

# Advanced Actuarial Issues for CCRCs

**Actuarial appraisals, open-  
group valuations, and  
future research**

by

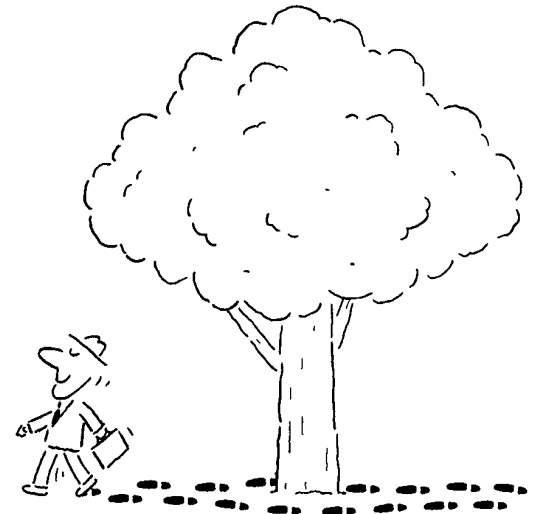
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*Helping you solve your management challenges*

# Our Presentation Process

- ◆ Review learning objectives
- ◆ CCRC appraisals
- ◆ Open-group valuations
- ◆ Predictions for the future
  - an interactive discussion

# Learning Objectives

- ◆ How does one determine the economic value (net worth) of a CCRC?
- ◆ How does one reconcile a low funded status with high new entrant fee surplus and favorable cash flow projections
- ◆ What's on the radar scope for future changes in CCRC operating procedures

# CCRC Appraisals

- ◆ CCRCs are appraised for:
  - Merger or acquisition
  - Major expansion
  - Credit-worthiness
- ◆ Traditional approaches value fixed assets
  - Income or cash flows
  - Market or comparable values
  - Highest and best use

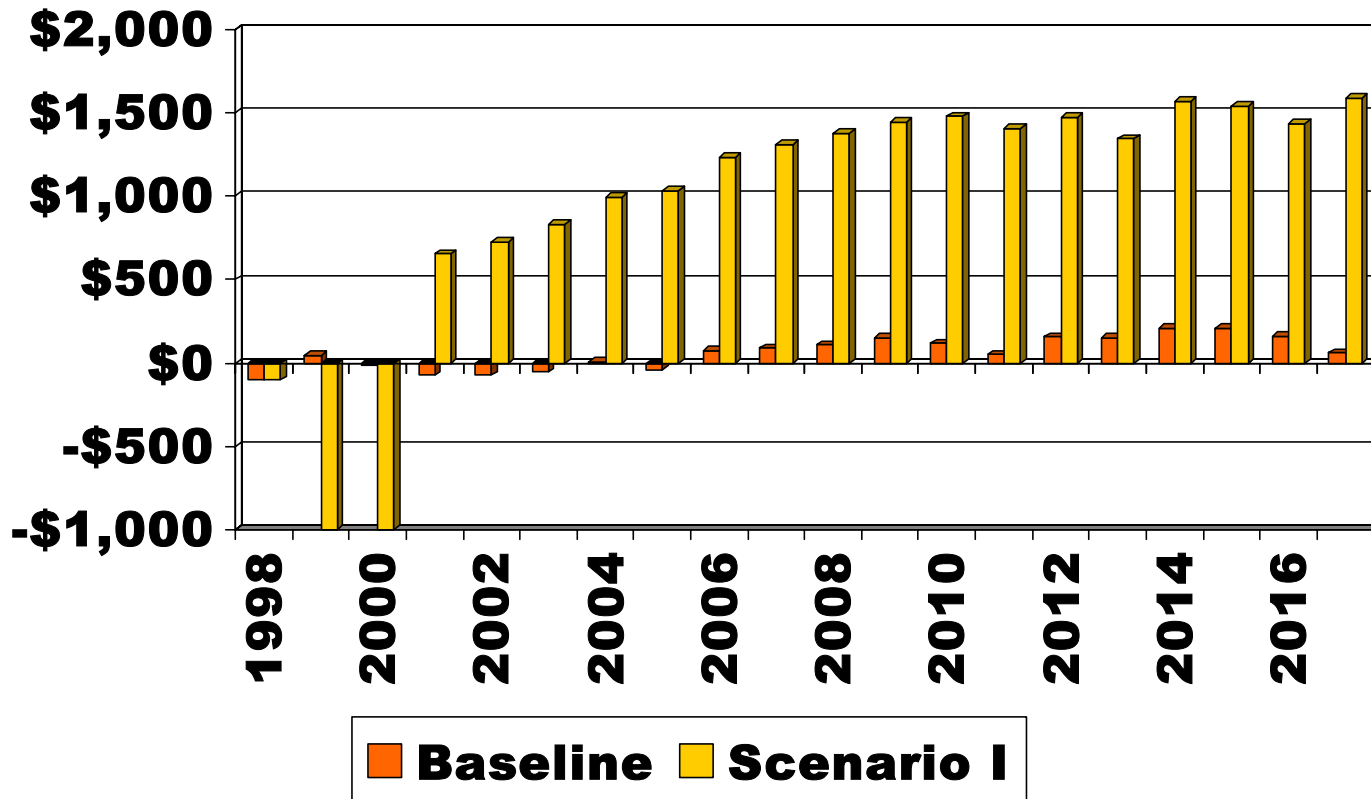
# CCRC Appraisals (Con't)

