

# Understanding Montana's Public Employee Retirement Plans

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## Purpose

This report is an introduction to Montana's public employee retirement systems, including updates on the financial situation of the systems and the work of a 2009-2010 interim committee charged with studying possible benefit and funding changes to the systems.

## Background on state retirement systems

Montana has 10 retirement systems that provide benefits to different classes of public employees, ranging from K-12 teachers to volunteer firefighters to general employees.

The Public Employees' Retirement Board (PERB) governs and the Montana Public Employees' Retirement Administration administers the majority of the systems. The PERB systems are:

- the Public Employees' Retirement System (PERS), which includes both a defined benefit and a defined contribution plan;
- the Sheriffs' Retirement System (SRS);
- the Municipal Police Officers' Retirement System (MPORS);
- the Firefighters' Unified Retirement System (FURS);
- the Highway Patrol Officers' Retirement System (HPORS);
- the Game Wardens' and Peace Officers' Retirement System (GWPORS);
- the Judges' Retirement System (JRS); and
- the Volunteer Firefighters' Compensation Act (VFCA).

**Another option:** The PERB also governs a 457 Deferred Compensation Plan to allow state employees to set aside part of their compensation on a pretax basis and invest the money on a tax-deferred basis, similar to a 401(k).

The Teachers' Retirement Board (TRB) governs the Teachers' Retirement System (TRS). This system generally includes K-12 teaching and administrative staff, as well as a few employees of state agencies.

The Montana University System governs the Optional Retirement Program (ORP) for its faculty and teaching staff. Currently, TIAA-CREF administers the ORP.

## Brief explanation of retirement benefits

Montana has two general plan types in its retirement systems: a defined benefit (DB) and a defined contribution (DC). A DB plan provides benefits for its members based on a formula that uses years of service and age to determine what percentage of an employee's final compensation will be replaced by the benefit upon retirement. (Currently all Montana's DB plans use a 3-year

average.) The minimum age or years of service required to receive a full benefit vary depending on the plan. For example, the PERS-DB plan is designed to provide a benefit that replaces about 60 % of a member's preretirement income if the member earned 30 years of service. A smaller benefit will be earned by members with less service. The public safety retirement systems (generally police, firefighters, and other law enforcement agencies) replace about 50% of income after 20 years.

Often, DB plans allow for early retirement, though most plans reduce the retiree's benefit in some way for early retirement.

A DC plan is investment based, similar to private sector 401(k) plans. Contributions from the employee and employer are invested on a tax-deferred basis by the employee. The sum of the contributions and investment income provides the benefit for the retiree. Generally, the employer will provide a range of preselected investment options from which the employee will choose. Currently, Great West Retirement Services contracts with the PERB to administer the PERS-DC and the 457 plans.

Eight of Montana's retirement plans are DB plans. Two--the PERS-DC and the ORP--are DC plans. New hires required to enter the PERS are given 1 year to make an irrevocable election into either the DB or the DC plan contained in the system. The ORP, despite its name, is required for most University System faculty.

#### Finances of the retirement systems

Article VIII, section 15, of the Montana Constitution requires all public employee retirement systems to be funded on an actuarially sound basis. Section 19-2-409, MCA, defines "actuarially sound basis" and provides that "contributions to each retirement plan must be sufficient to pay the full actuarial cost of the plan." It states that for the DB plans, the full actuarial cost includes both the amount necessary to provide benefits to current workers as the benefits accrue in the future (the normal cost) and the amount necessary to amortize any unfunded liability of the plan over 30 years. The unfunded liability is the difference between the amount of a retirement plan's assets and the benefits already accrued by current plan members or assumed the members will accrue in the future.

The TRS and PERB systems undergo annual actuarial valuations to determine their financial status and help the retirement boards and administrators, Legislature, stakeholders, and others to determine if the systems are being funded adequately. The valuation

#### **Montana Constitution, Art. VIII, Sec. 15. Public retirement system assets.**

(1) Public retirement systems shall be funded on an actuarially sound basis. Public retirement system assets, including income and actuarially required contributions, shall not be encumbered, diverted, reduced, or terminated and shall be held in trust to provide benefits to participants and their beneficiaries and to defray administrative expenses.

