



Minnesota
Legislative
Commission on
Pensions and
Retirement

**July 1, 2016 Actuarial Review and
TRA Replication Valuation Results**

April 18, 2017

Agenda

Summary of Recently Completed Projects

- Statewide Pension Systems Review
- Replication Valuation – Teachers Retirement Association

Statewide Pension Systems Review

Results of Retirement Systems Review

A comprehensive actuarial review of statewide retirement systems was conducted in accordance with Minnesota Statutes, Section 356.214, Subdivision 4, as directed by the Minnesota Legislative Commission on Pensions and Retirement.

Scope

- Assess reasonableness and reliability of July 1, 2016 actuarial reports
- Determine compliance with:
 - Minnesota Statutes
 - Standards for Actuarial Work of the LCPR
 - Applicable actuarial standards of practice

Process

- Reviewed census data and asset information for accuracy
- Reviewed detailed sample life output from each actuary's valuation software (93 participant lives reviewed this year)
- Compared assumptions, plan provisions and valuation reports to applicable standards and recent experience studies
- Discussed findings with retained actuaries and incorporated feedback where appropriate

Results of Retirement Systems Review

No errors or corrections that would significantly impact the calculation of liability or contribution amounts

Overall Recommendations

- Change LCPR standards so the actuary can assume that participants may elect refund of Employee Contributions even when not the most valuable benefit available
- Actuarial valuation reports for each plan should demonstrate the sensitivity of the discount rate assumption on key metrics
- Actuarial valuation reports for each plan should demonstrate the sensitivity of the threshold year for higher post-retirement benefit increases (COLA) on key metrics
- Consider best practices in funding methods between the Systems, their actuaries, and the Commission
- Update early retirement and optional benefit forms to be consistent with results of the most recent experience study

System-specific Recommendations

- A handful of minor recommendations
- Impacts on liability were limited to a fraction of a percentage point

Replication Valuation – Teachers Retirement Association

Matching Valuation Results: TRA

An actuarial valuation replication of the Teachers Retirement Association of Minnesota (TRA) Retirement Plan as of July 1, 2016 was conducted in accordance with Minnesota Statutes, Section 356.214, Subdivision 4, as directed by the Minnesota Legislative Commission on Pensions and Retirement.

Scope

- Similar to all other plans included in the Statewide Pension Systems Review, determine compliance with:
 - Minnesota Statutes
 - Standards for Actuarial Work of the LCPR
 - Applicable actuarial standards of practice
- Perform replication of July 1, 2016 actuarial valuation

Process

- Program the data, assumptions and plan provisions into our valuation software and replication valuation
- Compare our results to retained actuary's and discussed differences
- Address significant differences in:
 - Present Value of Benefits (PVB)
 - Actuarial Accrued Liability (AAL)
 - Normal Cost

Matching Valuation Results: TRA

Again, no errors or corrections that would significantly impact the calculation of liability or contribution amounts

(Dollars in thousands)	TRA Valuation	Deloitte Replication Valuation	Difference
Present Value of Benefits	\$ 30,950,072	\$ 31,244,863	0.95%
Actuarial Accrued Liability	\$ 26,716,216	\$ 26,883,504	0.63%

Required Contribution (as % of payroll)	18.72%	19.09%	0.37%

Recommendations

- Value the death benefit paid when a member dies after termination but before commencing benefits (estimated 0.2% impact on overall liability)
- Use active mortality assumption for vested terminated participants during period prior to benefit commencement (estimated <0.1% impact on overall liability).
- Similar recommendations to those noted for all other plans/systems covered in LCPR Review