MERCER
Human Resource Consulting

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Oregon PERS
Policy Alternatives for Financial Modeling

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Introduction
Background

- Meeting with Legislative Advisory Committee on September 13, 2005

- Written input following meeting

- Common Goals:
  - Transparency
  - Stable rates
  - Equity across generations
  - Protect funded status

- Concerns
  - Not supportive of methods that reduce rates in the short-term, but result in higher rates later on

- Board has been evaluating policies to achieve these goals

Introduction
Agenda

- To direct Mercer to analyze three specific alternatives under the financial modeling provisions of the contract.
  - The Board is not being asked to make policy decisions at this point in time.
  - The policy variations proposed for analysis are intended as parameters to enable the Board to make informed decisions.
- With direction from the Board, we will:
  - Model the policy variations
  - Analyze the outcomes
  - Present results at the December Board meeting
- The analysis will provide the Board and stakeholders with an understanding of the long-term implications of decisions made now.

Introduction
Overview of Financial Modeling Services

- Annual stochastic projections for system as a whole following the actuarial valuation, beginning with the December 31, 2003 valuation

- Baseline projection representing all current methods, assumptions and policies

- Alternative policies requested by the Board

- Presentation of results at Board meeting

Policies for Analysis
Initial Alternatives Considered

- Projected Unit Credit versus Entry Age Normal cost method
  - Transparency -- Normal cost and funded status

- Asset smoothing versus contribution rate smoothing
  - Stable rates – Managing volatility

- Reserve policy for contingency and capital preservation reserves
  - Stable rates – Managing surprises

The other objectives and concerns enter into the evaluation of these alternatives, but are not the primary motivation behind the proposed alternatives.

Policies for Analysis
Comments Received

- Specific comments from employers*

    - Confine modeling to current methods and assumptions rather than looking at PUC and alternative smoothing methods.

    - Break out projections to show impacts on various groups of employers separately and on P&F versus general service members

    - Vary assumptions/experience for mortality, retirement rates, and assumed rate of return

    - Reserving policy

* League of Oregon Cities, Association of Oregon Counties, Special Districts Association of Oregon, Oregon School Boards Association, and Oregon Community Colleges Association

Policies for Analysis
Comments Received

- Priorities for modeling from City of Portland
  - Reserving policy
  - Asset smoothing versus collar smoothing
  - Asset smoothing versus contribution rate averaging

Policies for Analysis
Considerations

- The number of policy changes should be limited to manage information intake and effective decision making.

- The short-term impact on rates of a change to the Projected Unit Credit method should be managed through the amortization of the change in UAL. The modeling will illustrate these dynamics.

- The affect of these policy variations will be similar across any significant grouping of employers. Individual non-pooled employers may exhibit different effects depending on their demographics.

- Financial modeling doesn't effectively illustrate the impact of variations in demographic experience.

Policies for Analysis
Future Considerations

- Policy variations that are affected by these primary variations should be considered for future analysis.
  - Assumed rate of return
  - Side funds – (Dynamics are specific to individual employer)
    - Interaction with pension obligation bond structure
    - Size of side fund compared to employer payroll

Recommendations
Policy Alternatives

■ **Baseline Projection** – Entry Age Normal – 4-Year Asset Smoothing – Maximize Reserves	■ **Alternative Policy #1** – Entry Age Normal – 4-Year Asset Smoothing – Minimize Reserves
■ **Alternative Policy #2** – Projected Unit Credit – Amortize change in UAL separately – 4-Year Asset Smoothing – Maximize Reserves	■ **Alternative Policy #3** – Projected Unit Credit – Amortize change in UAL separately – Collar contribution rates – Maximize reserves

Recommendations
Policy Comparisons

■ **Baseline Projection**	■ **Alternative Policy #1**
– Entry Age Normal	– Entry Age Normal
– 4-Year Asset Smoothing	– 4-Year Asset Smoothing
– **Maximize Reserves**	– **Minimize Reserves**

■ Illustrates impact of maximizing reserves versus minimizing reserves

■ While neither of these reserve policies is expected to be the Board's actual policy, this information will be valuable in putting parameters around the effect of Board reserving decisions.

Recommendations
Policy Comparisons

Baseline Projection	Alternative Policy #2

■ **Baseline Projection**
  – **Entry Age Normal**
  – 4-Year Asset Smoothing
  – Maximize Reserves
	■ **Alternative Policy #2**
	  – **Projected Unit Credit**
	  – **Amortize change in UAL separately**
	  – 4-Year Asset Smoothing
	  – Maximize Reserves

- Illustrates impact of projected unit credit versus entry age normal

- Specific amortization method will be designed for a smooth cost transition as Tier One members retire

- Please note that our primary reason for recommending a change to projected unit credit is transparency. The modeling will illustrate if there are any positive or negative financial effects associated with this change

Recommendations
Policy Comparisons

Alternative Policy #2	**Alternative Policy #3**
– Projected Unit Credit	– Projected Unit Credit
– Amortize change in UAL separately	– Amortize change in UAL separately
– **4-Year Asset Smoothing**	– **Collar contribution rates**
– Maximize Reserves	– Maximize reserves

- Illustrates impact of asset smoothing versus collaring contribution rates on stabilizing employer rates

- Evaluation of concerns of effect on funded status

- In addition, the modeling may also help us to define better parameters for the collar method to mitigate any negative effects

Appendix
Reserve Policy Definitions

■ **Maximizing Reserves**

  – Contingency and Capital Preservation Reserve – 7.5% of earnings in excess of 8.0%. These reserves are used to the extent necessary to maintain an 80% funded ratio

  – Rate Guarantee Reserve – All Tier One member regular account earnings in excess of 8.0%. This reserve is used to the extent necessary to credit 8.0% earnings to Tier One member accounts

■ **Minimizing Reserves**

  – Contingency Reserve – 0.75% of earnings in excess of 8.0%. This reserve is used to the extent necessary to maintain an 80% funded ratio.

  – Capital Preservation Reserve – not used

  – Rate Guarantee Reserve – All Tier One member regular account earnings in excess of 8.0%. This reserve is used to the extent necessary to credit 8.0% earnings to Tier One member accounts.

Appendix
UAL Amortization for Change to PUC Method

- With a change to the PUC method, the normal cost will be lower and the UAL will be higher. Depending on how the change in the UAL is amortized, the concern raised by employers may be valid.

- As a part of the modeling we will look at the expected pattern of Tier One retirements and amortize the change in UAL in a way intended to keep the combination of normal cost and UAL amortization either level or declining over time.

- The amortization method will likely be as a level dollar amount over a period of 5 to 10 years.

Appendix
Definition of Collar Method

- Contribution rates will be confined to a collar based on the current contribution rate.

- The next contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate.
  - If current rate is 15%, the new rate cannot be more than 18% nor less than 12%.
  - If current rate is 20%, the new rate cannot be more than 24% nor less than 16%.

- If funded percentage drops below 80% or increases above 120%, the size of the collar doubles.
  - If current rate is 15% and funded status is below 80%, the new rate can be as high as 21%.
  - If current rate is 20% and funded percentage is below 80%, the new rate can be as high as 28%.

- All calculations will use the market value of assets

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