

Key Financial Statistics for CCRCs and Projecting Apartment Turnover



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OVERVIEW

- ◆ What are the key financial statistics?
- ◆ How are the statistics determined?
- ◆ How should the statistics be used and what do they tell financial analysts?

Key Financial Statistics

◆ Input Assumptions

- Actuarial decrement
- Occupancy
- Entry age
- Gender
- Apartment density

Process for Projecting Future Population Flows for a CCRC

- ◆ Select assumptions from inconsistent sources
OR
- ◆ Analyze data and select appropriate “actuarial decrement” assumptions
- ◆ Develop computer model for CCRC
- ◆ Interpret results for planning decisions

Source of Actuarial Assumptions: before 1976

?

Source of Actuarial Assumptions: 1979-2004 (Medical Model)

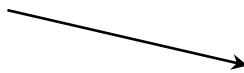
5,000 Life Years of
Experience for
Credible Data Set



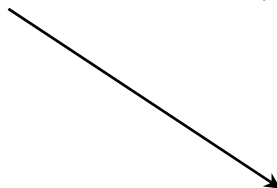
Move Out



Transfer to ALU



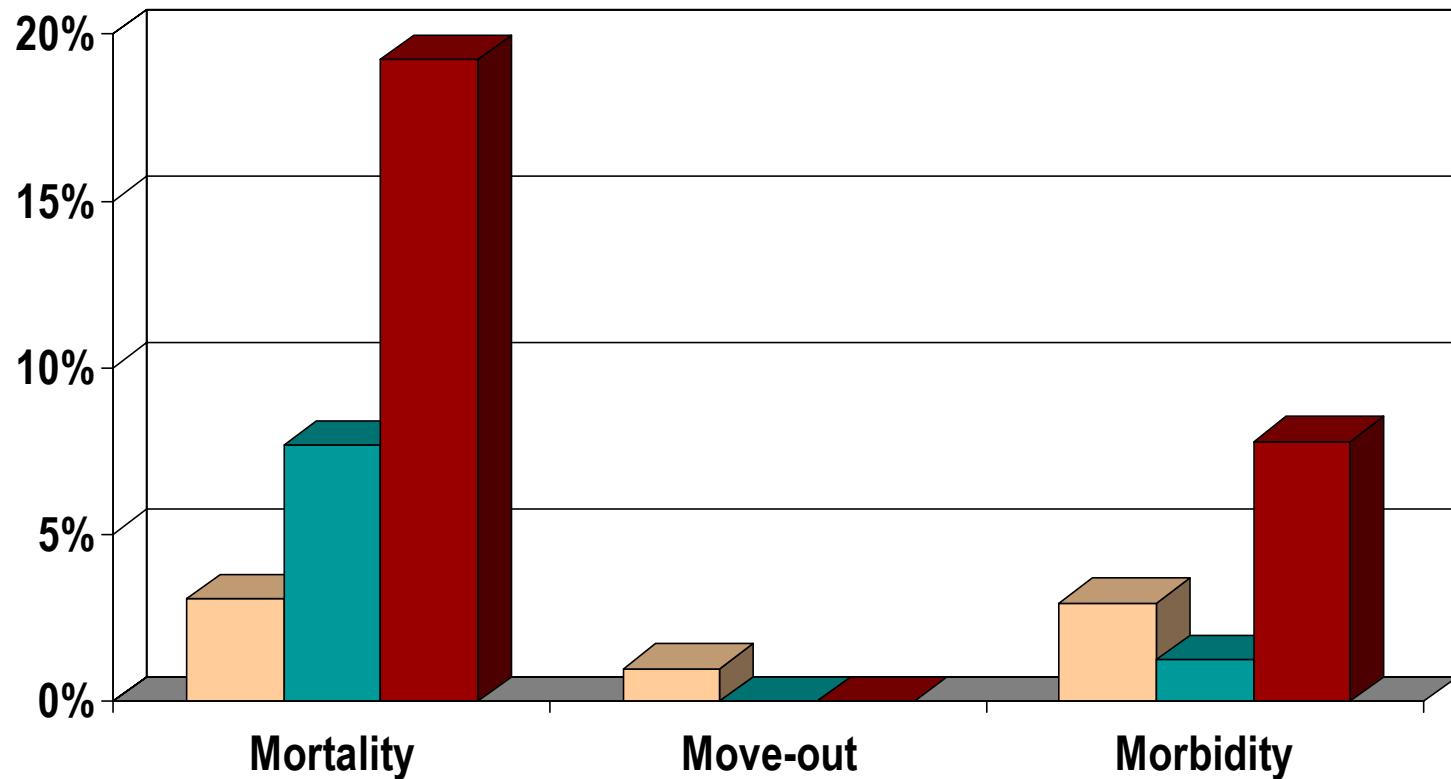
Transfer to NUR



Die (Not Survive)

12 Sets of Probabilities
for a CCRC That Offers
Three Levels of Care

Actuarial Decrement Assumptions

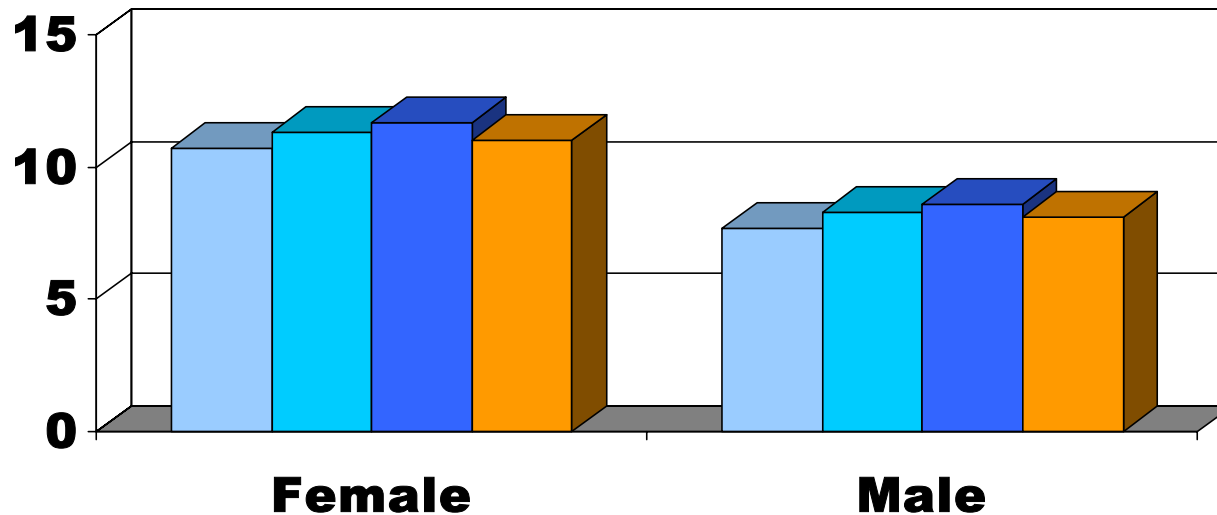


Source of Actuarial Assumptions: 2005+ (Disability Model)

