MONTANA'S PUBLIC PENSIONS: WHERE WE'VE BEEN

HISTORICAL OVERVIEW OF FUNDING & BENEFIT CHANGES IN MONTANA'S PUBLIC EMPLOYEE RETIREMENT SYSTEMS

January 2018
State Administration and Veterans' Affairs Interim Committee
Sheri S. Scurr, Research Analyst
MONTANA STATE LEGISLATURE

MONTANA'S PUBLIC PENSIONS: WHERE WE'VE BEEN

PURPOSE

In 2013, four of Montana's 11 defined benefit (DB) public employee retirement systems were actuarially unsound (i.e., unfunded liabilities could not be paid off, or amortized, in any amount of time), and Montana's Legislature was grappling with how to address this.

The following DB public pension plans were actuarially unsound:

- Teachers' Retirement System (TRS)
- Public Employees' Retirement System - Defined Benefit Plan (PERS-DB)
- Sheriffs' Retirement System (SRS)
- Game Wardens' and Peace Officers' Retirement System (GWPORS)

This report is an updated and enhanced version of a report first prepared for the 2013 Legislature about previous legislative actions related to benefit reductions, funding increases, and plan design reform proposals for the DB public pension plans. This report is organized into the following sections:

- Big Picture Overview
- Chronological Summary
- Current Funding Status
- Investment Return History
- Funding Status History
- Benefit Costs & Contributions History
- In Summary

BIG PICTURE OVERVIEW

Historical information about the retirement systems allows the Legislature to put the current funding status of the systems in perspective with long-term progress toward policy goals. The overarching long-term funding goal adopted by both the PERS and TRS retirement boards is for the retirement systems to be more than 100% funded. Being more than 100% funded allows for a funding reserve that acts as a cushion against future market declines and other adverse experiences that cause unfunded liabilities.

As illustrated in the remainder of this report, significant market losses on pension fund assets in FY 2000 and FY 2008 caused retirement system funded ratios to rapidly decline. Unfunded liabilities increased significantly and, in several systems, these liabilities either did not amortize or amortized in more than 30 years. In response, the Legislature examined plan design changes, increased contributions to the systems, provided cash infusions to two of the systems, and reduced benefits for new members, all in an effort to bolster the plans' funding status.

Recovery in the financial markets combined with these legislative actions has improved the funding status of these pension plans. Currently, all but two of Montana's DB plans with unfunded liabilities are funded sufficiently, based on the actuarial assumptions, for their unfunded liabilities to amortize in 30 years or less. However, additional funding may need to be considered for the Highway Patrol Officers' Retirement

System and the Game Wardens' and Peace Officers' Retirement System, which have unfunded liabilities that amortize in more than 30 years: 37 years and 70 years respectively.

Chronological Summary

Pre-1997	Prior to 1997, cost-of-living increases for retirees were provided in PERS and TRS by spending investment returns above the actuarially assumed rate of return. In the public safety retirement systems, minimum benefit provisions for retirees increased retiree benefits when the salaries of active members increased. Additionally, the Legislature periodically granted one-time ad hoc increases for retirees. These methods of providing postretirement benefit increases were not actuarial funding mechanisms. In other words, they did not allow for actuarially prefunding the benefit increases through contributions and investment earnings made during the working career of the retiree.
1997	In 1997, financial markets were soaring and pension fund investment earnings significantly exceeded the actuarial assumed rate of return of 8%. PERS was more than 100% funded. The other retirement systems were also very well-funded. During the 1997 session, the Legislature enacted a 1.5% Guaranteed Annual Benefit Adjustment (GABA) in systems administered by MPERA, which included all of the DB pension systems other than TRS. In some systems, benefit reductions were made in exchange for the GABA. Employer and employee contributions were also increased. (See HB 170.) However, most of the funding for the GABA was provided by creating new unfunded liabilities and extending amortization periods. Also during the 1997 session, some legislators wanted to convert the DB pension systems to defined contribution (DC) plans. Thus, the Legislature passed HB 90, which required a plan design study and development of legislation to add a DC component to PERS. Some supporters of the DC plan believed that employees should direct their own investments and that their accounts would actually earn more than the assumed 8% for the DB plans. Some supporters of the DC plan were philosophically at odds with DB plans and wanted employees rather than employers/taxpayers to shoulder the responsibility and associated rewards and risks of managing their retirement funds.
1999	The pension systems remained very well-funded. The 1999 Legislature enacted a 1.5% GABA for TRS members (HB 72). The Legislature also passed a bill enacting a PERS-DC plan as optional plan for new hires (HB 79).
2000	Financial markets were peaking. Investment earnings were at historic highs. PERS was 125% funded. Other plans were also more than 100% funded.
2001	The 2001 Legislature increased the GABA for MPERA plans from 1.5% to 3%. The Legislature also authorized the TRS Board to increase the 1.5% GABA in TRS to 3%, but only if the system's amortization schedule would remain at 25 years or less (HB 294). The cost of these increases was to be "absorbed" by the systems, meaning that new unfunded liabilities were created. However, according to actuarial determinations, these new liabilities would still amortize in under the 30-year threshold for maintaining actuarial soundness, so the systems remained financially sound. These actuarial valuations were based on an 8% assumed rate of return on investments.