- ◆ Financially sophisticated methods
  - Internal rate of return calculations
  - Actuarial valuations
- ◆ Actuarial appraisals reflect the economic value of continuing contracts the fixed assets because difficult to provide services in another location, and even so, would have to pay actuarial value anyway

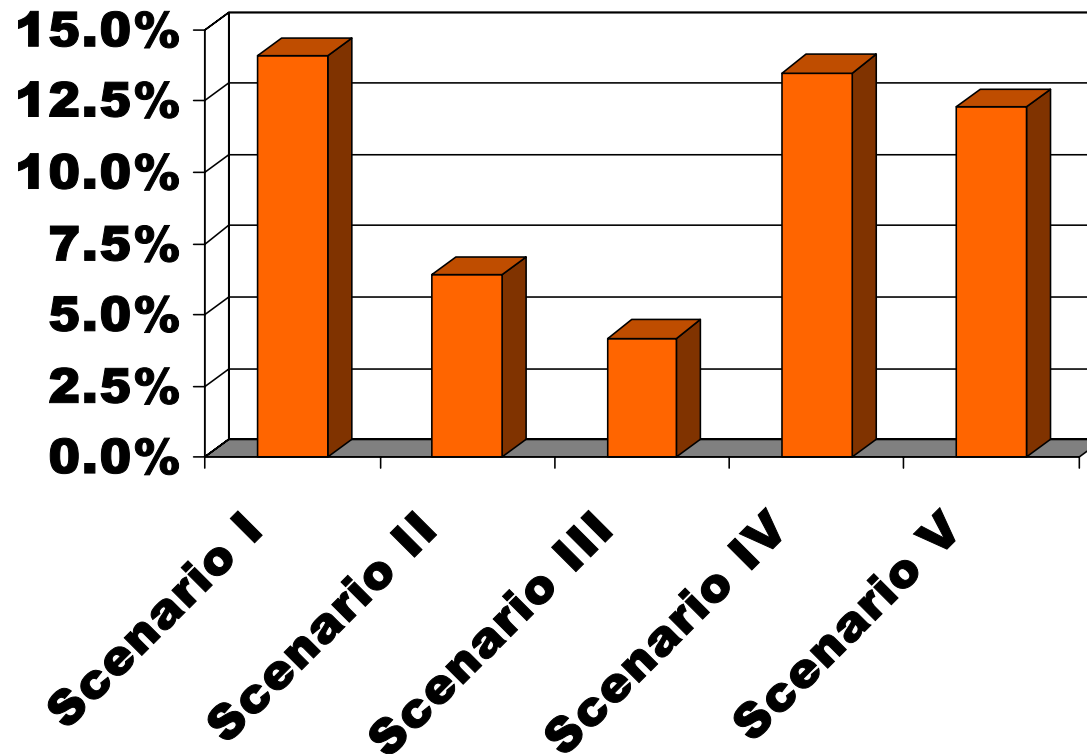
# Case Example A

- ◆ How do we evaluate (justify) use of 50% of credit-line for improving CCRC
- ◆ Description of alternatives
  - \$9.0 million expansion
  - \$3.5 million expansion
  - \$3.5 million expansion with pent-up demand
  - \$10.0 million expansion
  - \$10.0 million expansion with sheltered beds