Typical entrant to apartment	0 ADL limitations	1 or 2 IADL limitations
Home care resident	1 ADL limitation	1 or 2 IADL limitations
Assisted living resident	2 or 3 ADL limitations	3 IADL limitations
Nursing care resident	4 or more ADL limitations	4 or more IADL limitations

Life Expectancy Comparison with Similar CCRCs

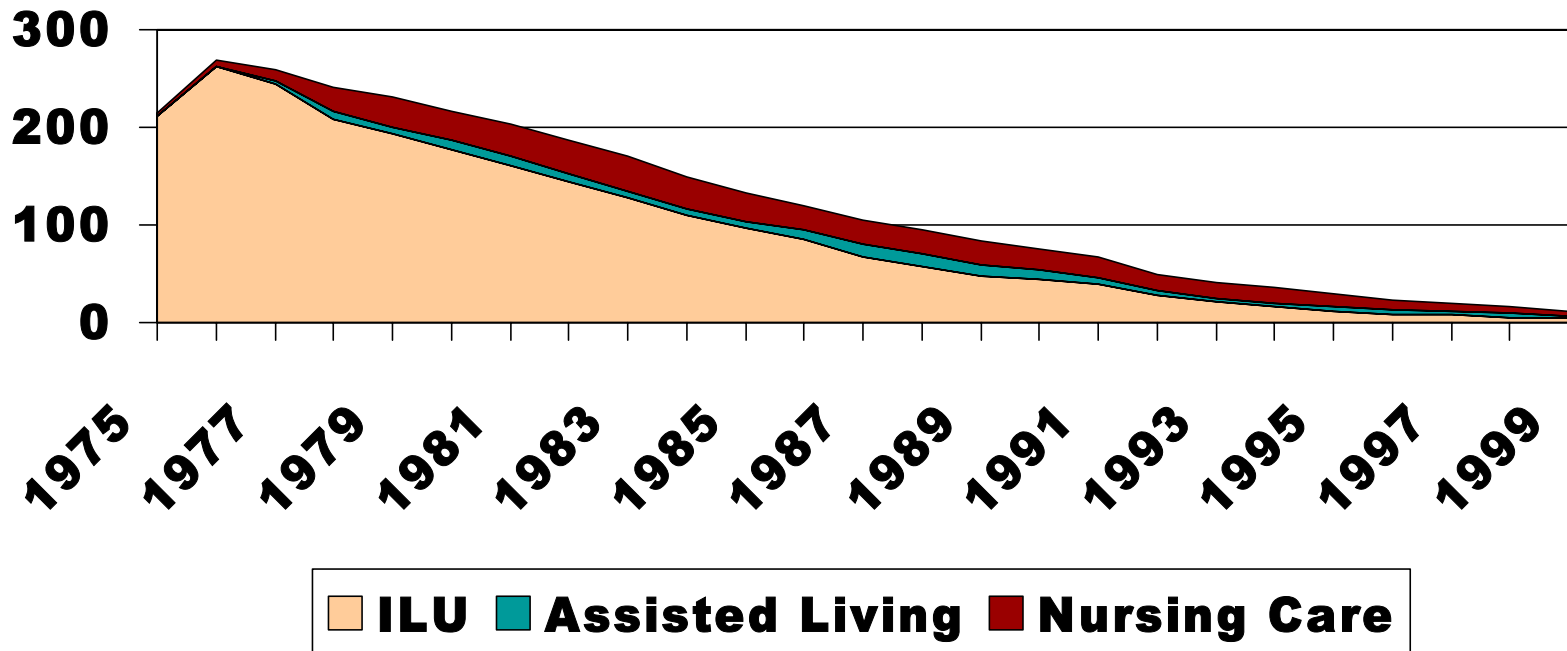
Age-80 Entrant



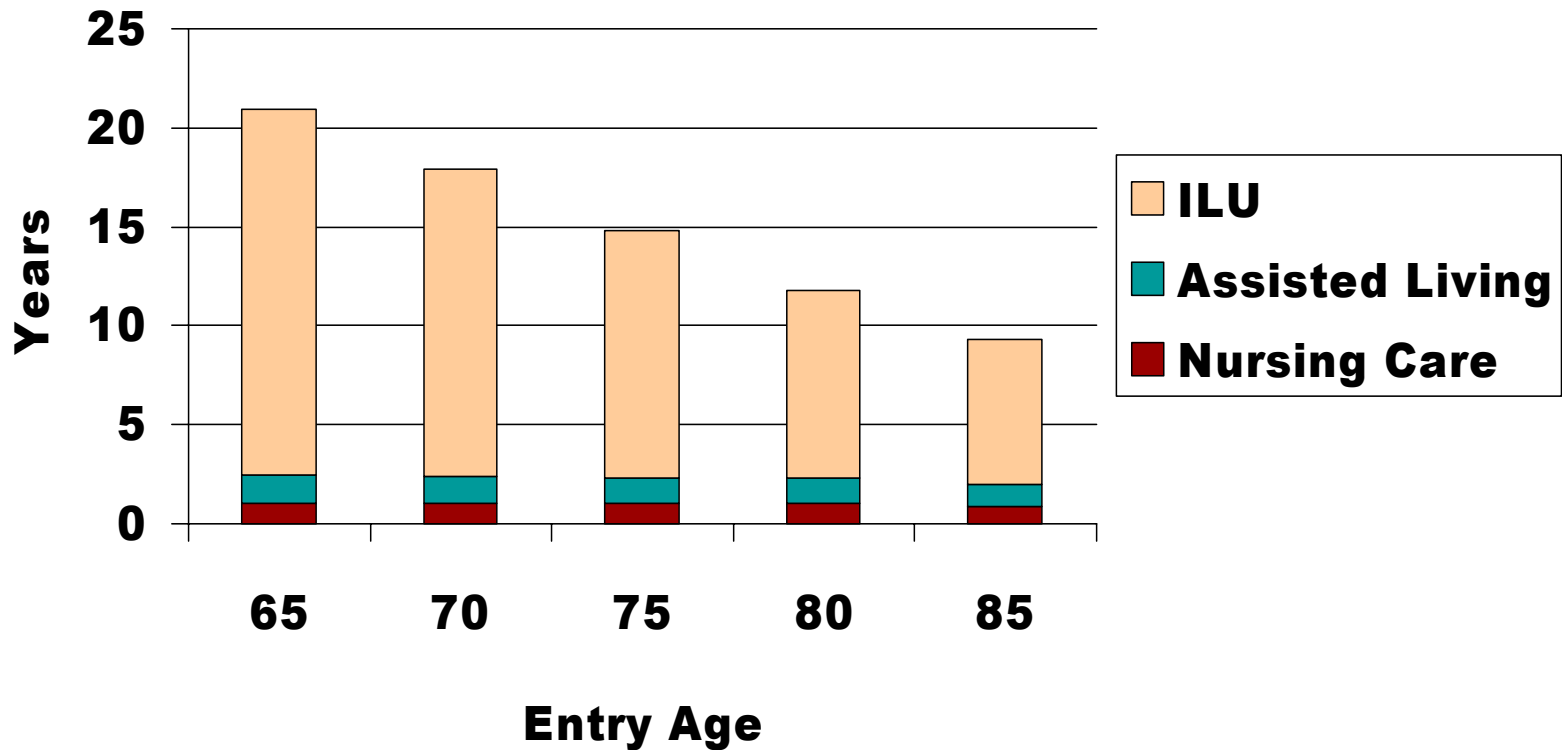
■ AVP 25th ■ AVP 50th ■ AVP 75th ■ AVP average

