Retirement Systems of Minnesota

Minnesota State Retirement System • Public Employees Retirement Association • Teachers Retirement Association

Retirement Plan Design Study

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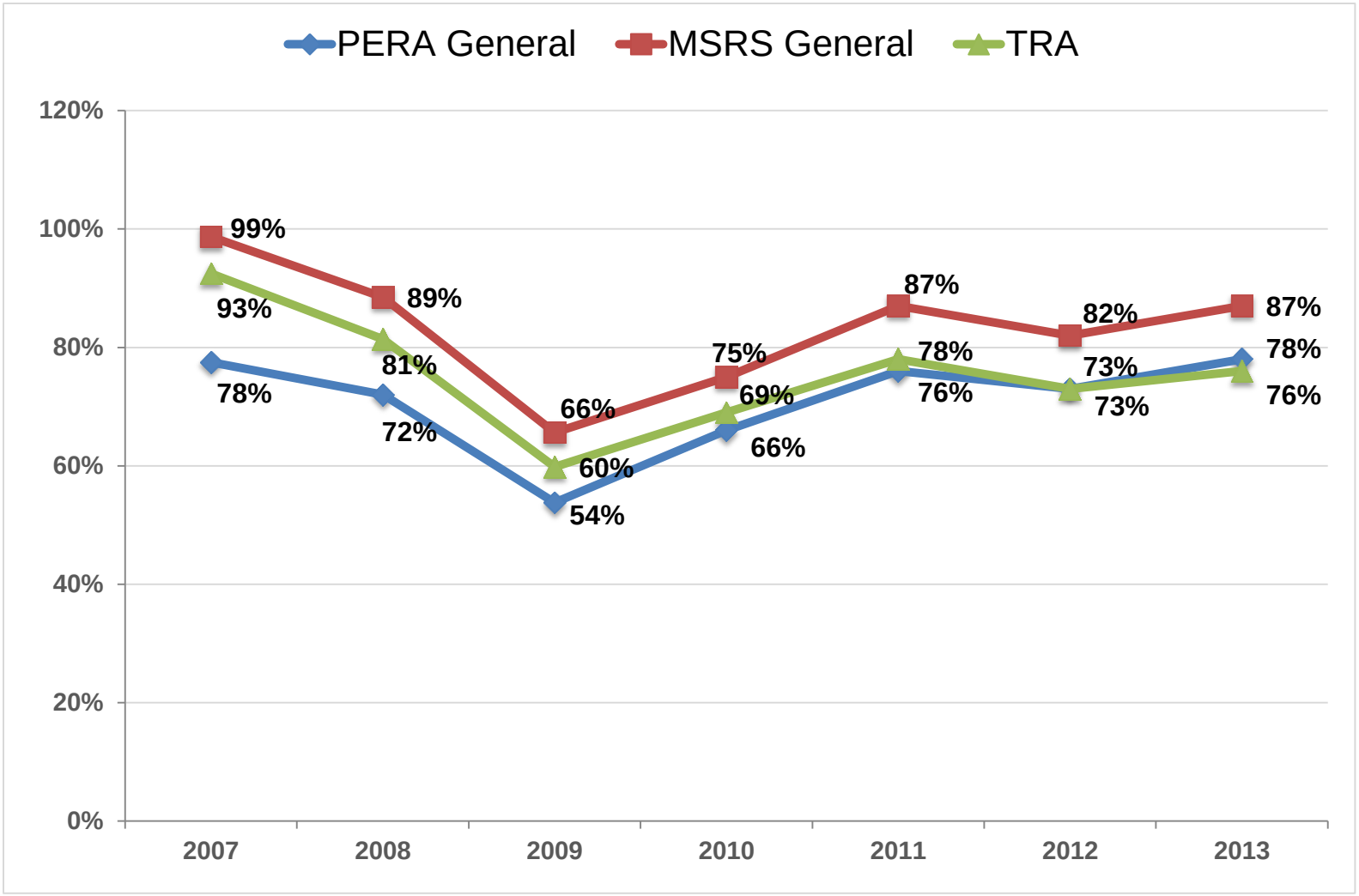
Background on plan design study

- 2010 sustainability legislation required state retirement plans to study retirement plan design options.
- In 2010, the retirement systems had investment losses as a result of the Great Recession and significant reforms were enacted to stabilize the systems' finances.
- Since 2010, systems have rebounded due to the benefit reforms enacted in 2010 and 2013 and good investment returns.

