

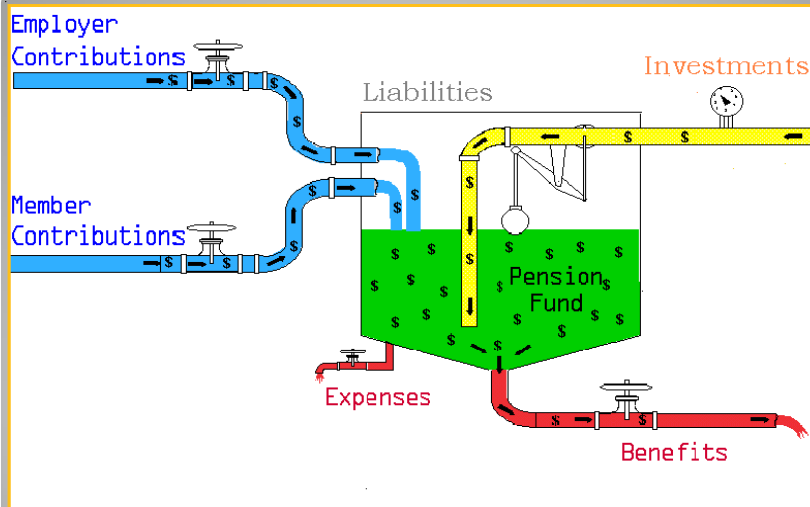
The Pension/OPEB Funding Puzzle

Greg Stump, FSA



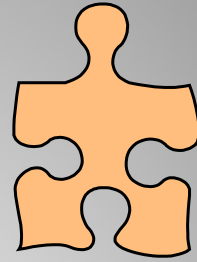
- Pension Funding is simply spreading the cost of benefits over time
- INTO the Fund: Contributions
- OUT of the Fund: Benefits, Expenses

Pension Funding Basics



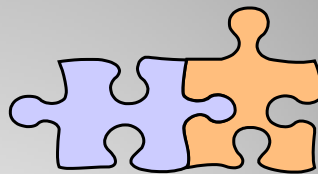
Pension Funding Basics

- Who?
- How much?
- Under what conditions?



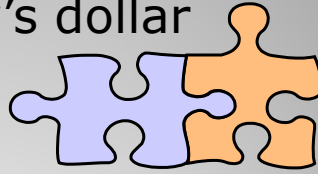
Benefits

- Demographic Assumptions
 - When?
 - For How Long?...
 - Termination, Disability
 - RETIREMENT & MORTALITY



Actuarial Assumptions

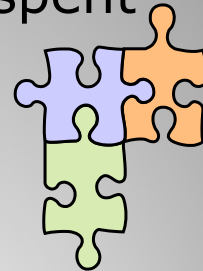
- Economic Assumptions
 - What is tomorrow's dollar worth today?...



- Inflation, Salaries
- INVESTMENT RETURN

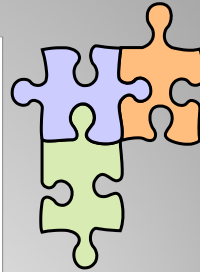
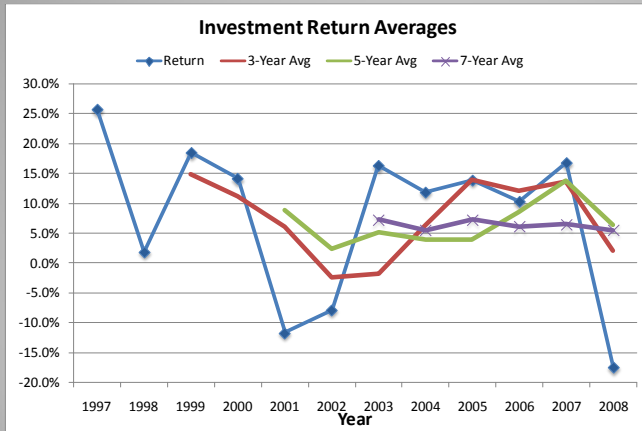
Actuarial Assumptions

- How much should be spent each year?
- Paygo vs. pre-funding
- Cost methods can vary, but they all do the same thing



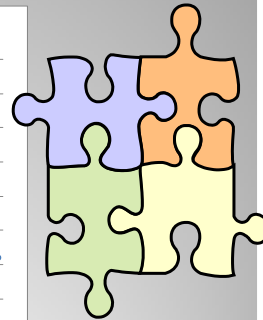
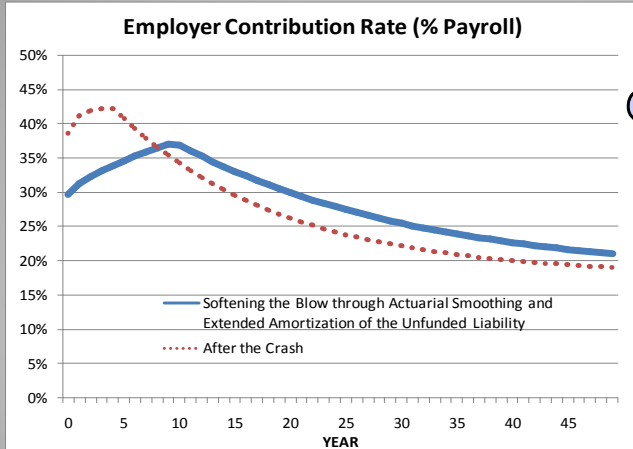
Actuarial Methods