Case Study Survivorship Curve for Initial Cohort

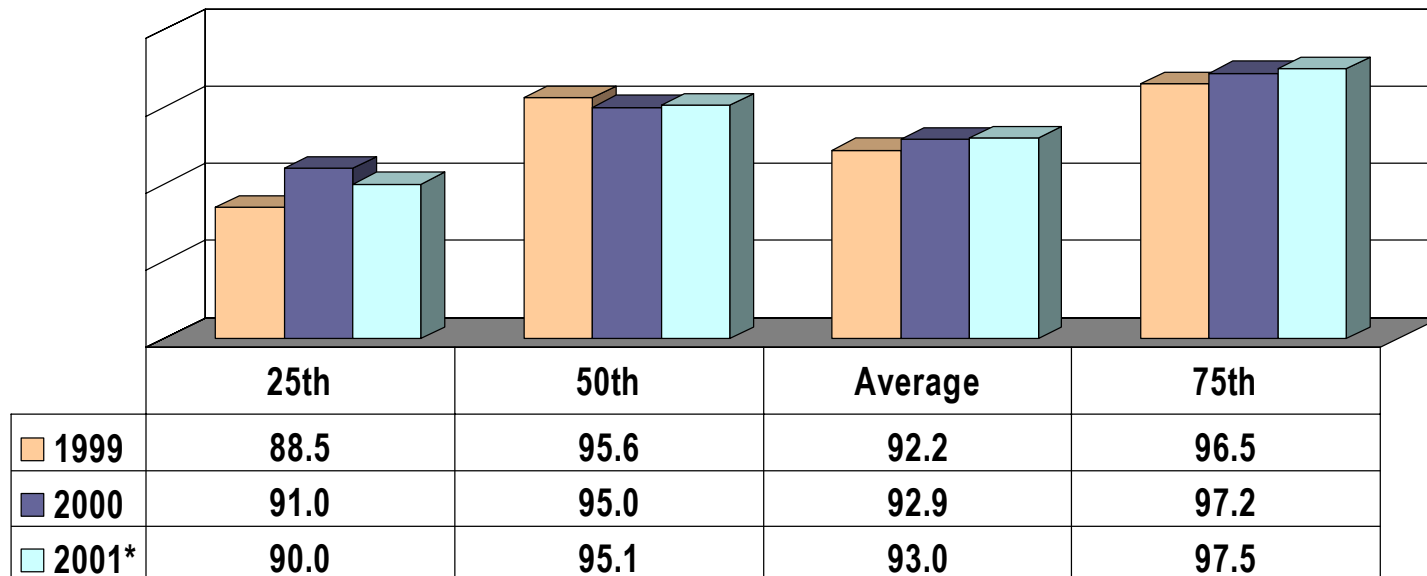
285 Residents; Avg Age=77; Females=77%



Expected ILU Female Health Care Usage

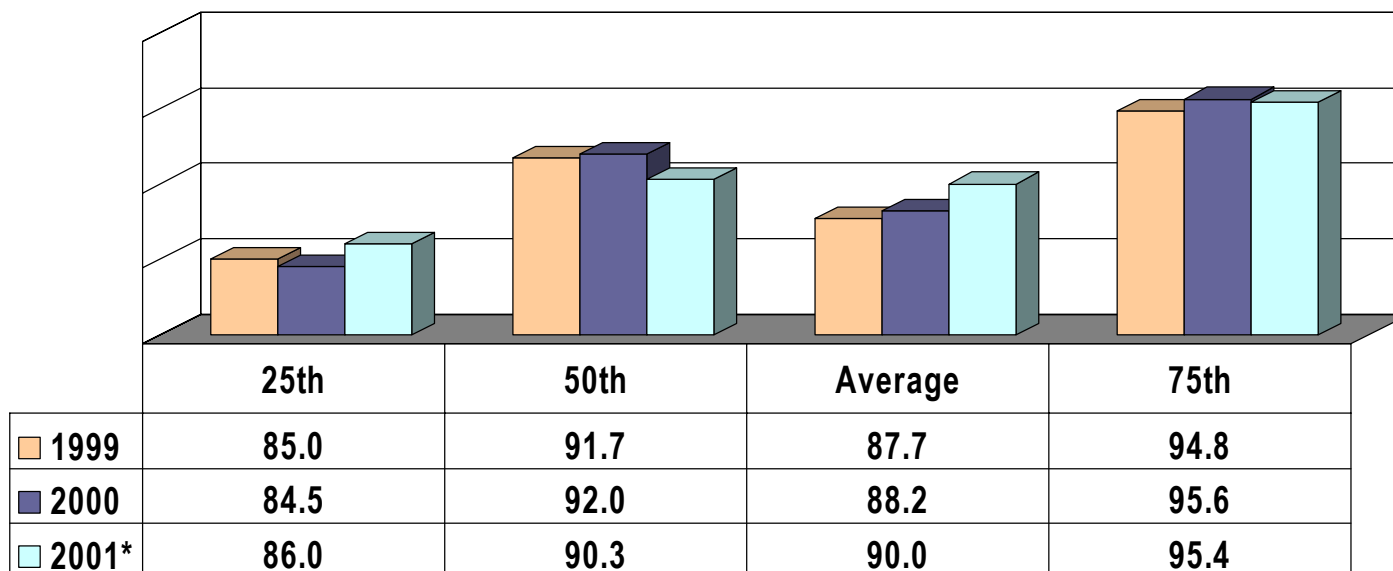


Average ILU Occupancy



