

HF 1468 (Nelson, M.); SF 1377 (Rasmusson): Statewide Plans and St. Paul Teachers Plan; Reducing the Investment Return Assumption to 7%

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Introduction

- Affected Plans:** Minnesota State Retirement System (MSRS) General State Employees Retirement Plan, State Patrol Retirement Plan, Correctional State Employees Retirement Plan, Judges Retirement Plan, Unclassified Plan
Public Employees Retirement Association (PERA) General Employees Retirement Plan, Police and Fire Retirement Plan, Local Government Correctional Employees Retirement Plan
Teachers Retirement Association (TRA)
St. Paul Teachers Retirement Fund Association (SPTRFA)
- Laws Amended:** Minnesota Statutes, Section [356.215, subdivision 8](#).
- Brief Description:** The bill reduces the investment return assumption from 7.5% to 7% for the statewide pension plans (other than for the Legislators Retirement Plan) and for the St. Paul Teachers Retirement Fund Association.
- Attachment:** [Amendment H1468-1A](#)

Background

The investment return assumption (sometimes called the rate of return assumption, interest rate assumption, or discount rate assumption) is the assumption used by the actuaries to project how much pension assets will grow through investment of assets into the future. The actuary also uses the investment return assumption to discount future liabilities to a present-day value. For example, if a pension plan knows it will owe \$10,000 in 10 years, then, assuming an investment rate of return of 7.5% per year, the plan needs to have about \$5,200 invested today. The higher the investment return, the less money is needed today to meet the obligation and vice versa.

The investment return assumption is one of several actuarial assumptions that the actuary uses to determine pension liabilities. The assumption is also used for some other purposes such as determining early retirement reductions for some plans, and interest charged to participants for purchasing service credit. Other assumptions used by the actuary include inflation, payroll growth, salary increases,

mortality, retirement age, disability, age of spouse, and several more.¹ Historically, many of the actuarial assumptions were listed in Minnesota Statutes, requiring an act of the whole Legislature to modify. In 2018 the remaining assumptions, other than the investment return assumption, were removed from statute and listed instead in [Appendix A to the Standards for Actuarial Work](#).² The investment return assumption remains in statute and can be adjusted only through legislation.

Historically, the investment return assumptions have been the following:

2018 to today	7.5%
2015 to 2018	8% ³
2012 to 2015	8% select / 8.5% ultimate ⁴
1989 to 2012	8.5%

For more background information on the investment return assumption see the [presentation provided by the Commission actuary](#) at the February 6, 2023, Legislative Commission on Pensions and Retirement (LCPR) hearing.

Summary

[HF 1468 \(Nelson, M.\)](#); [SF 1377 \(Rasmusson\)](#) consists of a single section amending Minnesota Statutes, section 356.215, subdivision 8, by changing the investment return assumption from 7.5% to 7% for each of the ten defined benefit plans listed in the Introduction section of this summary. The change to the assumption is effective June 30, 2023, which will make it effective for the July 1, 2023, actuarial valuations.

Analysis

Changing Actuarial Assumptions

Ideally, actuarial assumptions are as accurate as possible. The investment return assumption should closely match the actual returns experienced by the pension funds over time. If the investment return assumption is set too high, then future active members and future tax payers will be saddled with the obligation for paying for pension benefits being earned by active members today. On the other hand, if the investment return assumption is set too low, then current active members and taxpayers will pay more than the value of the benefits being earned today.

¹ For an example of a complete list of actuarial assumptions used to value a pension plan's current liabilities see PERA's General Employees Retirement Plan Actuarial Valuation Report as of July 1, 2022, pp. 43-46.

² The Standards for Actuarial Work and appendices are documents that are maintained and updated by the LCPR.

³ TRA used an 8% select and 8.5% ultimate investment return assumption during this period.