# Baseline Net Cash Flows versus Scenario I = 14.1%



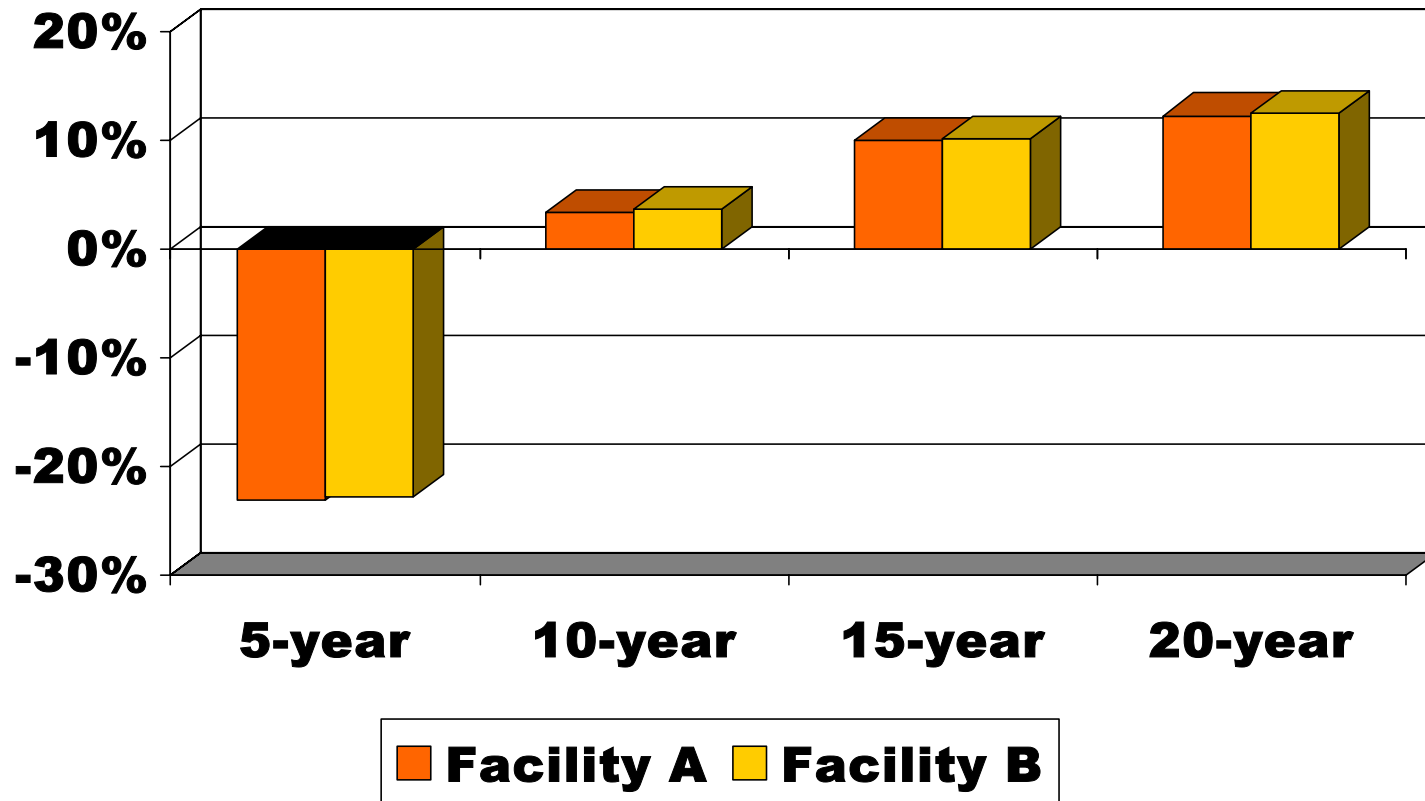
# Comparison of IRR Results



# Case Example B

- ◆ How do we determine purchase price for acquiring an existing CCRC?
- ◆ Description of alternatives
  - Commission traditional appraisal
  - Minimum cash payback period
  - Goals for investment returns

# IRR Calculations for Various Timeframes



# Open-Group Valuation

- ◆ Traditional actuarial report uses “three-legged stool” for measuring solvency
  - Actuarial valuation of reserves that are held on behalf of current residents
  - Test of adequacy of the combination of monthly and entry fees to new entrants
  - Ten-year plus cash flow projections

