CUPE·SCFP

CUPE Trustee Training

Actuarial Valuations Exercise

May 16, 2022

Keys to a Valuation

1. Going Concern funding ratio (ie surplus vs deficiency)
2. Solvency funding ratio
3. Reconciliation of experience
4. Current service cost (or “normal cost”)
5. Special payment obligations
6. Actuarial assumptions

Discount Rates

- Begins with an assumption about future investment returns
- Can then incorporate other elements:
  1. Provision for ‘adverse deviation’ (Pfad)
  2. Expenses
  3. Gains from ‘active investment management’ or ‘diversification’
- Lower discount rate = higher ongoing pension cost, and **highly sensitive**
- Common range of going concern discount rates currently 5% to 6.15%

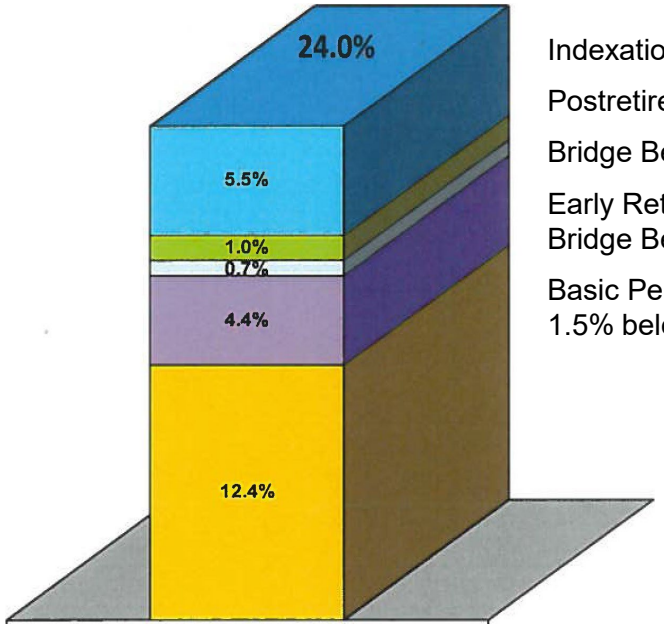
Challenging assumptions exercise

- Review December 31, 2015 CCRL valuation report, with particular focus on:
  - Summary of Results page
  - Going Concern results
- Move to Breakout Groups — Each group to answer the following questions:
  1. What are the employer contribution obligations after the 2015 report, either in dollar terms or as a percentage of payroll?
  2. What was the impact of the change to the discount rate on a) the current service cost; and b) the going concern funded ratio?
  3. How is the employer likely to respond to this valuation report?
- Walk through the results of the 2017 valuation report

Lessons from the exercise

- Review December 31, 2015 CCRL valuation report, with particular focus on:
  - Summary of Results page
  - Going Concern results
- Move to Breakout Groups — Each group to prepare answers to the following questions:
  1. What are the employer contribution obligations after the 2015 report, either in dollar terms or as a percentage of payroll?
  2. What was the impact of the change to the discount rate on a) the current service cost; and b) the going concern funded ratio?
  3. How is the employer likely to respond to this valuation report?
- Walk through the results of the 2017 valuation report

Breakdown of DB Plan Cost



Indexation 100% of CPI

Postretirement Survivor Pension 66 2/3%

Bridge Benefit 0.625%

Early Retirement Subsidies Without Bridge Benefit, Rule of 82

Basic Pension Benefit: FAE 3, accrual 1.5% below and 2% above YMPE

IMPACT on TOTAL CURRENT SERVICE COST of CHANGES to PENSION PLAN DESIGN

Expressed as a percentage of valuation compensation

Reduce indexation to 75% of CPI	(1.4%)
High 60 months final average (from 36 months)	(0.9%)
Reduce Joint and Survivor Benefit to 50%	(0.25%)
Reduce bridge benefit to 0.5%	(0.23%)
Increase Rule to 85 (from 82)	(0.5%)