



## How to Read an Actuarial Report and CalPERS Upcoming Issues

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### Agenda

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# How to Read An Actuarial Report



## All Reports Should Include

- Benefit Summary
- Data Summary
- Asset Summary
- Actuarial Methods & Assumptions
- Definition of Terms
- Valuation Results



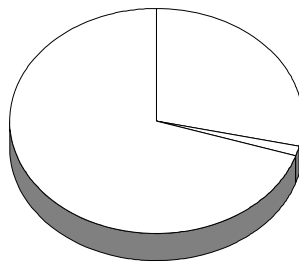
# Valuation Results

- Funded Status
- Contribution Requirements



## Definitions

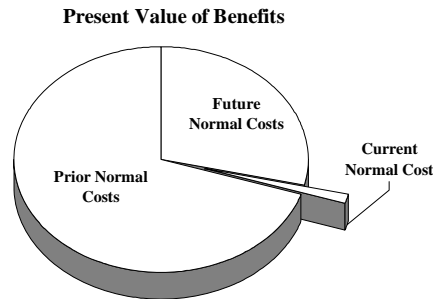
Present Value of Benefits



- **PVPB - Present Value of all Projected Benefits:**
  - Discounted value (at valuation date – e.g. 6/30/14), of all future expected benefit payments based on various (actuarial) assumptions
  - Portion of benefits not paid by investment earnings



# Definitions



## ■ PVPB Allocated to each year of service

- Allocation based on Actuarial Cost Method

## ■ Current Normal Cost (NC):

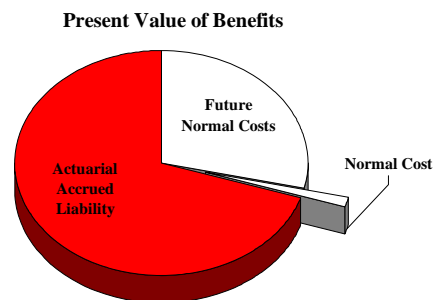
- Portion of PVB allocated to (or “earned” during) current year
- Value of employee and employer current service benefit

CSMFO 2/20/15

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# Definitions



## ■ Actuarial Accrued Liability (AAL):

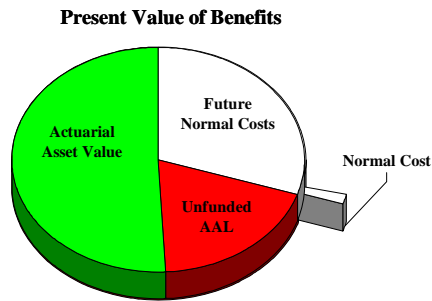
- Accumulated Normal Costs from Entry Age to Current Age
- Portion of PVB allocated or “earned” at measurement [value of past service benefit]

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# Definitions



- **Target-** Have money in the bank to cover Actuarial Liability (past service)
- **Unfunded Liability**
  - Money short of target at valuation date

# Definitions

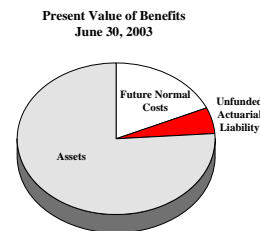
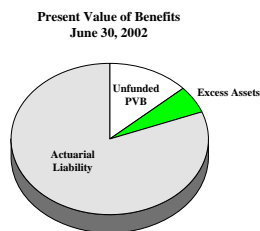
- **Excess Assets / Surplus:**
  - Money over and above target at valuation date
  - Doesn't mean you're done contributing

# Definitions

- **Market Value of Assets** – Value of assets based on what they could be sold for on valuation date
- **Actuarial Value of Assets**
  - Smoothed market value
  - Mitigates market value volatility
- **Funded Ratio:**
  - Ratio of Assets to AAL
  - Look at on Market and Actuarial basis



# Definitions



- **Contribution =**
  - Normal Cost
  - + Unfunded Liability Amortization

or

  - - Excess Asset Amortization



# Economic Assumptions

## ■ Inflation

- Used as a basis for individual salary increases & discount rate

## ■ Discount Rate – Long term expected return on plan assets

- Should vary based on investment mix
- Two components
  - Inflation
  - Real rate of return above inflation

● Example	1	2
Inflation	3.00%	4.25%
Real rate of return	<u>4.50%</u>	<u>3.25%</u>
<b>Discount rate</b>	<b>7.50%</b>	<b>7.50%</b>