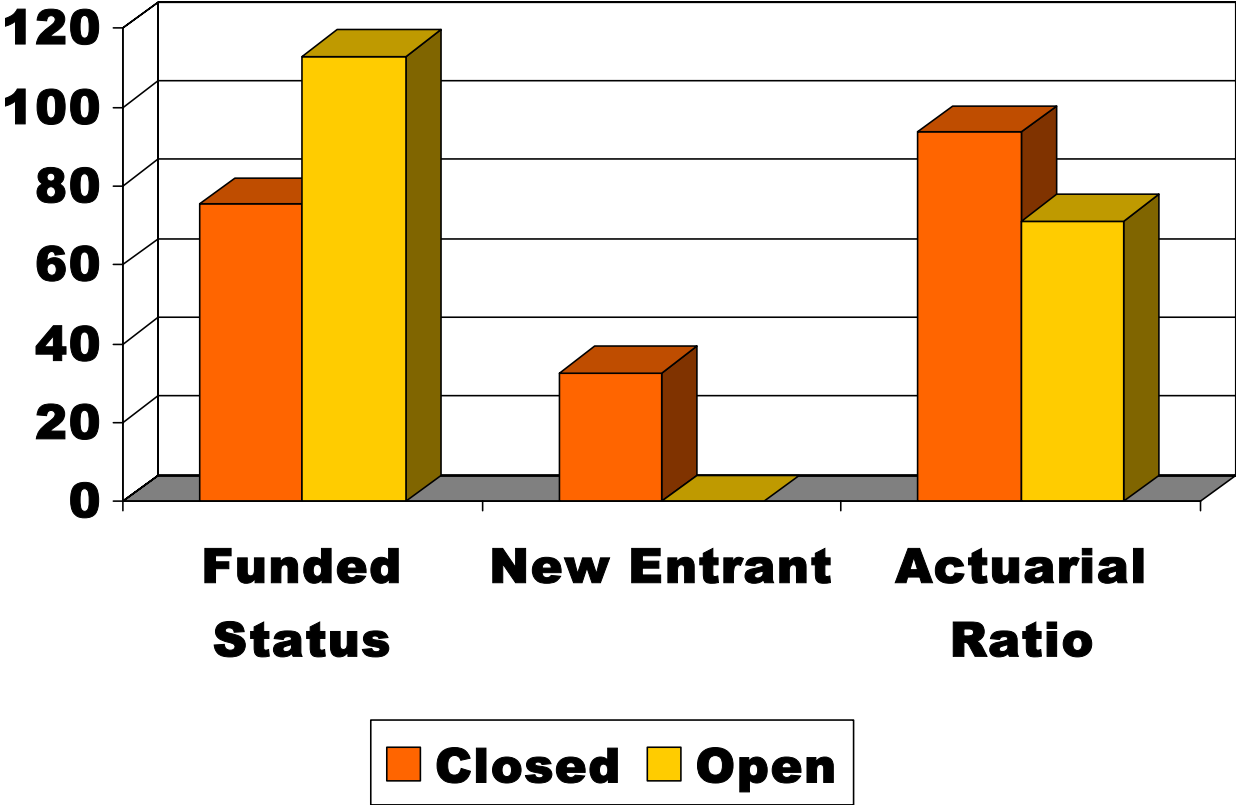
# Open-Group Valuation (con't)

- ◆ Rationale (need for) open-group approach
  - Possible for current valuation to show material unfunded liability while new entrants' fees show significant surplus and good cash flows because existing fixed assets (and their corresponding depreciation) are under-valued
  - This means that facility appears to be actuarially insolvent, yet cash flow rich

# Open-Group Valuation (con't)

- ◆ Possible solution is to recognize surplus associated with new entrants' fees in the current resident actuarial valuation by:
  - Revaluing current and future fixed assets
  - Solve for this value by determining maximum increase such that new entrant surplus = 0%
  - Typically reserve increase is a 0.4 to 0.5 multiplier for every \$1 in fixed asset increase

# Case Study



# Future Trends

- ◆ Meaningful financial criteria
- ◆ Resident assessments and third generation actuarial models
- ◆ Individual choice in selecting continuing care services and how they are funded