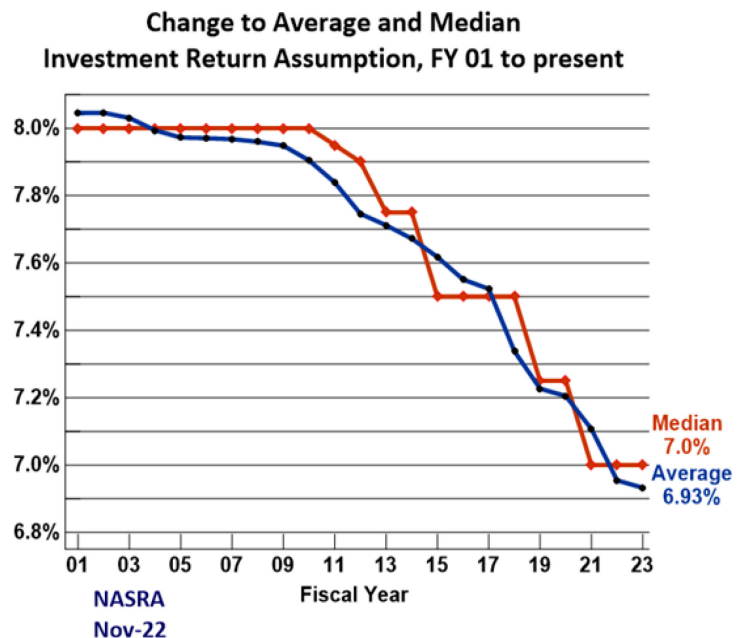
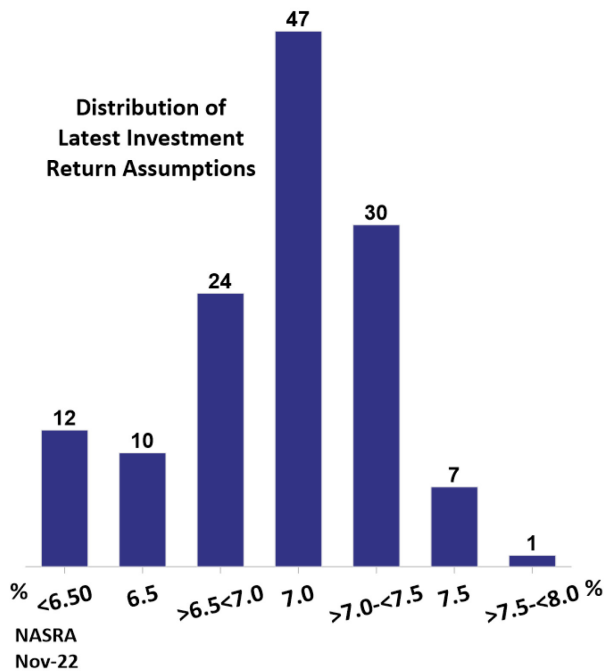
⁴ The "select" investment return assumption was a temporary assumption scheduled to revert to the "ultimate" investment return assumption at a future specified date.

Lowering the investment return assumption results in an increase in the required contribution rate. Depending on how large of a change in the required contribution rate, funding changes, such as increasing contribution rates, may need to be made to a plan to keep the plan on a positive funding trajectory. However, in Minnesota, unlike in many states, funding changes do not occur automatically following a change in an assumption. Instead, if a change in contribution rates is indicated, the contribution rates have to be changed by the Legislature by amending the law.

Generally, actuarial assumptions are updated based largely, if not solely, on the recommendation of each plan’s actuary. In this case, the actuary for each of the affected plans, other than TRA, has stated that the current investment return assumption of 7.5% is higher than the range of investment return assumptions that are reasonable. The actuary, Gabriel, Roeder, Smith & Company (GRS), has informed MSRS and PERA that “an investment return assumption in the range of 5.64% to 6.84% would be reasonable.” An investment return assumption of 7% is still outside of what GRS would consider reasonable for the 2022 valuation. The investment return assumption has historically garnered more attention and discussion than the other actuarial assumptions.