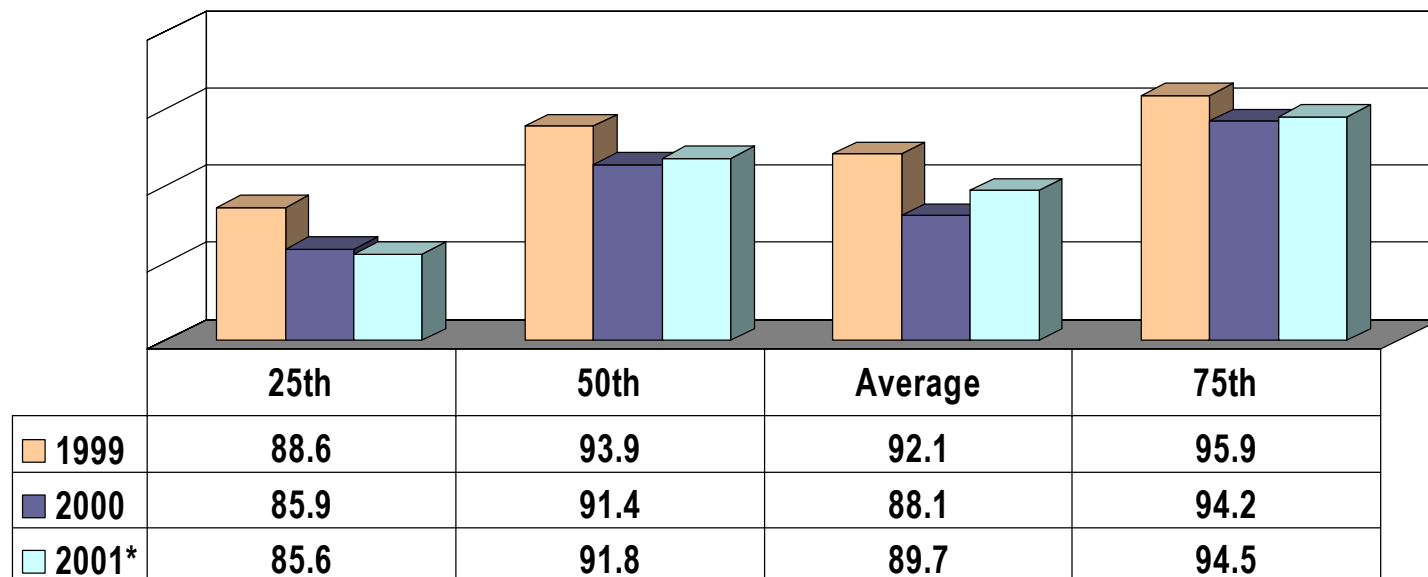
Percentages

Average ALU Occupancy



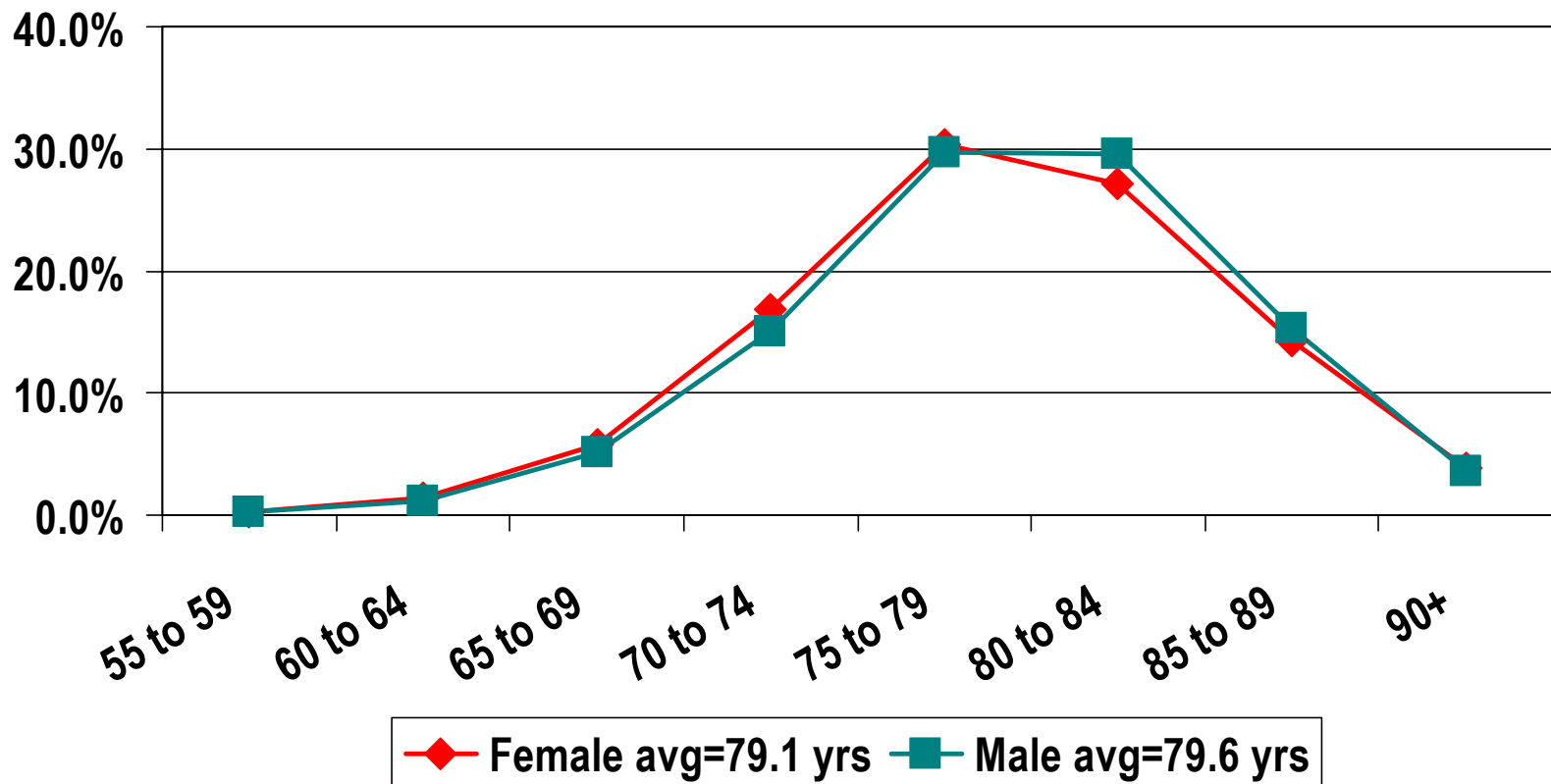
Percentages

Average NUR Occupancy

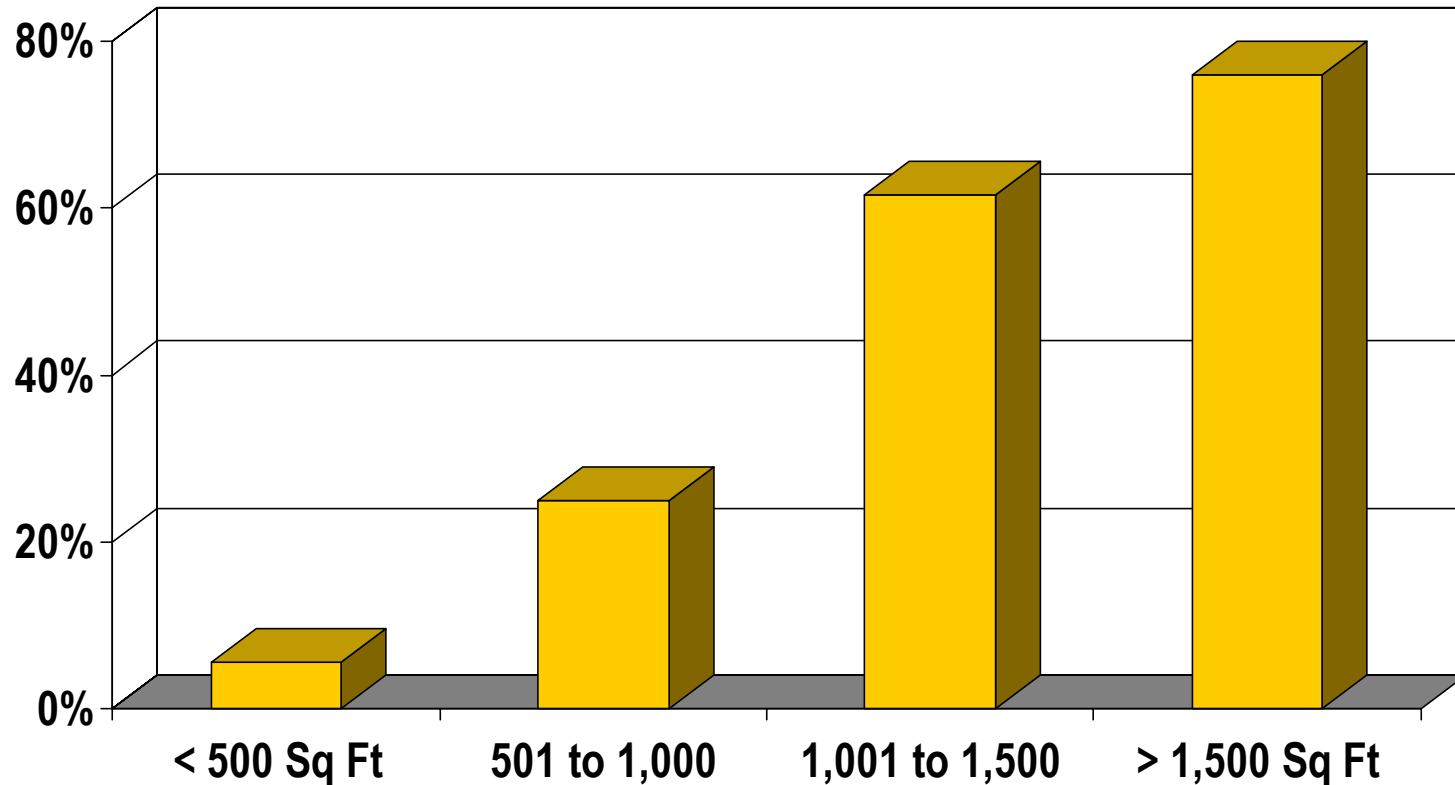


Percentages

Entry Age Distribution (1995 to 1999)