# Financial Criteria

- ◆ Traditional approach: ratio analysis
  - Liquidity--days' cash on hand
  - Profitability--operating margin
  - Capital structure--debt service coverage
  - Occupancy
  - Waiting list

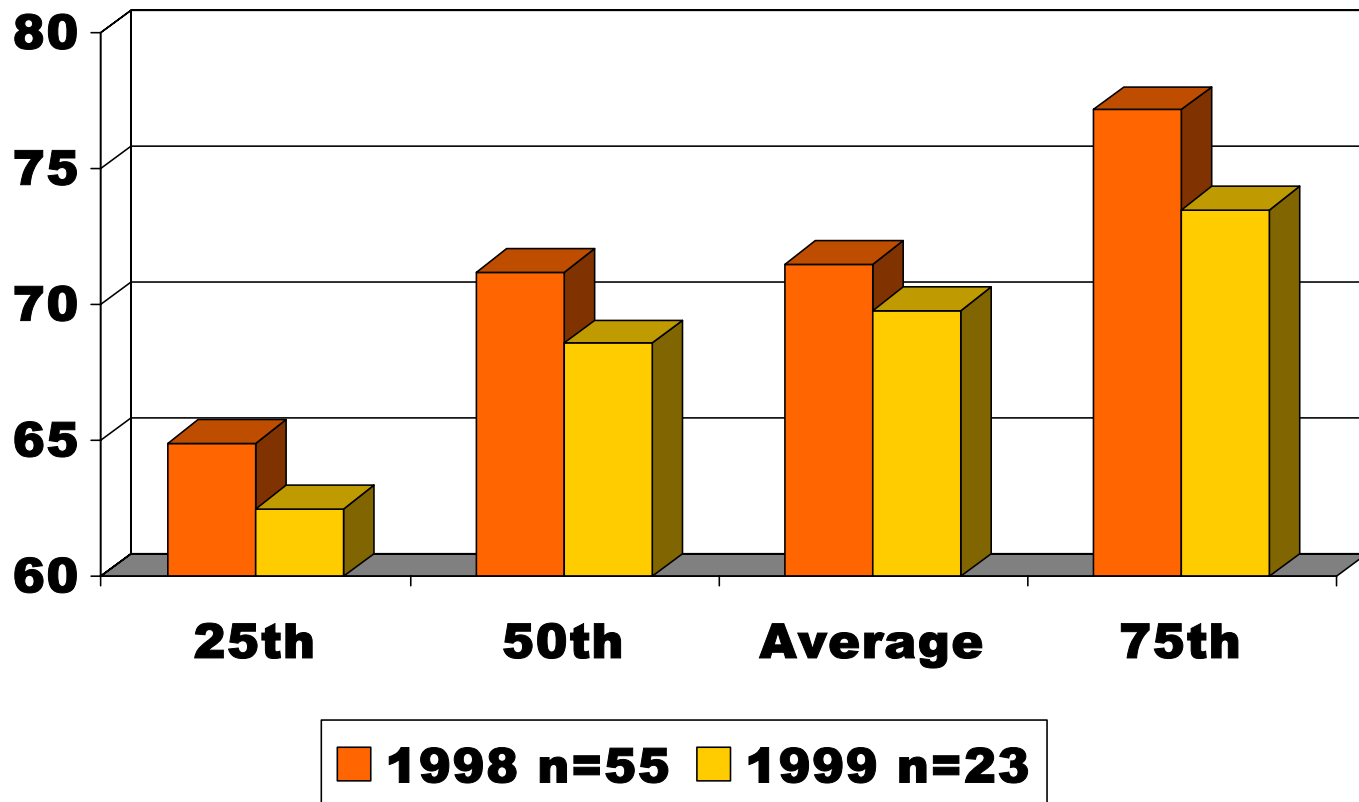
# Financial Criteria (con't)

- ◆ Alternative approach: actuarial statistics
  - Liquidity
    - Liquid reserve ratio
    - Actuarial ratio
  - Profitability
    - Funded status
    - New entrant contract surplus
  - Capital Structure
    - 10-year projected reserve increase