Funds rebound from market downturn



MSRS General Plan

MSRS GENERAL	FY2009 (MV)	FY2010 (MV)	FY2011 (MV)	FY2012 (MV)	FY2013* (MV)
Funded ratio	65.6%	75%	87%	82.1%	86.2%
Assets	$6.9 billion	$7.6 billion	$9.2 billion	$9.1 billion	$10.0 billion
Liabilities	$10.5 billion	$10.3 billion	$10.6 billion	$11.1 billion	$11.6 billion

*Estimate; final numbers due December.

MSRS State Patrol

STATE PATROL	*FY2009 (MV)*	*FY2010 (MV)*	*FY2011 (MV)*	*FY2012 (MV)*	*FY2013* (MV)*
Funded ratio	***62.0%***	***71.5%***	***81%***	***72.3%***	***79.5%***
Assets	***$450 million***	***$488 million***	***$568 million***	***$549 million***	***$594 million***
Liabilities	***$725 million***	***$683 million***	***$701 million***	***$761 million***	***$747 million***

*Estimate; final numbers due December.

MSRS Correctional

CORRECTIONAL	*FY2009 (MV)*	*FY2010 (MV)*	*FY2011 (MV)*	*FY2012 (MV)*	*FY2013* (MV)*
Funded ratio	***55.6%***	***61.7%***	***71.3%***	***68.1%***	***72.4%***
Assets	***$456 million***	***$525 million***	***$646 million***	***$659 million***	***$748 million***
Liabilities	***$821 million***	***$851 million***	***$907 million***	***$968 million***	***$1.0 billion***

*Estimate; final numbers due December.

PERA General Plan

PERA GENERAL	FY2009 (MV)	FY2010 (MV)	FY2011 (MV)	FY2012 (MV)	FY2013* (MV)
Funded ratio	**53.8%**	**66.0%**	**76%**	**73.0%**	**78%**
Assets	**$10.0 billion**	**$11.3 billion**	**$13.6 billion**	**$13.6 billion**	**$15.1 billion**
Liabilities	**$18.8 billion**	**$17.2 billion**	**$17.9 billion**	**$18.6 billion**	**$19.4 billion**

*Estimate; final numbers due December.

PERA Police + Fire

PERA P&F	*FY2009 (MV)*	*FY2010 (MV)*	*FY2011 (MV)*	*FY2012 (MV)*	*FY2013* (MV)*
Funded ratio	***63.6%***	***74.7%***	***83.6%***	***78%***	***86.1%***
Assets	***$4.0 billion***	***$4.5 billion***	***$5.3 billion***	***$5.8 billion***	***$6.3 billion***
Liabilities	***$6.3 billion***	***$6.0 billion***	***$6.4 billion***	***$7.4 billion***	***$7.3 billion***

*Estimate; final numbers due December.

TRA Plan

TRA	FY2009 (MV)	FY2010 (MV)	FY2011 (MV)	FY2012 (MV)	FY2013* (MV)
Funded ratio	**59.8%**	**68.5%**	**78%**	**72.5%**	**76%**
Assets	**$13.8 billion**	**$14.9 billion**	**$17.3 billion**	**$16.7 billion**	**$18.0 billion**
Liabilities	**$23.1 billion**	**$21.7 billion**	**$22.2 billion**	**$23.0 billion**	**$23.5 billion**

*Estimate; final numbers due December.

Pension reforms saving billions

- Bipartisan at legislative level, shared sacrifice at stakeholder level.
- Minnesota is a model for other states in taking bold, corrective action.
- Benefit reductions are not minor – equal to **10 percent** of total system benefit costs.