Apartment Density (1995 to 1999)



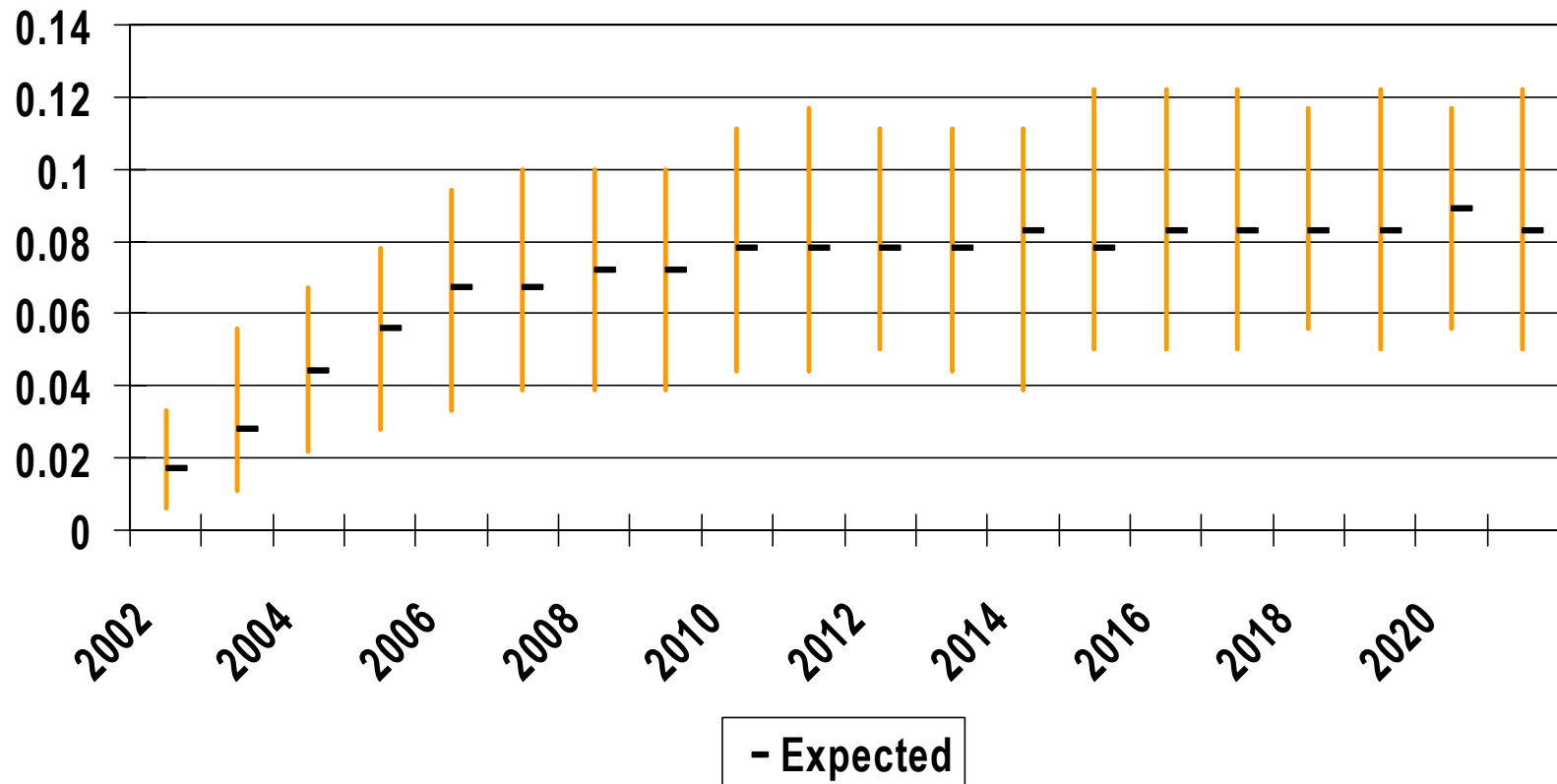
Key Financial Statistics

- ◆ Output assumptions
 - Turnover
 - Health care usage
 - Debt coverage ratio and cash-to-debt ratio
 - Actuarial funded status
 - ~ Future service obligation