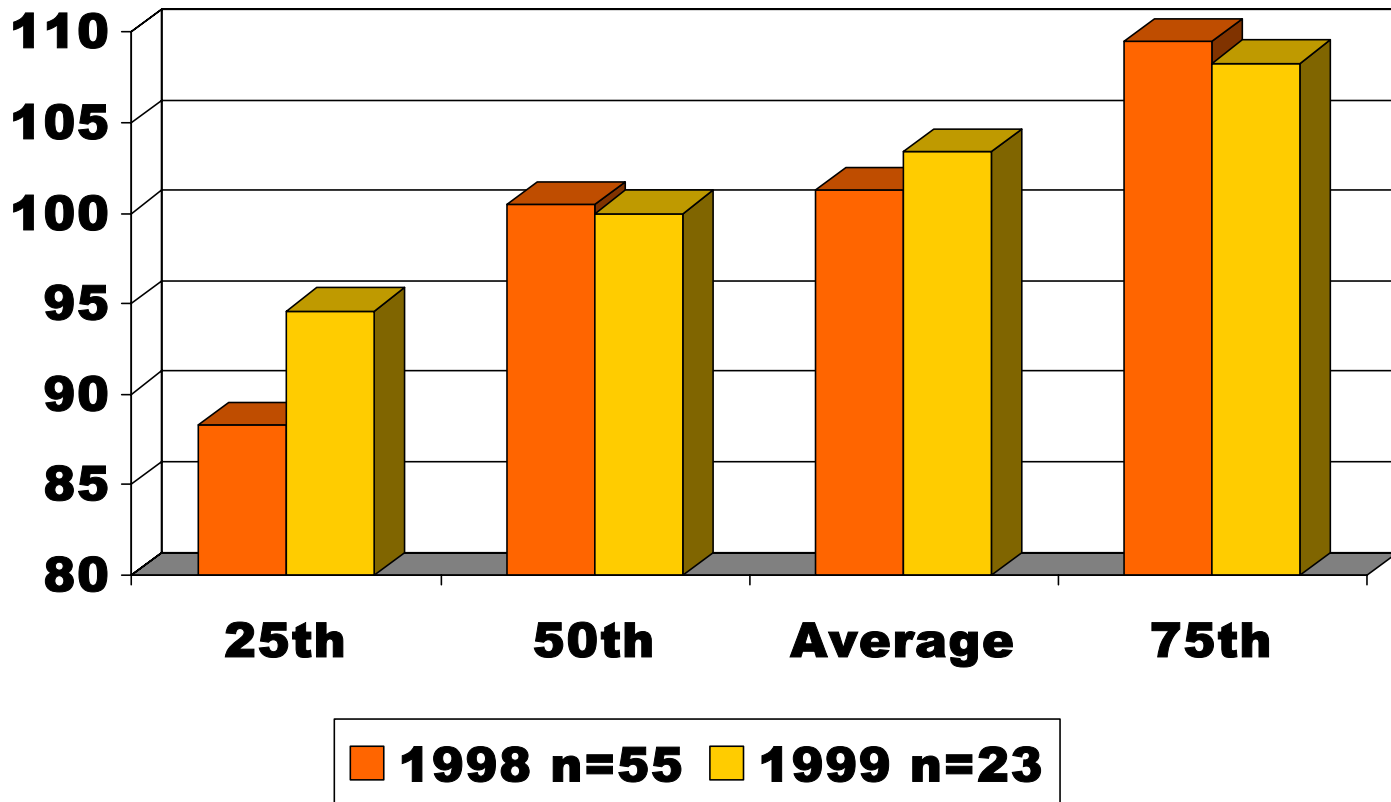
# Liquid Reserve Ratio (new)

- ◆ Definition: Cash and other unrestricted liquid assets divided by the present value of future operating and capital costs and entry fee refunds
- ◆ Meaning: Portion of future obligations that are funded by cash instead of bricks and mortar
- ◆ Use: ?