• Asset Smoothing



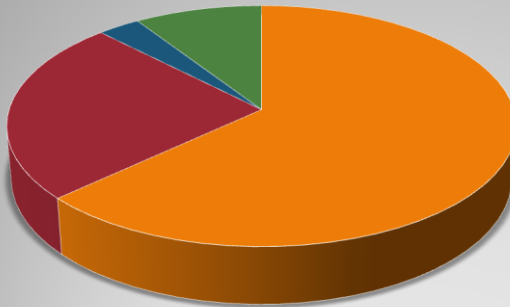
Actuarial Methods

• Asset smoothing/Amortization



Actuarial Methods

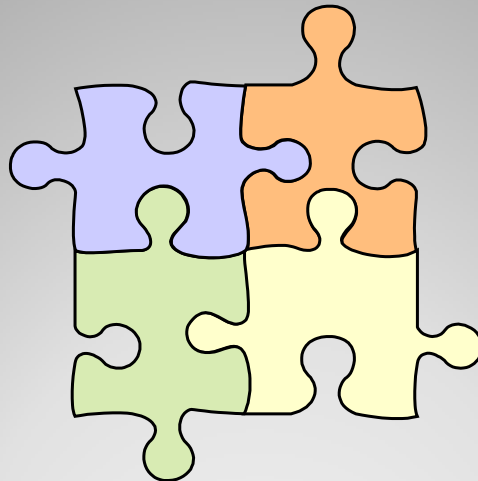
The "Whole Pie"



- Assets
- UAAL
- Normal Cost
- Future Normal Costs

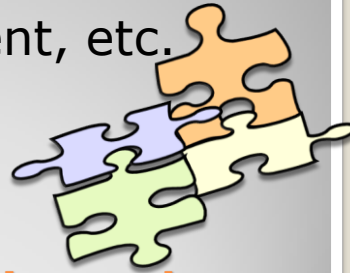
- Contribution =
Normal Cost + Amortization of UAAL

Annual Cost



So What's the Problem?

- Experience NEVER matches expectations
 - INVESTMENTS
 - Mortality, Retirement, etc.



Problem: Actuarial Gains and Losses

- $ARC = \$X$
 - Actual contribution $< \$X$
- Contribution Holidays
 - Contribution = $\$0$



Problem: Funding Adequacy

- "Free" Benefits
- Bargaining Issues
- Promise now, pay later



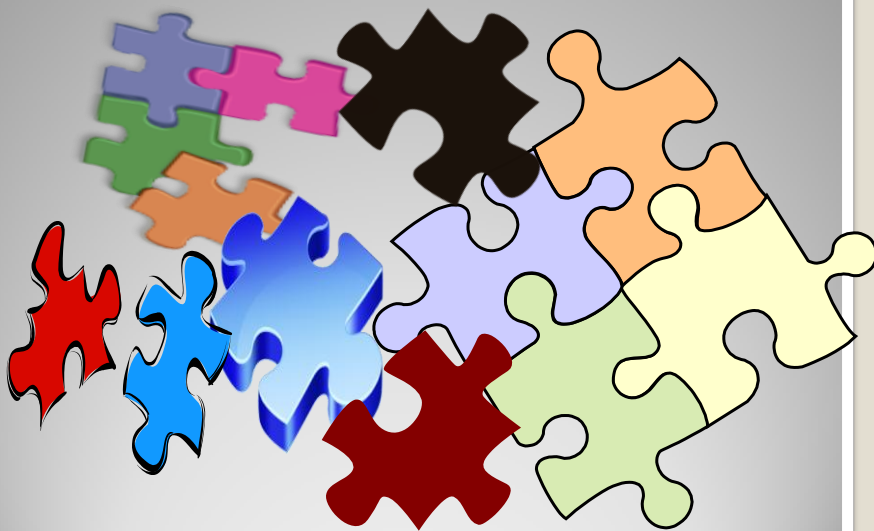
Problem: Benefit Increases

- Very long phase in period
- Does not impact UAAL
- Possible bargaining/legal issues

Benefit Decreases/New Tiers

Same	Different
Demographic Assumptions	Medical Inflation
Project & Discount	Predictability of Benefits
Basic Accounting Requirements	Historical Pre-funding

Pensions vs. OPEB



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