

MASSACHUSETTS TEACHERS' RETIREMENT SYSTEM
2000-2005 EXPERIENCE STUDY

Findings

Retirement

- Actual Retirements were generally greater than expected, (except female teachers in Retirement Plus with more than 30 years of service)
- Males and females not in Retirement Plus with less than 20 years of service had similar rates of retirement
- For females not in Retirement Plus, there is a significant proportion of the teachers over age 70 that continue working instead of retiring. However, since this cohort is such a small percentage of the population, we will continue to use an assumption of 100% retirement at age 70.

Disability

- There is often a lag between the date of injury of a member and the date of retirement. Our software cannot recognize this lag so we monitor this issue and make adjustments as necessary.
- Actual number of disability retirements about as expected up to age 50.
- Actual number of disability retirements less than expected after age 50, but possibly an aberration (disability rates should increase as members age). We will closely monitor this over next 5 years.
- Actual ratio of accidental disability to ordinary disability retirements about as expected over the 5-year period, but over the past 3 years, the ratio is less than expected. We will closely monitor this over the next 5 years.

Withdrawal

- Measuring withdrawal (termination) rates continues to be a challenge. Therefore, our rates for this assumption tend to be more conservative than retirement and disability
- For males, actual terminations are greater than expected for most years of service
- For females, actual terminations are greater than expected for most years of service

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Findings (continued)

Salary Increases

- Like withdrawal rates, accurately measuring salary increases continues to be a challenge. Therefore, our assumptions tend to be more conservative than retirement and disability rates.
- The ultimate rate for salary increases remained the same but the period was shortened
- Reliability of results questionable due to numerous salary changes made in annual valuation data

Post-Retirement Mortality

- Overall, mortality somewhat less than expected but data issues may influence this understatement
- Male mortality slightly less than expected in all years
- Female mortality greater than expected in most years
- Recent retiree data is more credible than past data for retirees; 2006 experience (although beyond the scope of the study) appears the most reliable and also provides the best match of the actual and expected for both males and females
- Total disabled mortality somewhat greater than expected; gender allocation and small sample make it difficult to assess
- Mortality not significantly different by Group
- This assumption will continue to be monitored each year as we perform the actuarial valuation. We did not change this assumption because of issues reconciling the actual number of deaths due to data issues for most of the 6-year period of our study.