(2) The governing boards of public retirement systems shall administer the system, including actuarial determinations, as fiduciaries of system participants and their beneficiaries.

**History:** En. Sec. 2, Const. Amend. No. 25, approved Nov. 8, 1994.

process can be complex for DB plans because of the nature and scope of projections about future investment results and the demographics of the plan's members.

Pension Plan Unfunded Actuarial Liability									
2010 Actuarial Valuation versus 2009 Actuarial Valuation									
(Dollars in Millions)									
	TRS	PERS-DB	SRS	GWPORS	HPORS	MPORS	FURS	JRS	VFCA
<b>2010 Valuation (as of 6/30/2010)</b>									
Actuarial Accrued Liability (AAL)	\$4,518.2	\$5,241.8	\$246.7	\$113.9	\$151.2	\$380.4	\$335.5	\$42.5	\$34.5
Actuarial Value of Assets (AVA)	<u>2,956.6</u>	<u>3,889.9</u>	<u>200.7</u>	<u>85.2</u>	<u>97.2</u>	<u>217.5</u>	<u>213.8</u>	<u>61.3</u>	<u>26.6</u>
Unfunded Actuarial Liability/(Surplus)	\$1,561.6	\$1,351.9	\$46.0	\$28.7	\$54.0	\$162.8	\$121.7	(\$18.8)	\$7.9
Funded Ratio (AVA/AAL)	65.4%	74.2%	81.4%	74.8%	64.3%	57.2%	63.7%	144.1%	77.0%
Years to Amortize Unfunded Liability	49.5 yrs	Does not amortize	Does not amortize	Does not amortize	29.9 yrs	23.0 yrs	14.7 yrs	0 yrs	7.7 yrs
<b>2009 Valuation (as of 6/30/2009)</b>									
Actuarial Accrued Liability (AAL)	\$4,173.8	\$4,792.8	\$223.9	\$92.2	\$137.8	\$345.3	\$306.2	\$41.8	\$33.5
Actuarial Value of Assets (AVA)	<u>2,762.2</u>	<u>4,002.2</u>	<u>200.7</u>	<u>81.2</u>	<u>99.6</u>	<u>214.3</u>	<u>209.8</u>	<u>61.9</u>	<u>27.2</u>
Unfunded Actuarial Liability/(Surplus)	\$1,411.6	\$790.6	\$23.2	\$11.0	\$38.2	\$131.0	\$96.4	(\$20.1)	\$6.3
Funded Ratio (AVA/AAL)	66.2%	83.5%	89.6%	88.1%	72.3%	62.1%	68.5%	147.9%	81.2%
Years to Amortize Unfunded Liability	Does not amortize	Does not amortize	Does not amortize	Does not amortize	21.5 yrs	22.1 yrs	12.7 yrs	0 yrs	6.9 yrs
<b>Key</b>	TRS - Teachers' Retirement System				MPORS - Municipal Police Officers' Retirement System				
	PERS - Public Employees' Retirement System				FURS - Firefighters' Unified Retirement System				
	SRS - Sheriffs' Retirement System				JRS - Judges' Retirement System				
	GWPORS - Game Wardens' and Peace Officers' Retirement System				VFCA - Volunteer Firefighters' Compensation Act				
	HPORS - Highway Patrol Officers' Retirement System								

DB plans are usually prefunded, meaning the current contributions (employer and employee) are used to pay for benefits in the future for those same contributing employees. A pay-as-you-go system is the opposite, in which current contributions pay for benefits of retired workers. The U.S. Social Security system is an example of a pay-as-you-go system. In Montana, both employers and employees contribute to the retirement systems at rates set in statute by the Legislature.

It is important to note that unfunded liabilities are part of a DB plan's structure, akin to a mortgage in some ways. Most plans rely heavily on investment returns to provide income to the system to pay future benefits; often, around 60% of the money needed to pay a retiree's benefits will come from investment income. For that reason, even if a plan is 100% funded, the state and employee would still need to contribute the

**Why Unfunded Liabilities or Surpluses Occur:** Even though the Montana defined benefit retirement plans are prefunded, unfunded actuarial liabilities (UAL) or surpluses can and do occur because actual experience does not match assumptions used in the annual valuations. As of June 30, 2010, the total UAL of the 9 plans listed above is \$3.3 billion, up from \$2.5 billion in the 2009 actuarial valuation. The primary reason for the increased UAL is the extraordinary drop in the equity markers in 2008. Half of those losses are yet to be realized.

normal cost rate to ensure adequate time for those contributions to accrue interest.