Plan	**Cost reduction: 2010**	**Cost reduction: 2013**
MSRS General	$ 0.650 billion	
MSRS Correctional	$ 0.045 billion	
MSRS State Patrol	$ 0.062 billion	$ 35 million
PERA General	$ 2.800 billion	
PERA P&F	$ 0.625 billion	$ 457 million
PERA Correctional	$ 0.015 billion	
TRA	$ 1.750 billion	
TOTAL	$ 5.947 billion	$ 492 million

Shared sacrifice saving billions

Under the 2010 and 2013 reforms:

- Retiree COLAs were suspended or lowered for all plans.
- Employee and employer contributions were increased.
- Early retirement benefits were curtailed.
- Interest paid on refunds and deferred benefits lowered.
- Vesting requirements increased.

Benefit design study

- 2010 sustainability legislation required state retirement plans to complete a study by June 1, 2011, analyzing plan options for Minnesota's 500,000 public employees and retirees.
- Study contrasts features of defined benefit ["DB" or pension plan], defined contribution ["DC" or 401(k)-type plans] and hybrid plans.
- Compares costs, portability, income adequacy, investment performance and recruitment/retention.
- Mercer, the retirement systems' actuary, in 2010 analyzed costs of transitioning from current structure to a defined contribution plan.
- **Goal: Illustrate the pros and cons of each option and analyze potential costs.**

Why pension plans?

Minnesota's pension plans are guided by the principles of the Legislative Commission on Pensions and Retirement and are designed to meet these goals for the state workforce:

- Encourages/mandates savings for retirement by employees.
- Requires savings throughout worker's career, allowing investment earnings to finance a pension that provides modest income replacement in retirement.
- Allows self-sufficiency in retirement, avoiding dependence on public assistance or nonprofit safety net programs.
- Helps to recruit and retain competent personnel.
- Helps employer with workforce management, allowing orderly replacement of retiring workers.

What is a DB retirement plan?

- The basic funding equation for a defined benefit (DB or pension) plan is:

Contributions + Investment Earnings = Benefits + Expenses

- In a DB plan, the benefit is calculated using a pre-determined formula (a percentage for each year of service multiplied by the final average salary) and is generally paid for the member's lifetime.
- A DB plan pools contributions and the funds are managed by investment professionals.
- The goal is to pre-fund benefits during the working life of the employee, allowing contributions and investment earnings on those contributions to fund the benefit. Investment earnings typically fund 70 percent of benefits.
- If the benefit is collected at the plan's full retirement age, there is no reduction in benefit; however, if the member collects the benefit prior to full retirement age, the amount is reduced.

What is a DC retirement plan?

- The basic equation for a defined contribution or 401(k)-type plan is:

  Benefit = Contributions + Investment Earnings – Expenses

- A DC retirement plan has a pre-determined contribution amount that is invested at the direction of the member to provide retirement income.
- Benefits payable vary depending on value of individual's account at retirement.
- Employee contributes a percentage of income to an account and the employer may make an equivalent or lower contribution.
- At retirement, individuals may have a variety of payment options, including a lump sum payout, annuity, partial lump sum, or installment payments.
- Income is not guaranteed for life unless individual purchases a lifetime annuity.

What is a hybrid retirement plan?

- Hybrid design combines features of a DB and DC plan.
- Participation is usually mandatory and contributions are usually fixed.
- Examples:
  - **DB/DC combo:** Contributions go to both an employee-invested DC account and to a DB pension, which usually has a lower multiplier (generally 1 to 1.5 percent) for each year of service.
  - **Cash balance:** Employer and employee make contributions to an individual account, a certain investment return is guaranteed, pension amount determined by the balance in the individual account at retirement.
- Hybrid benefit can be annuitized for lifetime income (depending on the plan). Sometimes the individual may elect how the DC portion is distributed; options might include a lump sum, annuity payable for life, a partial lump-sum payment, or installment payments.

Study highlights: DB features

DB advantages

- Provides reliable, lifetime income that is dependable and usually sufficient to reduce risk of poverty and use of public assistance.
- DB professional investors earn superior investment returns, have lower fees and long-term investment horizons that allow more diversification.
- DBs protect workers from investment declines.
- DB can provide same benefit at roughly half the cost of DC due to DB's longevity pooling and higher returns.