National Trends

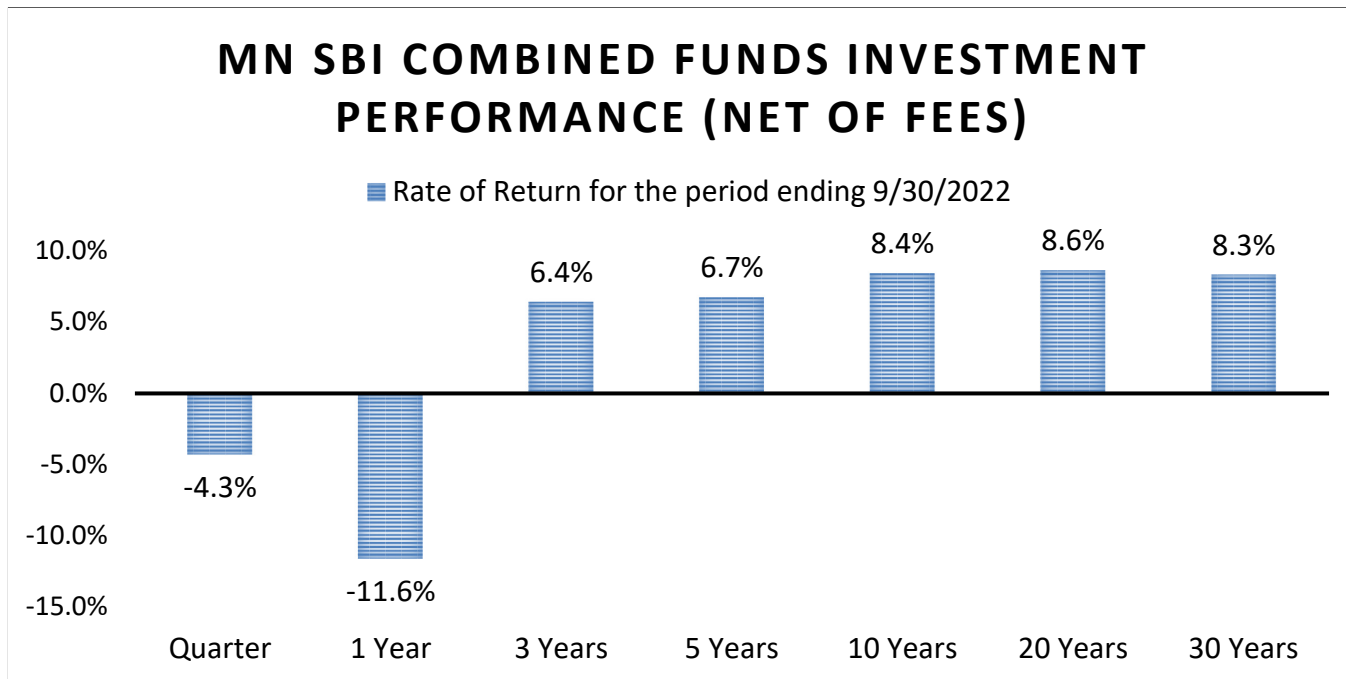
The National Association of State Retirement Administrators (NASRA) keeps track of investment return assumptions used by 131 of the largest public retirement plans across the country including three of the Minnesota plans. NASRA’s most recent publications indicate that of the 131 plans, there are 5 public pension plans outside of Minnesota that have an investment return assumption of 7.5% or higher.⁵



⁵ See NASRA, Latest Investment Return Assumption, Investment Return Assumption by Plan, (<https://www.nasra.org/latestreturnassumptions>)

Historical Rates of Return on Investments

Pension assets for the statewide plans are pooled together and invested by the State Board of Investment (SBI). Historically, over the last 10 years or longer, investment returns have exceeded the current assumption of 7.5%. However, the investment return assumption is a forward-looking assumption and past performance is only one factor of many to consider when changing the investment return assumption.



The rate of return for periods longer than one year are the average annual rate of return.
 *Source: Minnesota State Board of Investment, [Quarter Ending September 30, 2022, Combined Funds](#)

Cost to the Plans

Reducing the investment return assumption will result in changes to the liabilities that each plan recognizes, reducing the funded ratios, increasing required contributions, and modifying downward the projected funded ratios. Decreasing the assumption from 7.5% to 7% results in a total increase in actuarial accrued liability across all of the affected plans of approximately \$5.9 billion. The change would also result in four plans having a contribution deficiency. Of those four plans, only the PERA Correctional plan would be projected to never become fully funded; two of the remaining plans, the Police and Fire Plan, and TRA, would still be projected to become fully funded sometime after 2048.⁶ The MSRS Correctional plan, although showing a small deficiency, would still be projected to become fully funded before 2048. See the table below for more details.

⁶ In 2018, the Legislature changed the target date for paying off unfunded liabilities to July 1, 2048.

Summary of Plan Funding at 7.5% and 7% (Market Value)

Retirement Plan	Actuarial Accrued Liability		Funded Ratio		Contribution Sufficiency / (Deficiency)		Projected Full Funded Date	
	7.5%	7%	7.5%	7%	7.5%	7%	7.5%	7%
MSRS General	\$16.1 B	\$17.0 B	98.5%	93.0%	3.52%	0.91%	2024	2036
State Patrol	\$1.07 B	\$1.13 B	82.8%	77.9%	11.56%	5.21%	2032	2038
MSRS Correctional	\$1.88 B	\$2.01 B	78.5%	73.3%	3.64%	(0.57%)	2037	2047
Judges	\$403.4 M	\$422.8 M	63.0%	60.1%	5.1%	1.9%	2044	2047
PERA General	\$30.2 B	\$32.1 B	86.2%	81.2%	2.93%	0.65%	2034	2045
Police & Fire	\$11.4 B	\$12.1 B	91.8%	86.3%	5.91%	(0.49%)	2032	2082
PERA Correctional	\$0.95 B	\$1.02 B	103.2%	95.2%	2.73%	(0.95%)	Fully Funded	Never
TRA	\$31.6 B	\$33.6 B	80.9%	76.2%	1.19%	(1.82%)	2040	After 2048
SPTRFA	\$1.7 B	\$1.8 B	66.73%	63.17%	5.17%	2.86%	2038	2044