Because large jumps or declines in investment returns can have dramatic effects on the funding of a retirement system, many states use a technique called "smoothing" to phase in market returns over time, rather than recognizing all of a loss or gain at the next valuation. Both the TRB and PERB employ 4-year smoothing for their systems. If a system's invested assets were to earn 10% interest one year, only one-quarter of that increase would be recognized in the retirement system's next actuarial valuation. The other three-quarters of investment return would be recognized over the subsequent 3 years, along with a portion of returns for those years. The goal of smoothing is to reduce the effect of the markets' volatility on the contribution rates for the retirement plan. If investment returns were to be recognized immediately, the funding rate for a plan might swing wildly up after a year of poor investment returns, or drop dramatically after a series of above-average returns. Those swings in required contributions to keep the system actuarially funded would be difficult for most legislative bodies to accommodate, especially when budgeting for a biennial budget cycle, as does the Montana Legislature.

The 2008 market downturn and subsequent volatility deeply affected the Montana retirement systems, as it did most retirement plans, public and private, as well as individual investors. As of June 30, 2010, the date of the most recent valuations, four of the state's retirement systems did not amortize in the required 30 years. In fact, the PERS-DB, SRS, and GWPORS don't amortize in any length of time; the amortization period for TRS is currently estimated at 49.9 years. At the 2009 valuation date, TRS did not amortize in any length of time.

Another system, the HPORS, is close to the 30-year amortization limit. With 2 more years to go before all the 2008 market losses are completely recognized, it is likely that this system will also become actuarially unsound in the next few years.

#### 2009-2010 study of retirement system changes

The State Administration and Veterans' Affairs Interim Committee (the SAVA Committee) has the responsibility, pursuant to section 5-5-228, MCA, to monitor the state's retirement systems and the boards that govern them.

During the recent 2009-2010 interim, the SAVA Committee was tasked by the 2009 Legislature with a specific task related to the retirement systems. House Bill No. 659 (HB 659) required the SAVA Committee to examine and recommend to the 62nd Legislature funding and benefit changes in the statewide public employees' and teachers' retirement systems. The study task took the form of a bill rather than a study resolution because it included an appropriation for the committee to use during the course of the study.

**Recent History:** PERS-DB, SRS, GWPORS, and TRS were also actuarially unsound earlier in the decade because of a market downturn in 2001 and 2002. Legislative action in the mid-2000s provided cash infusions of \$25 million to PERS and \$150 million to TRS, and employer contribution rates were also increased. By the end of June 2007, with improvements in the equity markets, all four plans were once again actuarially sound. The trend reversed in 2008 when the market tumbled again.

Essentially, HB 659 required the SAVA Committee to complete four tasks:

- review current trends and best practices in public retirement plan design and funding;
- examine various options for changes to each of the statewide systems administered by the PERB, such as but not limited to changes in the multiplier used in the retirement benefit formula and the minimum age or years of service required for a plan member to receive a full, unreduced benefit or an early, reduced benefit;
- compare and contrast options for redesigning TRS; and
- develop legislation to implement that redesign.

Although HB 659 didn't require the SAVA Committee to change any of the PERB systems (as it did for TRS), it gave the committee discretion to do so. The bill also set "sideboards" for the redesign of TRS. For example, the redesign must, among other things, ensure members have a guaranteed benefit in retirement, be funded on an actuarially sound basis, share risk of investment returns between employer and employee, and have assets that are invested by the Montana Board of Investments.

#### Summary of the SAVA Committee work

The SAVA Committee spent the fall of 2009 familiarizing themselves with the state's retirement systems, including how the systems are funded and the current fiscal situation faced by several of the plans. They also reviewed retirement systems in other states and changes made by some states to their retirement plans when faced with similar financial issues these past 2 years. In December, the SAVA Committee chose to focus its work on the two largest Montana retirement systems: PERS and TRS. (At present, neither system's unfunded liability amortizes within the required 30-year threshold.)

