806.3	10,391.7	NA	10,731.1	96.8%
2012	-	514.0	6,414.8	520.0	-	3,023.0	11,321.5	NA	11,590.3	97.7%
2013	-	529.4	6,795.1	535.6	-	3,256.2	12,290.0	NA	12,475.7	98.5%
2014	-	545.3	7,184.6	551.7	-	3,507.1	13,312.4	NA	13,402.9	99.3%
2015	-	561.7	7,508.6	568.2	-	3,777.0	14,289.6	NA	14,258.6	100.2%

*Equals PPA Target Liability for 2008 and thereafter.



Case 2 – Ongoing Plan with Transition Relief

Sample Ongoing Cost Projection Program

Fill in Variables for Deterministic Projection

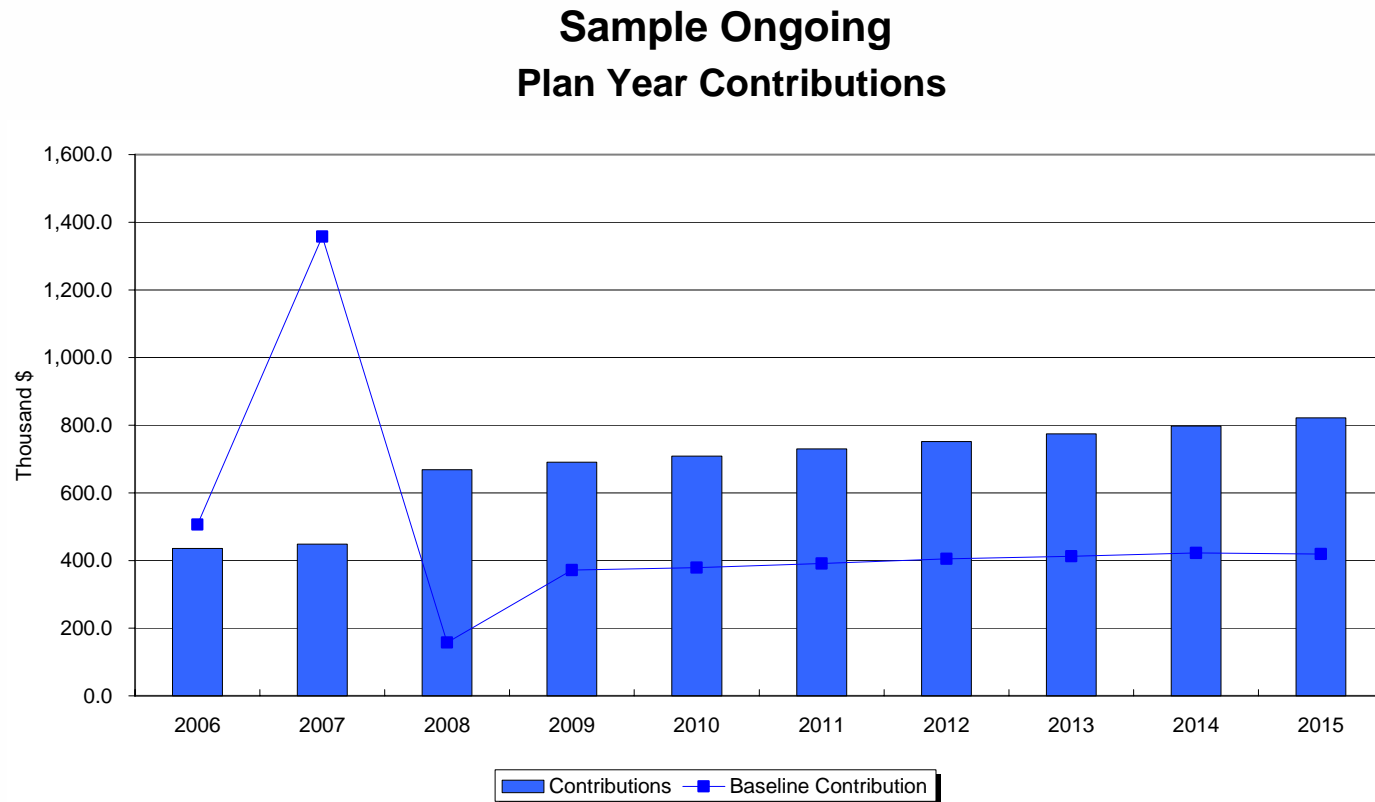
Current Input	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Portfolio Actual Return	3.65	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Bond Yield Beginning of Year	5.77	5.77	5.77	5.77	5.77	5.77	5.77	5.77	5.77	5.77	5.77
Funding Interest Rate	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
CL Int Rate % of Corridor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Funding Salary Scale	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Actual Salary Increases	9.75	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Funding Policy (place an X beside the policy)

Minimum Required Conts	<input checked="" type="checkbox"/>	Use Credit Balance? (Y/N)	<input type="checkbox"/>	n	(old law)								
Maximum Deductible Conts	<input type="checkbox"/>	Use FASB Phase 1 New Rules	<input type="checkbox"/>	1	(1=Yes)								
Normal Cost + N-Year Amort	<input type="checkbox"/>	Amortization Period (years)	<input type="checkbox"/>	0									
Benefit Payments	<input type="checkbox"/>	Apply PPA Funding Rules?	<input type="checkbox"/>	1	(1=Yes)								
X Percent of Payroll	<input type="checkbox"/>	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%		
PBGC Variable Exemption (old law)	<input type="checkbox"/>	PBGC Exemption and NC+N year amortization policies do not work after 2007 if PPA funding rules are applied.											
Flat Dollar Override (\$ million)	<input type="checkbox"/>	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
DB Plan	<input type="checkbox"/>		1.60	0.45	0.46	0.48	0.49	0.50	0.52	0.54	0.55	0.57	0.59