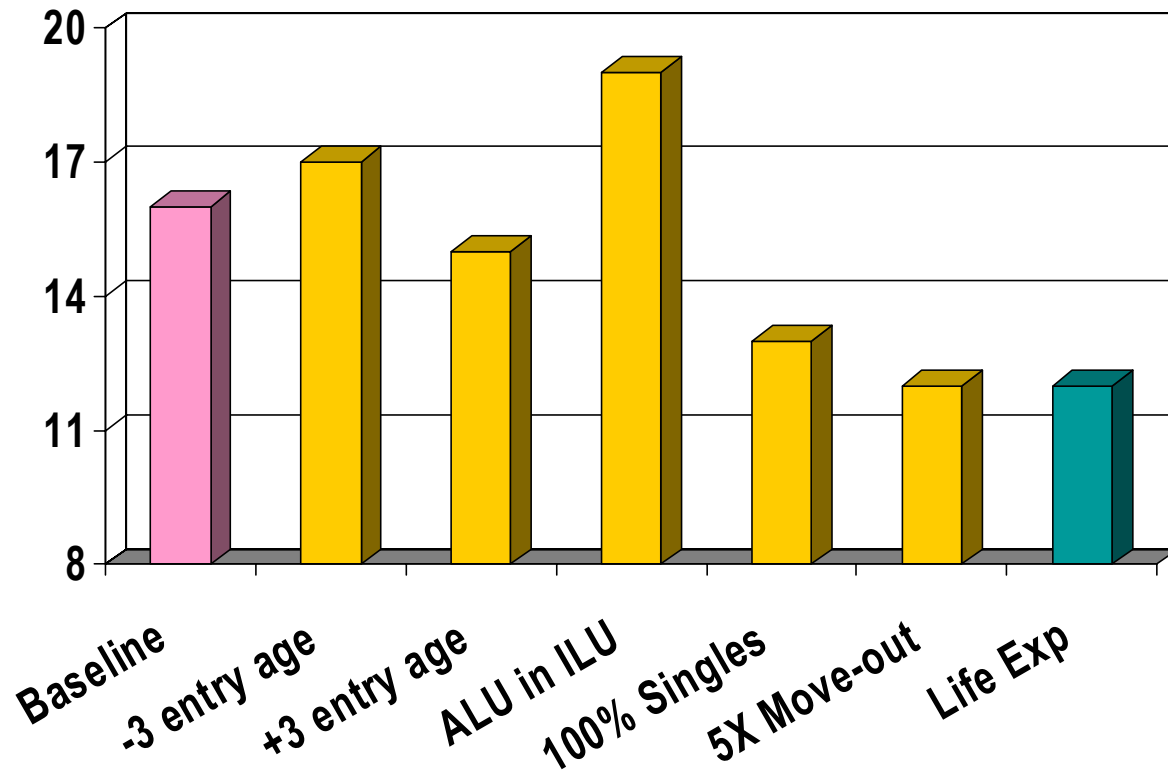
Steps in Actuarially-based Population Flow Projection

- ◆ Identify current census
 - Number of residents as of
 - Average age
 - Average years in community
 - Percentage female
- ◆ Apply actuarial decrements to project:
 - Deaths, move-outs, and transfers
 - Couple density, average health care usage by level
- ◆ Generate sensitivity projections

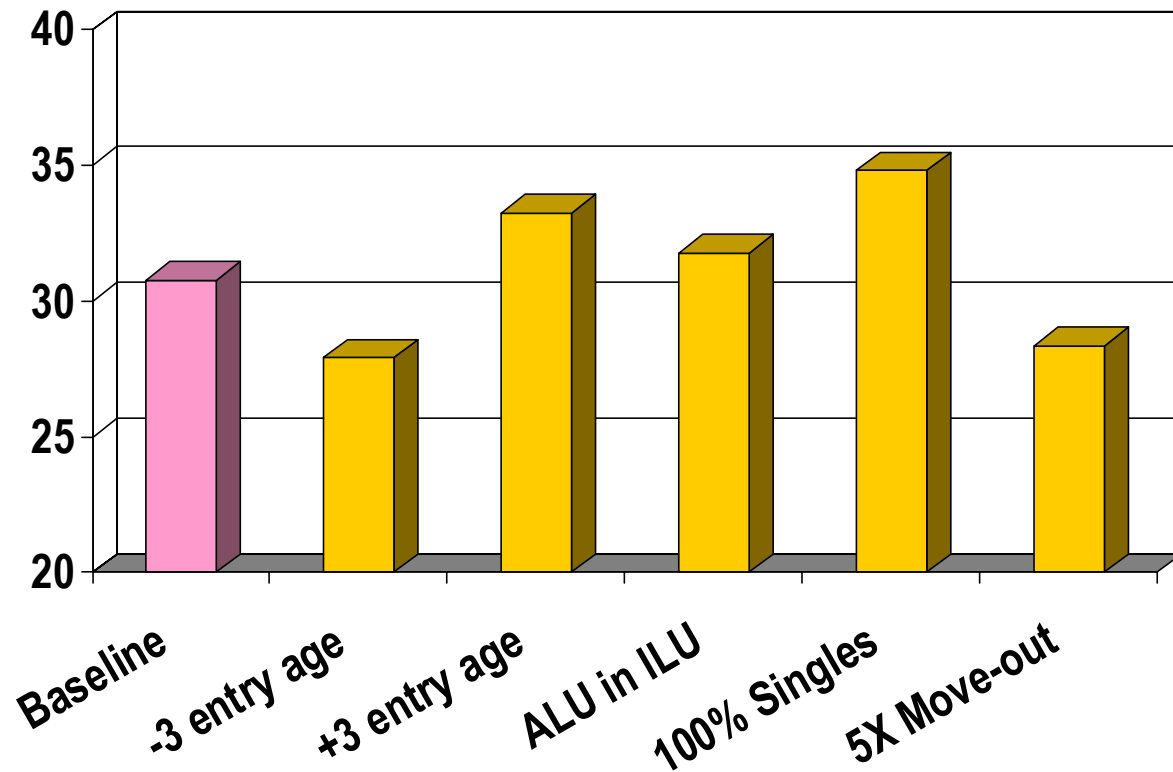
Expected and Potential Variation in Apartment Turnover



