



Actuarial Funding Methodology Overview

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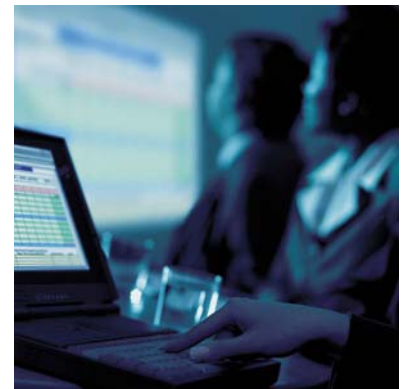
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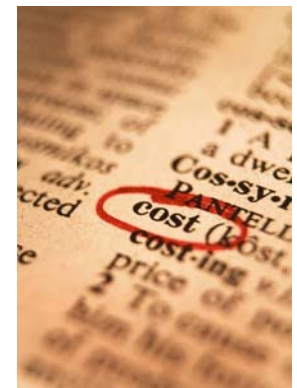
Today's Presentation

- Aggregate funding method
- Asset valuation method
- Minimum contribution rates



Aggregate Funding Method

- Under this method, the unfunded present value of future benefits is amortized over the present value of projected payroll for the group
- No unfunded actuarial accrued liability (UAAL) is amortized outside the “normal cost” of the plan



Example (\$ In Millions)

PV of Future Benefits (PVFB)	\$5,447
Actuarial Value of Assets	\$3,329
Unfunded PVFB	\$2,118
PV for Future Salaries	\$13,171
Total Contribution Rate	16.08%



Aggregate Funding Method

- Relatively simple method and easy to explain
- “Front loads” funding of retirement costs
- Stronger adherence to principle of intergenerational equity
- Can produce volatile contribution rates as a stand-alone policy



Asset Valuation Method

- The market value of assets is adjusted to calculate contribution rates
- The adjusted value is referred to as the “actuarial value” or “smoothed value” of assets
- Assets are adjusted by deferring the full recognition of annual asset gains/losses



Asset Gains/Losses

- We assume an 8% rate of return (ROR) on assets each year
- Asset gain occurs when $ROR > 8\%$
- Asset loss occurs when $ROR < 8\%$



Deferred Gains/Losses

- Each annual gain/loss is deferred according to a schedule
- The larger the deviation of the actual return from the expected return, the longer the deferral



Deferral Schedule

Annual Gain/Loss		
Rate of Return	Smoothing Period	Annual Recognition
15% and up	8 years	12.50%
14-15%	7 years	14.29%
13-14%	6 years	16.67%
12-13%	5 years	20.00%
11-12%	4 years	25.00%
10-11%	3 years	33.33%
9-10%	2 years	50.00%
7-9%	1 year	100.00%
6-7%	2 years	50.00%
5-6%	3 years	33.33%
4-5%	4 years	25.00%
3-4%	5 years	20.00%
2-3%	6 years	16.67%
1-2%	7 years	14.29%
1% and lower	8 years	12.50%



Example (\$ In Millions)

Market Value of Assets	\$3,614
Deferred Gains and (Losses)	\$285
Preliminary Actuarial Value of Assets*	\$3,329

** Before application of market value corridor*



Market Value Corridor

- The actuarial value of assets must remain within a “corridor” of the market value of assets
- Corridor is 30% above and below the market value of assets
- Limits the amount of smoothing that can occur



Example (\$ in Millions)

Market Value of Assets	\$3,614
70% of Market Value of Assets	\$2,530
130% of Market Value of Assets	\$4,699
Actuarial Value of Assets*	\$3,329

** After application of market value corridor*



Minimum Contribution Rates

- Beginning July 1, 2009, contribution rates adopted by the Board shall not be less than 90% of the normal cost calculated under the entry age normal cost method



Entry Age Normal Cost

- The level percentage of payroll expected to fully fund a member's benefit from plan entry to retirement if all assumptions are realized
- Long-term expected contribution rate if all goes as planned
- Benefit improvements and assumption changes can take you "off plan"



Current Member Rates

Under Aggregate Method	8.64%
Entry Age Normal Cost*	8.67%
90% of Entry Age Normal Cost	7.81%

** As of September 30, 2005, actuarial valuation*



Summary

- Aggregate funding method
 - Front-loads funding, avoids UAAL, stronger adherence to intergenerational equity
- Asset valuation method
 - Asset gains/losses smoothed over at most eight years, subject to market-value corridor
- Minimum contribution rates
 - 90% of normal cost under Entry Age Normal



In Closing

- All these policies taken together signify an intent to
 - Fully fund the plan
 - Maintain intergenerational equity
 - Maintain stable contribution rates into the future
- Consistent with the Board's strategic goals