# Demographic Assumptions

## ■ Salary increases

## ■ Mortality

## ■ Termination

## ■ Retirement



# CalPERS Upcoming Issues



## Contribution Policy Changes

- No asset smoothing
- 5-year ramp up
- Future Gains/losses 25 year amortization period
  - With 5 year ramp up means paid over 30 years
- Method & Assumption changes 15 year amortization period
  - With 5 year ramp up means paid over 20 years
- No cap on rate increases each year





## Risk Pool Changes

- All Risk Pools combined into 2 Risk Pools
  - Miscellaneous
  - Safety
- Collect payment on UAL as dollar amount
- Risk Pools UAL payment allocated based on liability & assets rather than payroll
- **Side Fund payoff no longer guaranteed savings!**



## Assumption Changes

- No changes to economic assumptions
- Anticipate future mortality improvement and
- Earlier retirements for Miscellaneous enhanced formulas
- Greater salary increases (late in career)



# Timing

	<b>Valuation</b>	<b>First Impact</b>	<b>Full Impact</b>
■ Contribution Policy	6/30/13	2015/16	2019/20
■ Risk Pool Changes	6/30/13	2015/16	2015/16
■ Assumption Changes	6/30/14	2016/17	2020/21

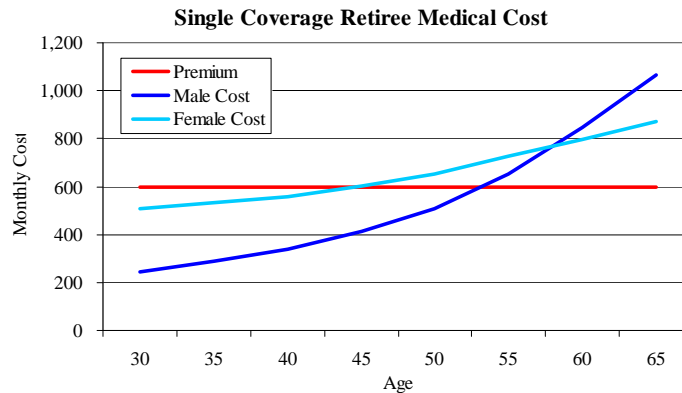


# GASB 45 Implicit Rate Subsidy



## GASB 45 – Implicit Rate Subsidy

- Employer cost for allowing retirees to participate at active premium rates



## GASB 45 – Implicit Rate Subsidy

- GASB 45 defers to Actuarial Standards of Practice (ASOP) for implicit rate subsidy
- Old ASOP says community-rated medical plans not required to value implicit rate subsidy
  - PEMHCA is, for most participating agencies, considered a community-rated plan



# GASB 45 – Implicit Rate Subsidy

- New ASOP requires
  - Implicit rate subsidy be valued for all plans
  - Based on medical plan's (not agency's) demographics
    - Cross-employer subsidy would be ignored
    - Some agencies will have liability that will not be defeased
    - Others will have liability that will be over defeased
- Actuaries must comply with valuation measurement after March 31, 2015

## Paying Down Unfunded Liability & Rate Stabilization

## Options

- Pension Obligation Bonds (POBs)
- Borrow from General Fund
- Amortization Period
- One time payments
- Internal Service Fund
- Irrevocable Supplemental (§115) Trust



## POBs

- Interest arbitrage between **expected** CalPERS earnings and rate paid on POB
- No guaranteed savings
  - Including paying off CalPERS Side Fund



## **Borrow from General Fund**

- Pay GF back like a loan
- Payments come from all funds



## **Request Shorter Amortization Period**

- Higher short term payments
- Less interest and lower long term payments



## One Time Payments

- Council/Board resolution to use a portion (e.g. 50%) of one time money to reduce unfunded liability



## Establish Internal Service Fund

- Could be used for rate stabilization
- Restricted investments:
  - Likely low (0.5%-1.0%) investment returns
  - Short term/high quality
  - Designed for preservation of principal
- Assets could be used by Council for other purposes
- Does not reduce GASB 68 Net Pension Liability



## Establish Irrevocable Supplemental (§115) Trust

- Could be used for rate stabilization
- Reduces GASB 68 Net Pension Liability
- Investments significantly less restricted:
  - Designed for long term returns
  - Likely much higher ((5%-7%) investment returns

## Establish Irrevocable Supplemental (§115) Trust

- Can only be used to :
  - Reimburse for CalPERS contributions
  - Make payments directly to CalPERS
- Assets could **not** be used by Council for other purposes
- PARS & PFM



# Appendices

- Bartel Associates [www.Bartel-Associates.com](http://www.Bartel-Associates.com):
  - GASB 68 Summary
  - PEPRA Summary
  - Other exciting stuff
- Anthony T. Oliveira, *The Local Challenges of Pension Reform*
  - <http://www.tonytoliveira.com/Research.html>