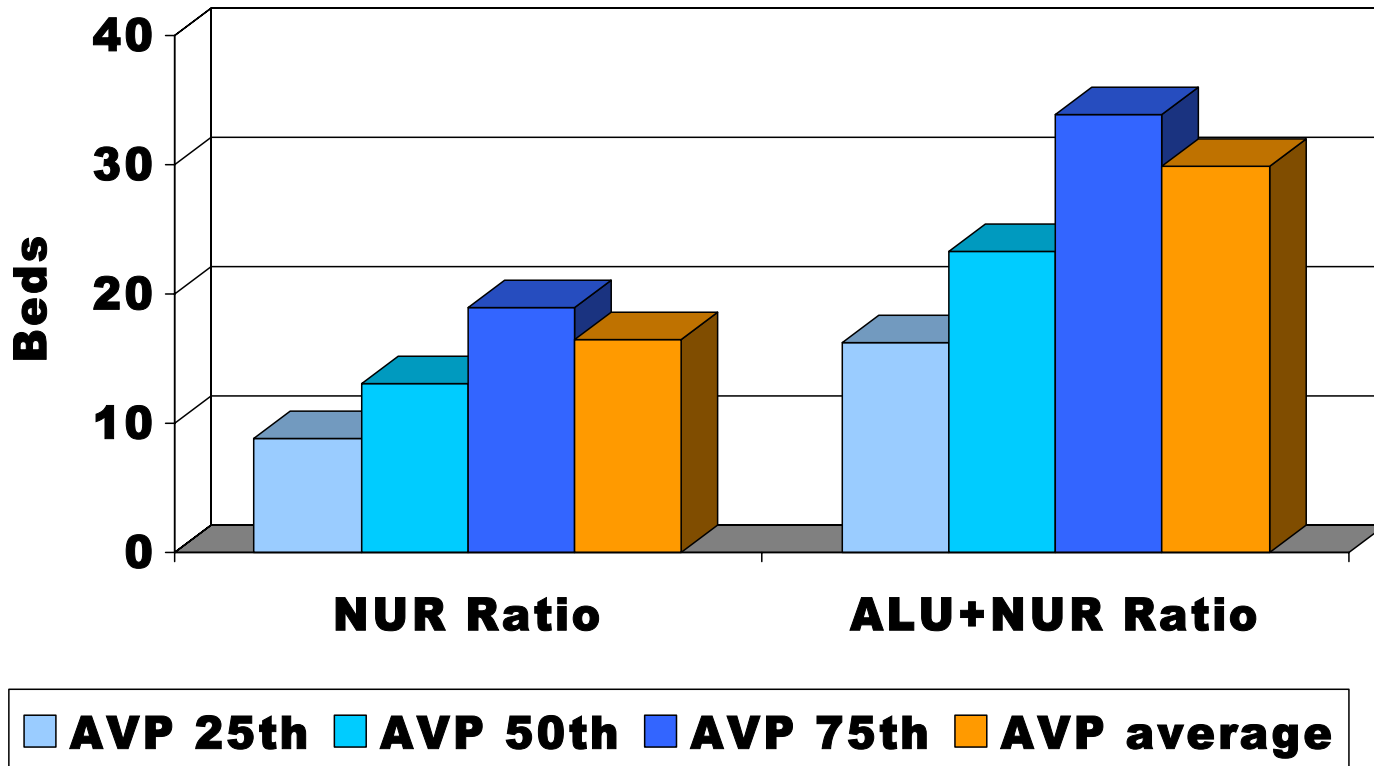
Number of Years for 100% Turnover



ALU + NUR Projected Needs

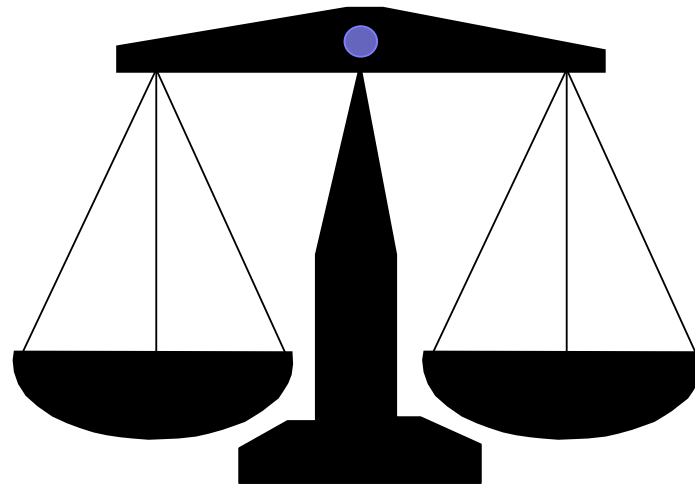


How Does Projected Usage Compare with Similar CCRCs?



General Definition of Solvency

- ◆ Do the assets of your organization equal or exceed your liabilities?



Hierarchy of Solvency Criteria

- ◆ Level One (Residents)
 - Cash inflows projected to exceed cash outflows
 - No technical defaults of loan covenants
- ◆ Level Two (Regulators/Financing Institutions)
 - Projected accumulation of significant reserves
 - DSR and cash-to-debt ratios exceed targets
- ◆ Level Three (Board and Management)
 - Meets criteria for satisfactory actuarial balance

Solvency Measures in Bond Covenants

- ◆ Minimum debt service coverage requirements
- ◆ Possible cash-to-debt thresholds
- ◆ Concerned only with ability to repay bonds, not obligations to residents

Solvency Measures using Ratio Analysis

- ◆ Is there a “magic set” (high statistical correlation) of ratios that would indicate that a CCRC is solvent?
- ◆ If so, how does it vary and what are criteria for:
 - **Mix of contract types**
 - **Age of facility**
 - **Unit configuration**

Solvency Measures from Feasibility Study

- ◆ Five-year financial projection is too short to uncover long-term pricing problems
- ◆ Expectation that \$0 GAAP future service obligation means that all liabilities are fully funded

~ Future Service Obligation (FSO)

- ◆ GAAP amortization generally recognizes too much entry fee income too soon
- ◆ FSO—good name, wrong implementation
 - Employs actuarial techniques
 - Liquidation liability
 - Excludes certain expenses
 - Focus should be on “net assets” value from GAAP balance sheet

ASOP No. 3 Conditions for Satisfactory Actuarial Balance

- ◆ Developed by American Academy of Actuaries Committee on CCRCs
- ◆ Adopted by Actuarial Standard Board, July 1994
- ◆ Defines three criteria to be tested by:
 - **Condition 1—Actuarial balance sheet**
 - **Condition 2—Cohort pricing analysis**
 - **Condition 3—Cash flow projection**