The committee then issued a Request for Proposals, or RFP for consulting services to help suggest redesigns for PERS and TRS. Eventually, the SAVA Committee hired an actuarial consulting firm with significant experience in plan redesign. The consultants worked with the committee members throughout the winter and spring to consider and then narrow down the options for altering the current TRS and PERS structures.

At its June 2010, meeting, the SAVA Committee requested actuarial cost analysis to be performed on several plan design options. From this analysis, they expected to learn the estimated cost of these designs for new hires and also how the changes might affect the funding of the two retirement systems.

#### *Options to redesign the Teachers' Retirement System*

For TRS, the SAVA Committee examined two options: a money purchase plan and a revised DB plan. The money purchase plan is also known as a cash balance plan and has been referred to by the consultants as an "individual account defined benefit" plan. In very basic terms, the money purchase plan gives members a benefit based on an account balance at the time of retirement or termination. A member has a credited account, the balance of which consists of a certain percentage of the employee's compensation along with interest earned on the contributions. In this case, the interest rate is set either by statute or by the retirement board and

can vary from year to year depending on actual investment returns. The size of the account balance depends on the employee's salary over all years of employment with that plan sponsor, plus the investment returns. Similar public employee retirement systems include the Texas County and District Retirement System and the State Employees' Pension Plan in Nebraska.

When an employee retires, the benefit is an annuity based on the account balance and a set employer match of that balance. (Some plans provide options for lump-sum or partial lump-sum distributions.) The level of the match might depend on whether the member is fully vested in the benefit. The vesting schedule can vary, depending on the plan.

A key distinction between a money purchase and cash balance plan and a DC plan is who invests the plan's assets. In a DC plan, each member is responsible for investment decisions. In a money purchase plan, contributions from all members would be pooled and invested by the Montana Board of Investments, as they are now in the existing DB plans. The plan would guarantee members a minimum return on investment. The option the SAVA Committee chose to explore would set a target interest rate of 7%, with a minimum rate of 5% and a maximum of 9%. In this type of plan, members share with the plan sponsor some of the risks of investing. The higher the minimum, though, the more risk assigned to the sponsor, because of the interest guarantee.

The second option considered for TRS is known as the modified Professional Retirement Option (PRO). It would revise the existing TRS structure. As mentioned earlier, retirement benefits for TRS members are determined by the formula:

- average compensation of the member's 3 highest consecutive years of service (highest average compensation or HAC) X years of service X a multiplier.

The multiplier in TRS is 1.67%, which replaces about 50% of income after a 30-year career or approximately 42% after a 25-year career. Another key provision of TRS is that a member can draw full, unreduced retirement benefits after 25 years of service; i.e., about 42% of HAC. The "25-and-out" provision can be very costly because it reduces the amount of time for interest to be earned on contributions and also allows benefits to be paid out for a longer period of time.

The PRO that the SAVA Committee considered would offer a 2% multiplier after 30 years of service. The multiplier would apply to all years of service, not just those in excess of 30. Members working less than 30 years before retiring would earn the current 1.67%. The design would keep the service retirement age at 60 and vested but would increase the minimum time of service required to earn a full, unreduced benefit to 30 years. Also, unlike previous versions of the PRO (which the returning legislators may remember from past legislative sessions), this design would apply to new hires only. Current members would not be eligible for the 2% multiplier but would still be eligible to retire after 25 years regardless of age.

The SAVA Committee also explored combinations of vesting and HAC changes as part of the PRO. For example, a member in the current TRS vests (becomes entitled to a retirement benefit) after 5 years. One option was to implement a 15-year graded vesting period, under which an employee would gradually become vested in more of the employer contributions to

the plan as the 15-year period went on. Another option was to increase the amount of time used to calculate the HAC from 3 to 5 years, which would theoretically lower the member's benefit because the compensation average used in the formula to determine the benefit would be lower.

*Options to redesign the Public Employees' Retirement System*

For PERS, the SAVA Committee also considered two different options: a money purchase plan resembling the one proposed for TRS and a modification of the existing PERS benefit design.

