Valuation vs. Pricing
Actuarial Methodology

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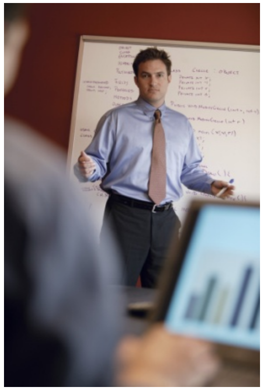
September 23, 2009

Today's Presentation

- Valuation Methodology
- Pricing Methodology
  - Complexity
  - Group size
  - Sensitivity
  - Materiality



How We Perform The Annual Valuations

- Pull together all the data
  - Participant
  - Asset
- Update our software
  - Program law changes
  - Make corrections if necessary
  - Incorporate assumption and method changes
- Review the results
  - How have things changed from last year's numbers?
  - Happens along the way

Principles Of The Valuation

- Funding method and assumptions laid out in statute, adopted by the Board
- Includes all plan provisions
- Includes all plan participants
- Have about a year to produce

We’ve Got A Pricing

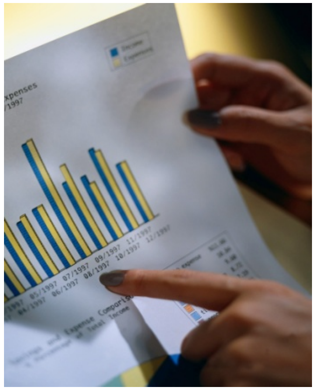
- How much does it cost to . . . ?
- It depends
  - What’s the benefit?
  - Who’s impacted?
  - When’s the effective date?
  - Who’s paying for it?

Do The Valuation Principles Apply?

- Funding method and assumptions laid out in statute, adopted by the Board?
  - Yes – for how the supplemental rates work with the basic rates
  - No – for determining the supplemental rates
    - Currently you rely on your actuary
- Includes all plan provisions?
  - No – usually only a select few
- Includes all plan participants?
  - Yes – retirement age/death and disability benefits
  - No – Fish and Wildlife
- Have about a year to produce?
  - Hardly – could be a portion of the Interim or just a few days during session

Things We Consider When Pricing

- Complexity
- Group size
- Sensitivity
- Materiality



Complexity

- Are there a lot of moving parts?
  - Transfers from other plans
    - Fish and Wildlife
  - Cross-over benefits – death and disability
    - Occupational diseases
- Have we done a pricing like this before?
  - Was it audited?
- What data do we have/need?
- How long will it take to complete?
  - Available resources and competing LEOFF 2 projects

Group Size

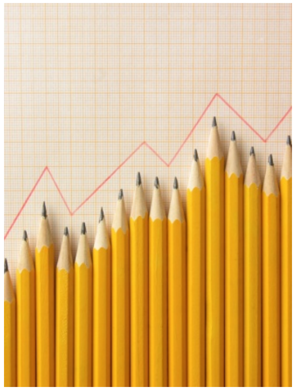
- Large group pricings give us more latitude when setting assumptions and methods
  - Law of large numbers improves accuracy
    - 17,000 actives in LEOFF 2
    - Use valuation software
- Small group pricings take some tools out of our kit
  - Can't rely on law of large numbers
    - Use individual methods and assumptions

Group Size Example – No Pre-Retirement Mortality

- Let's assume 100 members all have a 0.5 percent chance of dying in a given year
- What's a better strategy over a 30-year period?
  - Strategy A: Assume no one dies each year
  - Strategy B: Assume the expected value of deaths – half a death each year

Sensitivity

- Do the results change significantly when we vary a key assumption a small amount?
- Do the costs move in the direction we expect?
- Are we on the right side of the risk?
  - What happens to the plan if we're wrong?



Materiality

- Materiality has several meanings for actuaries
- Does this pricing result in a supplemental rate?
- Is the pricing close to the rounding threshold?
  - $1.54 million increase in liability results in a 0.01 percent member and 0.01 percent local government supplemental rate
    - Based on 2007 Actuarial Valuation Report
    - Threshold increases each year with salaries
  - 0.01%/0.01%/0.00% => Member/Local Gov/State

Supplemental*	Liability Increase Range *(Dollars in Millions)*
0/0/0	$0.00 - $1.54
1/1/0	$1.54 - $4.62
2/1/1	$4.62 - $7.70

**Assumes only a liability change with no change in salaries.*

Next Steps

- Did I leave you wanting more?

Questions?