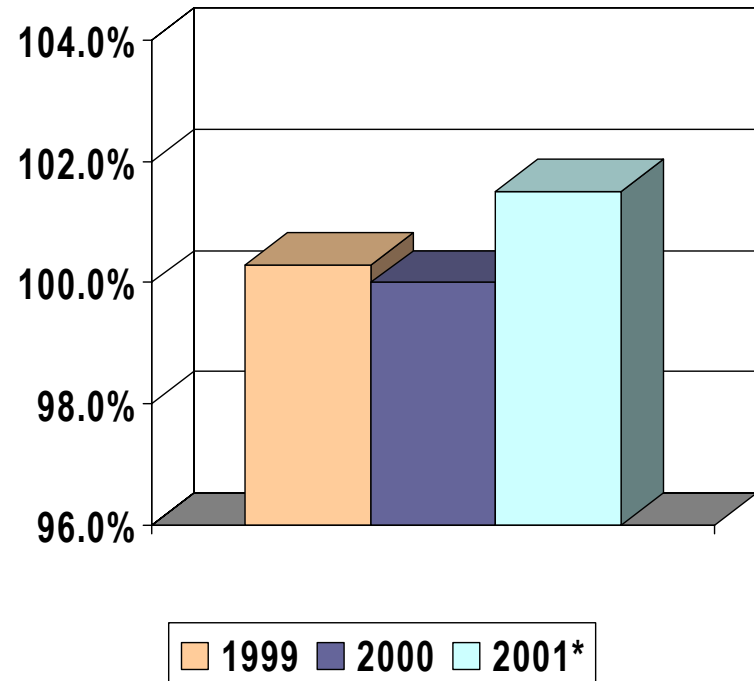
Condition 1:

Funded Status \geq 100%

- ◆ Are the resources available for current residents greater than or equal to the actuarial present value of the expected costs of meeting all remaining obligations to such residents under their contracts, with appropriate provision for surplus?
- ◆ Layman's terms—do the reserves held by the organization, which include liquid assets and PP&E, cover the shortfall between future costs and fees?

Empirical Data on Condition 1 Funded Status

- ◆ Median is fully funded
- ◆ Recommended surplus depends on age of facility, mix of continuing care contracts and their risks
- ◆ AVP standards are: 5% to 10% surplus



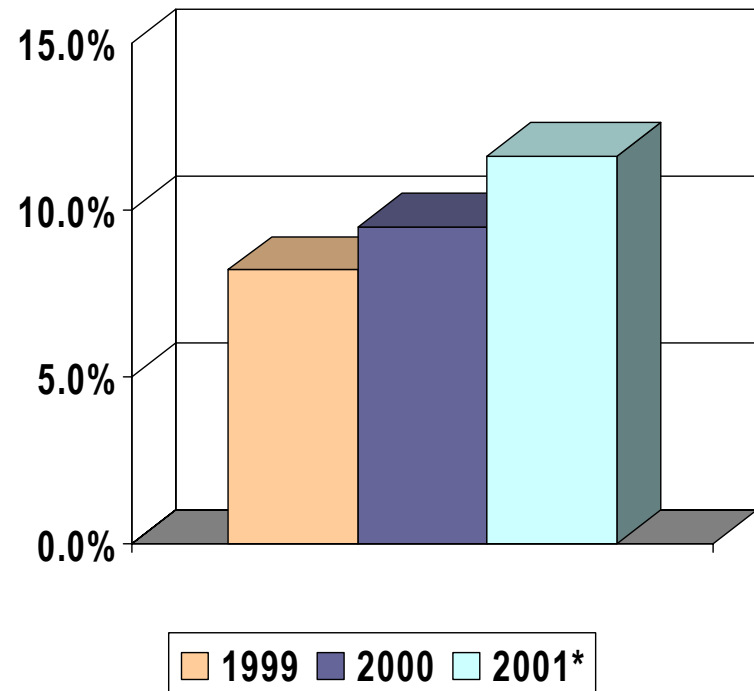
Condition 2:

New Entrant Pricing Surplus $\geq 0\%$

- ◆ Does the sum of entry fees paid plus the actuarial present value of monthly fees equal or exceed the actuarial present value at occupancy of the costs of meeting all obligations for a typical cohort of new entrants, with appropriate provision for surplus?
- ◆ Layman's terms—will the combination of future monthly fees and entry fees cover the expected future costs of care and entry fee refunds for a group a new residents?

Empirical Data on Condition 2 New Entrant Pricing Surplus

- ◆ Median is nearly 12%
- ◆ Recommended surplus depends on size of facility, type of continuing care contract and its risk
- ◆ AVP standards are: 10% to 15% surplus



Condition 3:

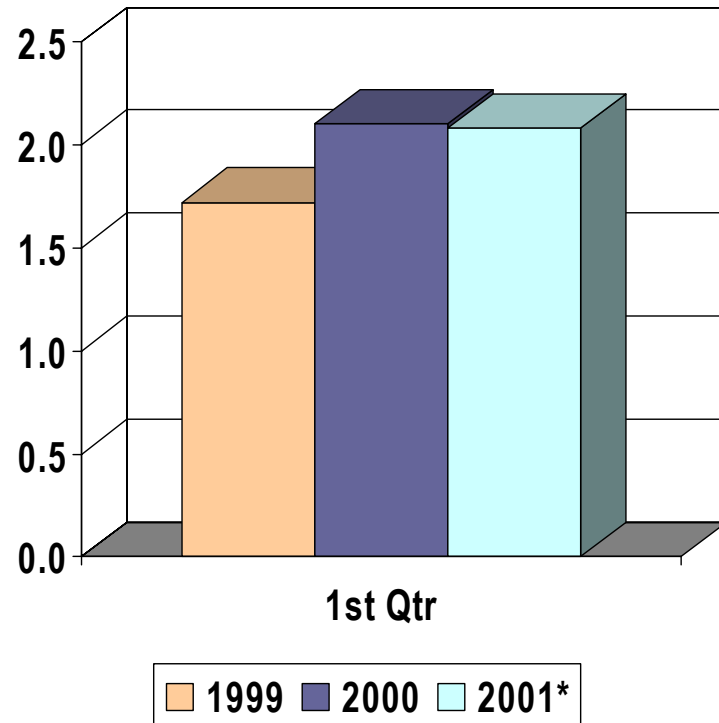
Projected Cash Balances \geq \$0

- ◆ Are positive cash balances projected with respect to current and future residents for a period of at least 20 years?
- ◆ Layman's terms—is the facility projected to generate sufficient cash to pay its expenses?

Empirical Data on Condition 3

Projected Cash Balances

- ◆ Median is increasing cash balances
- ◆ Recommended position is for reserves to at least match increases in expenses since liabilities will increase the same
- ◆ AVP standards are: 1.48 to 1.79 (10-year growth)



Summary

- ◆ Projecting population flows is a key assumption for financial analysis
- ◆ FSO and trends do not reflect CCRC economic reality
- ◆ Ratios are useful for measuring ability to repay debt
- ◆ Methods to achieve satisfactory actuarial balance have become the de facto standard for prudent stewardship