Study highlights: DC, hybrid features

DC advantages

- Benefits are portable and workers can make their own investment choices.
- Some individuals can be very successful in managing own assets, target date funds can help.
- Less risk to taxpayers of “unfunded liabilities” since worker is responsible for funding benefit.
- Auto-enrollment and annuity options can make DCs more adequate.
- Employer contributions are flexible – can be raised in good times, lowered in bad.

Hybrid advantages

- Has advantages of both DB and DC.

Minnesota analysis: Study assumptions

- Assumed pure DC plan is implemented, similar to floor amendment offered in the 2010 legislative session.
- DB closed to new hires; new hires participate in DC plan with 5 percent employer, 5 percent employee contribution rates (rates selected as an example and were based on the floor amendment introduced in 2010).
- Analysis used baseline investment return assumption of 8.5 percent; alternate assumption of 7 percent.
- Future post-retirement benefit increases equal current rate.
- The entire actuarial required contribution is assumed to be contributed.
- Unfunded liabilities in ongoing DB plan amortized as a level percent of payroll over the statutory period.
- Unfunded liabilities in closed DB amortized as a level dollar amount over same statutory period.
- No actuarial gains or losses.

Key findings: Transition costs high

- Costs are high during a transition period because once a DB plan is closed to new members, any unfunded liabilities remaining in the existing DB plan should be paid off on an accelerated schedule.
  - Unfunded liabilities should be paid off in an accelerated manner in order to avoid intergenerational inequities in which future generations are forced to pay the benefit costs of the current generation.

- The cost of closing the current DB plans and placing new hires in a DC plan would be approximately **$2.76 billion over the next decade** for the three systems.
  - Cost would be $3.2 billion if investment assumption were lowered to 7 percent.

- Transition-cost difficulties are similar to what Legislature faced recently in funding Minneapolis Police & Fire, which was closed to new members in 1980, and the Minneapolis Employees Retirement Fund (MERF), which was closed to new members in 1978.

Key findings: Transition costs high

- While there are significant transition costs* in the next decade, paying off the unfunded liability of the existing DB plans in a shorter time frame **would eventually lower costs for PERA and TRA,** because accelerated funding has the opportunity to generate more investment earnings.

Change in required contributions (in millions)				
Years	**PERA**	**TRA**	**MSRS**	**Total**
1-5	$573	$653	$276	$1,502
6-10	$529	$433	$298	$1,260
11-15	$302	($57)	$238	$483
16-20	$58	($610)	$161	($391)

*Based on 2010 numbers, not recent market experience.

Key findings: Lower investment returns

- When a DB plan is closed, plan assets are spent down more rapidly than would happen in an open plan that has incoming contributions to invest. Due to this rapid spend-down, assets would need to be invested in a lower-risk, lower-return investment allocation.

- The financial impact of these investment allocation changes would be significant and are not included in the cost estimates in this study.

- Mercer estimated that if the investment return assumption for the closed DB were lowered to reflect a more conservative asset allocation, earnings would be a lot lower. **Actuarial accrued liabilities would increase by about 30 to 40 percent and unfunded actuarial accrued liabilities would more than double.***

*Refer to Mercer's letter dated March 31, 2011 (pages 88-90 of study), for additional detail, assumptions, background, and important notices.

Study recommendations

- Carefully analyze **financial impacts** of transitioning to an alternative retirement plan. Modifying plans can have complex financial implications with unintended consequences.
- Consider potential negative effect of closing DB on **investment returns**. SBI strategy would need to become conservative, lowering expected future returns.
- Review and clearly understand **funding requirements** of alternative plan and legacy plan.
- Develop a specific, **long-term funding strategy** that identifies sources of revenue and future costs for any alternative plan.
- Analyze **benefit adequacy** to ensure that benefits are sufficient and that public employees won't need to rely on social programs.
- About 90 percent of public retirees live and pay taxes in Minnesota. Consider the positive economic impact of pension income and retiree spending on the state.