Case 3 – Ongoing Plan with DRC and smoothed contributions



Case 3 – Ongoing Plan with DRC and smoothed contributions

Sample Ongoing Numerical Summary of Results Deterministic Projection

(All numbers except amortization period in Thousand \$)

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2007	-	1,544.9	7,188.9	448.6	908.1	1,451.8	6,170.4	6,752.2	8,775.8	76.9%
2008	668.1	684.8	6,304.4	668.1	-	15.8	6,821.8	NA	8,521.1	80.1%
2009	690.7	690.7	6,490.4	690.7	-	-	7,759.6	NA	9,211.7	84.2%
2010	692.4	692.4	6,655.3	708.8	-	-	8,861.3	NA	9,951.1	89.1%
2011	675.5	694.1	6,819.8	730.1	-	17.6	9,873.1	NA	10,731.1	92.0%
2012	635.1	696.0	7,001.1	752.0	-	57.6	10,968.8	NA	11,590.3	94.6%
2013	568.1	697.1	7,162.8	774.5	-	122.0	12,099.8	NA	12,475.7	97.0%
2014	225.6	452.3	7,313.7	797.7	-	214.4	13,278.8	NA	13,402.9	99.1%
2015	-	489.8	7,393.9	821.7	-	601.8	14,354.5	NA	14,258.6	100.7%

*Equals PPA Target Liability for 2008 and thereafter.



Case 3 – Ongoing Plan with DRC and smoothed contributions

Sample Ongoing Cost Projection Program

Fill in Variables for Deterministic Projection

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Funding Salary Scale	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Actual Salary Increases	9.75	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

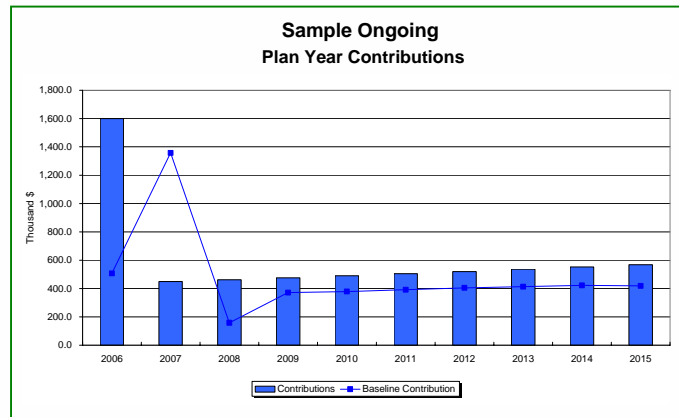
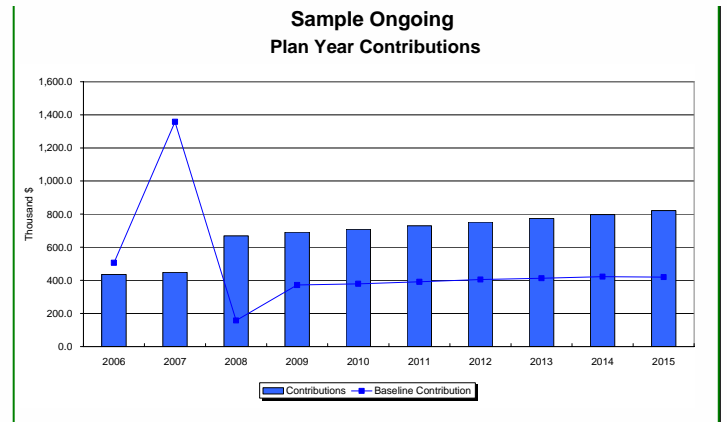
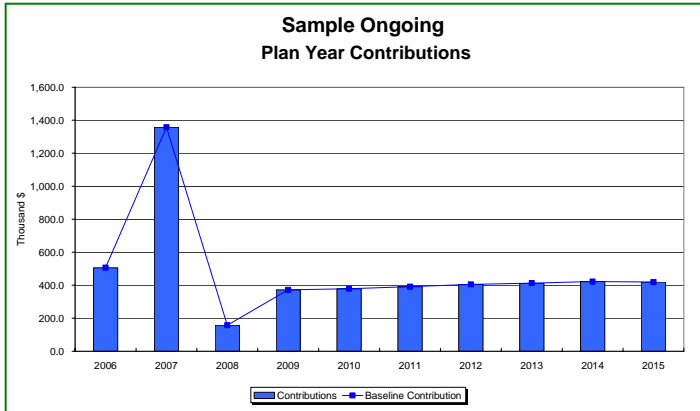
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Benefit Payments	<input type="checkbox"/>	Apply PPA Funding Rules?	<input type="checkbox"/>	1	(1=Yes)								
X Percent of Payroll	<input type="checkbox"/>	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%		
PBGC Variable Exemption (old law)	<input type="checkbox"/>	PBGC Exemption and NC+N year amortization policies do not work after 2007 if PPA funding rules are applied.											
Flat Dollar Override (\$ million)	<input type="checkbox"/>	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
DB Plan	<input type="checkbox"/>		0.44	0.45	0.67	0.69	0.71	0.73	0.75	0.77	0.80	0.82	0.85

Scenario Description: Funding Policy at 3% increase over prior year



All Three Cases



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- In summary – the three problems we started with
 1. The Perfect Storm is over
 2. Temporary fixes have been replaced with permanent ones
 3. The legality has been clarified for hybrid plans
- Volatility can be managed
- The funding rules are not that bad



Pension Protection Act of 2006

Defined benefit plans are valuable

- Features cannot be easily obtained elsewhere
 - Guarantees
 - Flexibility
 - Pooling Arrangements

Defined benefit plans are valuable not only for employees but also for employers and the nation.