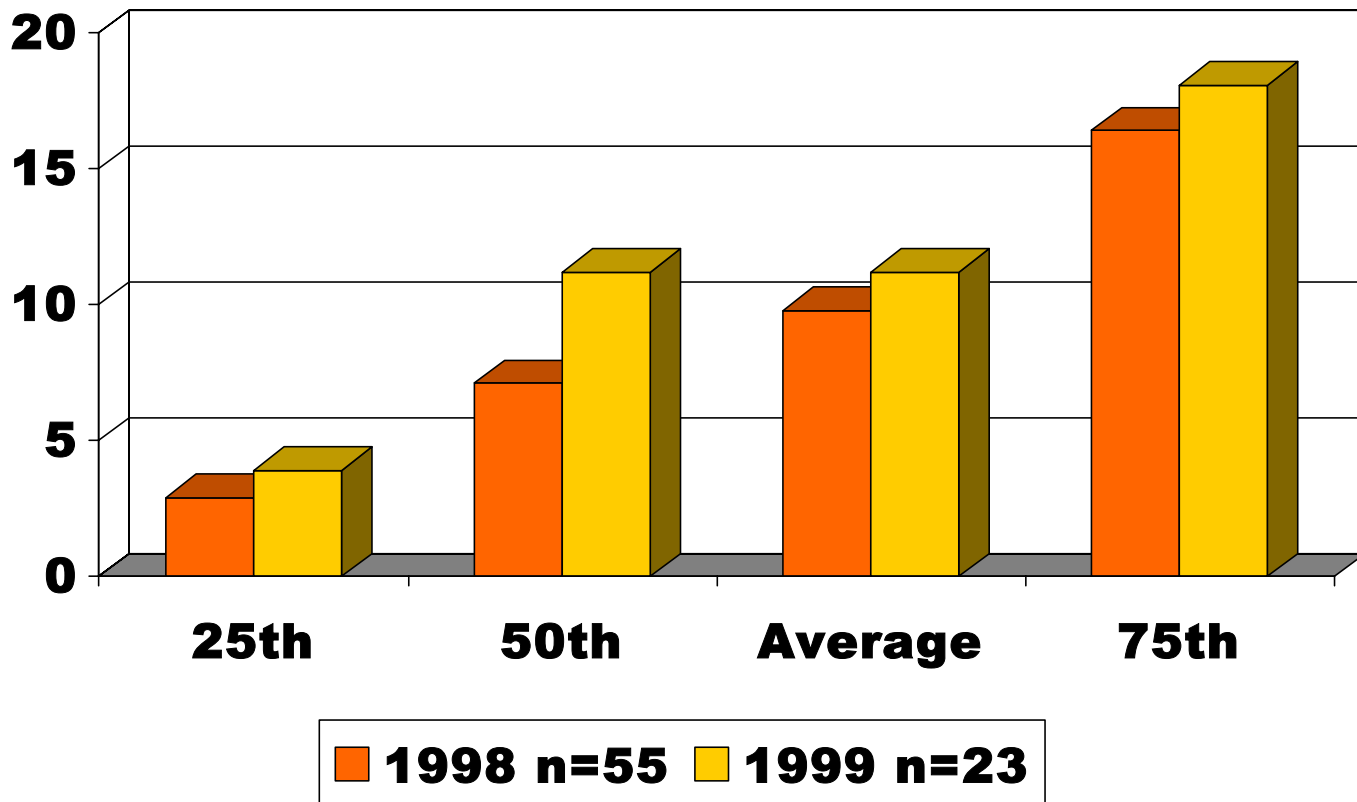
# Actuarial Ratio Distribution



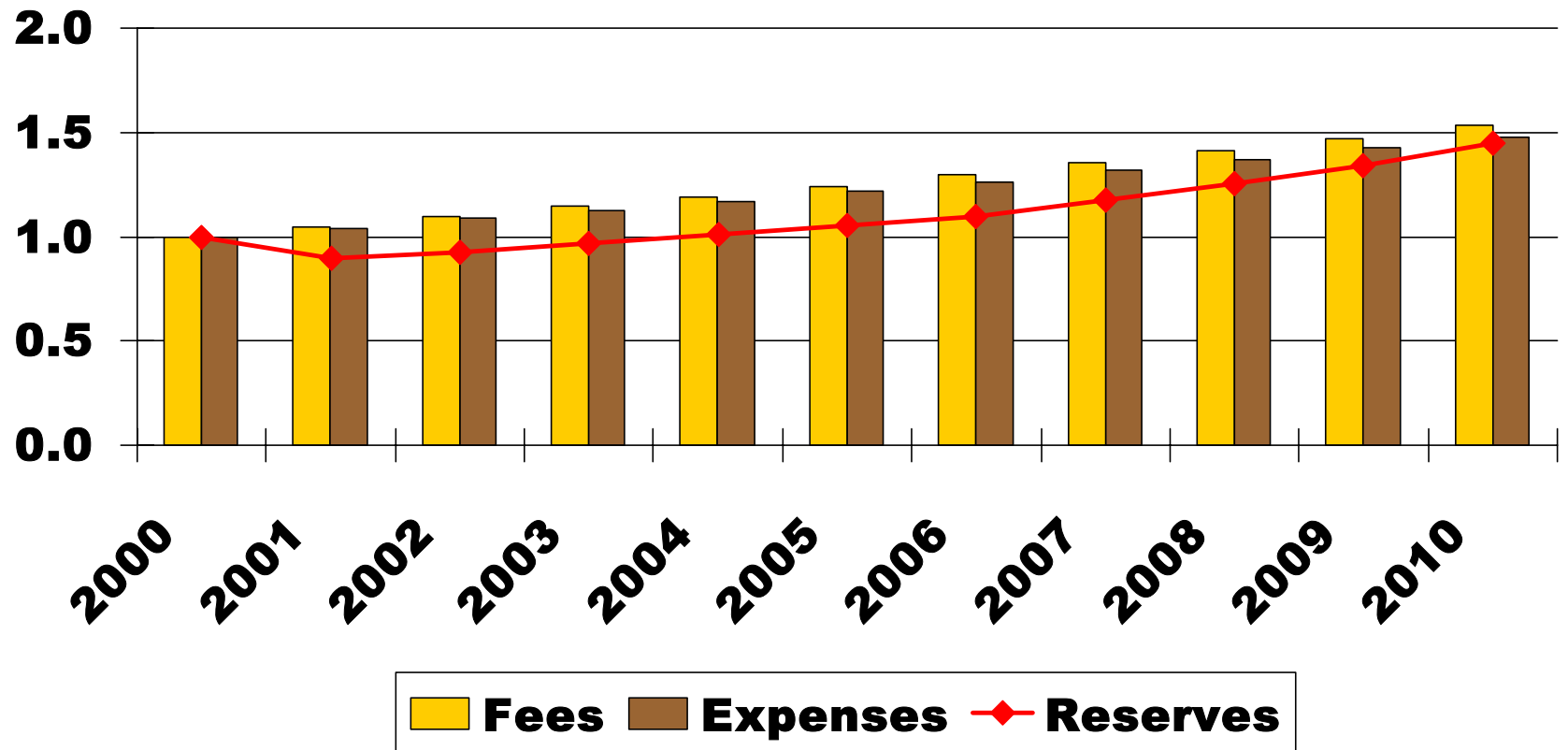
# Funded Status Distribution



# New Entrant Contract Surplus Distribution

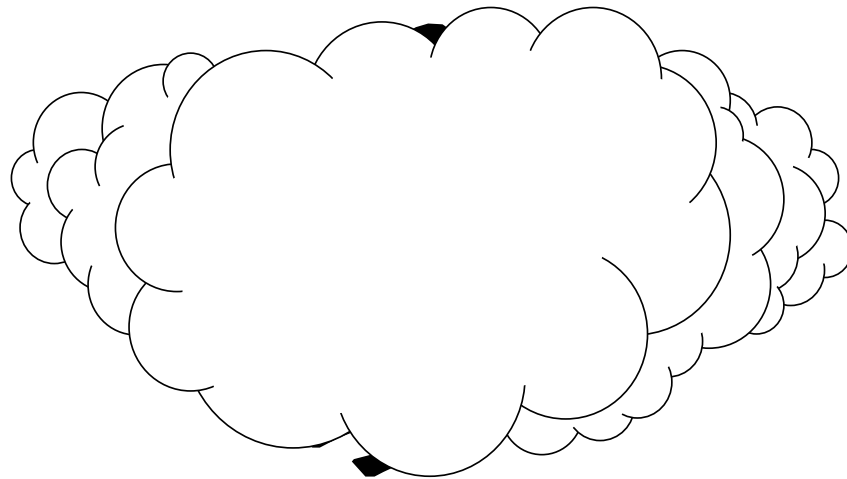


# Relationship between Fees, Expenses, and Reserves



# Resident Assessments

- ◆ HLR: Health & Lifestyle Review
- ◆ MAP: Moorings Assessment Protocol
- ◆ SF-36: Short Form 36



# Individual Choices

- ◆ Residents want to select services
- ◆ Continuing care contracts are really funding options
- ◆ Next generation CCRCs will allow residents to define funding to meet their needs and still be financially adequate
- ◆ Marketing is

