St. Paul Teachers’ Retirement Fund Association – Actuarial Basics

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Funding Objectives

- Intergenerational equity with respect to plan costs.
- Stable pattern of contribution rates.
- Ratio of Assets to Liabilities targeted at 100%.
What Is Needed To Meet Objectives?

- Reasonable forecasts of resources and obligations (i.e., good assumptions).
- Smoothing devices.
  - Level % of payroll funding method (EANC)
  - Market-related asset valuation method
- A sound funding program.
- A sound investment program.
Basic Retirement Funding Equation

Where:

- C is Contribution Income
- I is Investment Return
- B is Benefits Paid
- E is Expenses

"Money In = Money Out"
Basic Retirement Funding Equation

\[ \text{C} + \text{I} = \text{B} + \text{E} \]

- **B** depends on
  - Plan Provisions
  - Experience

- **C** depends on
  - Short Term: Actuarial Assumptions, Actuarial Cost Method
  - Long Term: I, B, E
The Long Term Solution to the Equation

- Pay-As-You-Go Contributions
- CASH BENEFITS
- Investment Income
- Level Contributions
- Employer and Employee Contributions

% of Active Member Payroll

Start
50 ±
Years of Time
SPTRFA Actuarial Contribution Rate as of July 1, 2014 (% of Payroll)

- Contribution for Normal Cost: 9%
- Contribution for Unfunded Actuarial Liability: 13%
- Total: 22%

Compared to Ultimate SPTRFA Rates:
- Member: 7.5%
- Employer: 10.4%
- Additional (ER/State): 3.9%
- Total: 21.8%

- Normal Cost is the value of this year’s benefit accruals.
- On a market value of assets basis, contributions are currently sufficient.
Funding Highlights

- The contribution rate shortfall has been significantly reduced due to higher contribution rates, state support, and favorable investment returns.
- The current ratio of assets to liabilities is 62% (68% on a market value of assets basis) and trending upward.
Governmental Accounting Standards Board (GASB)

- GASB sets accounting rules for public plans and sponsoring employers
- New rules require accounting results separate from funding results
  - Funding calculations are not affected
- Net Pension Liability of $535 million recognized on employer’s balance sheet
- Accounting results expected to be very volatile
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