Member benefits

While a change to the investment return assumption will not affect benefits for most plan participants, it will affect some active members in at least three situations, which are described below.

Purchase of service credit

Service credit purchases are available in certain circumstances for active participants in each of the ten plans considering a rate change. Some common examples of a service credit purchase include purchasing service credit following an unpaid leave of absence or repaying a refund of employee contributions. A reduction in the investment return assumption will mean that it will cost less for participants to purchase service credit. This would have a small negative fiscal impact on each plan that would not materially affect plan funding. For many service credit purchases,⁷ the change would only

⁷ There are a several different types of service credit purchases authorized in the law. While most use the interest rates set in Minnesota Statutes, section 356.59, some others use the investment return assumption set in 356.215, subdivision 8.

occur if the interest rates in law are changed as provided by Amendment H1468-1A, further described on page 7.

Actuarially equivalent early retirement factors

When a participant retires before normal retirement age with an annuity from the MSRS General Plan, PERA General Plan, or PERA Correctional Plan, the annuity is reduced so that the monthly annuity amount remains actuarially equivalent to what the participant would have received if retiring at normal retirement age. The three plans with actuarially equivalent early retirement factors have a total of more than 295,000 active and deferred members. Roughly half of those members can be expected to retire before normal retirement age, and therefore, have their benefit calculated using an early retirement factor. Lowering the investment return assumption would cause the early retirement benefits to increase. PERA provided figures indicating that moving to a 7% investment return assumption would result in a roughly 1.5% increase in the monthly annuity of a PERA General Plan participant retiring at age 62.⁸

The increase in early retirement annuity amounts would have some cost to each of the three plans. Implementing early retirement factors for each of the plans falls under the authority of the MSRS and PERA boards. In the past, the boards have sometimes used this authority to phase in changes to early retirement factors.

Unclassified Plan annuity rates

Participants in the Unclassified Plan may, at retirement, convert their Unclassified Plan account balance into an annuity. The law requires that the annuity factors that are used to calculate the annuity be determined using the actuarial assumptions that apply to the MSRS General Plan. As a result, upon the MSRS board approving changes to the factors to reflect the 7% investment return assumption, the lower the investment return assumption will result in lower monthly annuities for Unclassified Plan participants who annuitize their accounts after the change. In the past, MSRS has implemented new annuity factors by phasing them in over a period of many months.

Direct State Aid and Supplemental Employer Contributions

Several of the statewide plans and the SPTRFA receive direct state aid or supplemental employer contributions that are scheduled in law to stop when the plan becomes one-hundred percent funded. Last year, the Police and Fire Retirement Plan and the State Patrol Retirement Plan were approaching full funding because of strong investment returns in FY 2021. There was concern that without a change in the investment return assumption or some other statutory change, some of the direct state aids or supplemental employer contributions might turn off prematurely due to a single year's unusually high

⁸ See PERA Board Meeting Presentation, Staff's Investment Return Assumption Recommendation, December 9, 2021, slide 8 (comparing annuities for participants retiring before normal retirement age using a 7.5% investment return assumption and a 6.5% investment return assumption). The 1.5% increase at a 7% investment return assumption was determined by using approximately half of the percentage increase shown when going from a 7.5% to 6.5% assumption.

return. In FY 2022, investment returns were negative, resulting in lower funded ratios for the Police and Fire and State Patrol Plans. Currently both plans are projected to be fully funded in 2032 assuming a 7.5% investment return. At a 7% investment return assumption the Police and Fire and State Patrol plans are projected to be fully funded in 2082 and 2038, respectively.

Amendment H1468- 1A

[Amendment H1468-1A](#) amends HF 1468 / SF 1377 by inserting a new section that changes the interest rates charged by the plans in various situations to an annual rate of 7% or a monthly rate of 0.584%. The monthly rate is 7% divided by 12 months. The interest rates have historically been set to match the investment return assumption.

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