The modifications to the existing design were based on those suggested to the SAVA Committee by the PERB during its presentation of agency bill draft proposals. In the existing PERS design, the multiplier is 1.786%, which increases to 2% for all years of service after the member has worked for 25 years. The suggested modification would:

- increase the normal retirement age from 60 with 5 years of service to 65 with 5 years of service;
- change the HAC calculation from 3 to 5 years; and
- implement a phased-in multiplier that would start out lower than the current 1.786% and increase more slowly to 2%.

The money purchase plan reviewed for PERS was similar to that proposed for TRS, except that the vesting schedule was a 5-year cliff, as it is for the other PERB-administered systems.

After hearing cost analysis of the various design options for PERS and TRS, the SAVA Committee agreed that it might be impossible to obtain committee consensus on just one design to forward to the 2011 Legislature for its consideration. As a result, the SAVA Committee decided to draft two alternative plans for TRS. The Legislature could then review both alternatives and make the final decision.

The SAVA Committee did not make a recommendation for the PERS.

The first design option for the TRS that the SAVA Committee voted to send to the 2011 Legislature was a choice for new hires between two money purchase plans. The second was a modified defined benefit plan based on the PRO concept. Option 1 was drafted as LC251; Option 2 was drafted as LC252.

*Option 1: Choice between money purchase plans (LC 251)*

- establish two plans between which new hires can select membership
- both would be money purchase plans. The benefit would be an annuity at retirement age based on the accrued balance of the member's account.
- a member's account would be credited with their employee contributions (currently set at 7.15% of salary) and interest credits
- at retirement, the vested member's accumulated account balance would be matched up to 100% by the retirement system (depending on the member's years of service) and the total would be annuitized for a retirement benefit
- the TRS Board would grant a minimum interest rate of 5% and a maximum of 9%. The goal would be to average 7% over the member's career.

- 15-year graded vesting (The member would be 25% vested after 5 years, increasing 5% each year for years 6 through 10, and increasing 10% each year for years 11 through 15 until the member is fully vested after 15 years.)
- retirement eligibility age would be 60 and vested
- the second money purchase plan would have the same provisions as the first, except that a member would pay an additional ½ of 1% of salary into the member's account. If the member remained for 30 years, the retirement system would match the additional employee contribution at retirement, along with interest on the additional contribution.

*Option 2: Professional Retirement Option (PRO) (LC252)*

- would keep general structure of existing TRS
- new employees' contribution rate would increase by 0.54%
- increase the number of years used to calculate a member's average final compensation from 3 to 5 years
- revise the time to vest in the employer contributions to the benefit from a 5-year cliff vesting to a 15-year graded system. (The member would be 25% vested after 5 years, increasing 5% each year for years 6 through 10, and increasing 10% each year for years 11 through 15 until the member is fully vested after 15 years.)
- the benefit multiplier would be 1.667% for retirement before 30 years of service
- a 2.0% multiplier would apply for all years of service if the member retired with 30 or more years of service
- service retirement at any age with 30 or more years of service or age 60 and vested
- early retirement age would be 55 and vested, with a reduced benefit. Board-set actuarial factors based on a member's age and years of service would be used to calculate the reduction. (Currently, reductions calculated using a formula set in statute.)

Additional resources about Montana's retirement systems can be found on-line or by contacting either Rachel Weiss or Jon Moe at the Legislative Branch. The resources include:

- **Materials related to the SAVA Committee's work on HB 659:**  
[http://leg.mt.gov/css/Committees/interim/2009\\_2010/State\\_Administration\\_and\\_Veterans\\_Affairs/Assigned\\_Studies/hb659.asp](http://leg.mt.gov/css/Committees/interim/2009_2010/State_Administration_and_Veterans_Affairs/Assigned_Studies/hb659.asp)
- **Updates to the Legislative Finance Committee on the pension systems:**  
[http://leg.mt.gov/css/Committees/Administration/Finance/2011\\_lfc\\_default.asp](http://leg.mt.gov/css/Committees/Administration/Finance/2011_lfc_default.asp)
- **Information provided on retirement systems administered by the Public Employees' Retirement Board (including actuarial valuations):**  
<http://mpera.mt.gov/>
- **Information provided by the Teachers' Retirement Board (including actuarial valuations):** <http://trs.mt.gov/>

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