2001 After the 2001 legislative session, financial markets crashed. Pension fund investment earnings began a sharp decline, which significantly increased unfunded liabilities.

2003 The 2003 Legislature did not consider legislation that had any significant impact on the n funding status of the retirement system.

2004 The unfunded liabilities in PERS and SRS did not amortize in any amount of time. The TRS amortization schedule was beyond 70 years. The GWPORS amortization schedule was about 50 years.

2005 Bills requested by the PER Board (HB 148) and the TRS Board (HB 181) to increase employer contribution rates to address the growing unfunded liabilities failed to pass the 2005 Legislature. Following the regular session, the State Administration and Veterans' Affairs Interim Committee (SAVA) worked on legislative proposals to increase employer contributions in the unsound systems, close benefit "loopholes" in TRS, and provide cash infusions to TRS and PERS. In December, the Legislature was called into a special session and approved general fund cash infusions of $25 million to the PERS-DB plan and $100 million to TRS (HB 1). The TRS Board reduced its actuarially assumed rate of return on investments from 8.0% to 7.75% effective July 1, 2005.

2006 A SAVA interim study examined pension funding and investments (HJR 42 from the 2005 regular session). The committee made no recommendations related to the study.

2007 Unfunded liabilities in the pension systems continued to grow. The market was improving, but investment earnings remained below the actuarially assumed rate of return. Unfunded liabilities in PERS, TRS, and SRS did not amortize. The Legislature adopted bills to reduce benefits for new hires and to increase contributions:

- The 3% GABA in PERS, HPORS, SRS, GWPORS, MPORS, FURS, and JRS was decreased to 1.5% for new hires (HB 131).
- Modest employer contribution increases were phased-in over 4 years beginning July 1, 2007 (HB 63 for TRS and HB 131 for the MPERA systems). A state supplemental contribution from the general fund was used to offset the contribution increases for local governments and school districts.
- The Legislature appropriated $50 million from the state general fund as a second cash infusion to TRS (HB 63).

2008 SAVA studied pension plan funding and plan design alternatives under HJR 59. No recommendations were made as a result of the study.

2009 Minor changes were made in TRS to improve funding by closing certain benefit loopholes. Employer contributions were required on salaries paid to retirees who returned to work (HB 34).

2010 SAVA conducted an interim study under HB 659, which required hiring an outside actuarial consulting firm to develop pension plan funding options and plan design alternatives. The study produced two competing recommendations concerning TRS. Neither bill passed. SB 54 would have created a hybrid cash balance plan in TRS for new hires. SB 56 would have lowered benefits for new hires and established a higher benefit for teachers who worked more than 30 years, which was to address teacher shortages. Regarding the other systems, actuaries for MPERA conducted an experience study and recommended that the assumed rate of return on investments be lowered from 8.0% to 7.75%. This rate was adopted by the PER Board effective July 1, 2010.

2011 The 2011 Legislature reduced benefits and increased contributions for new hires in PERS-DB (HB 122), SRS (HB 135), and GWPORS (HB 134). Certain benefit provisions in TRS were tightened to improve actuarial soundness (HB 116).

2013 Although financial markets were recovering, the pension trust funds were still struggling to recover from the significant asset losses. Four public employee retirement systems remained actuarially unsound: PERS-DB, TRS, SRS, and GWPORS. The 2013 Legislature created a special joint pension committee to consider various bills related to these retirement systems. Ultimately, the Legislature passed two bills to increase contributions and reduce future benefits in PERS-DB (HB 454) and TRS (HB 377). HB 454 included about $33 million in state contributions from certain coal tax revenue for the PERS-DB plan. Both bills reduced the GABA for new and current members, including retirees. A court decision later invalidated the GABA reduction for the current members. However, the bills' valid provisions still allowed PERS and TRS to become actuarially sound.

2014 Pension fund investment returns improved. But, SRS and GWPORS remained actuarially unsound with unfunded liabilities that did not amortize in any amount of time.

2015 No legislation during the 2015 session addressed the funding shortfalls in SRS and GWPORS.

2017 A 2017 regular session bill to increase employer contributions in GWPORS failed after it was amended to reduce benefits for new hires and increase employee contributions (HB 136). A bill to provide actuarial funding in SRS passed, increasing employer and employee contributions (HB 383).

Current Funding Status

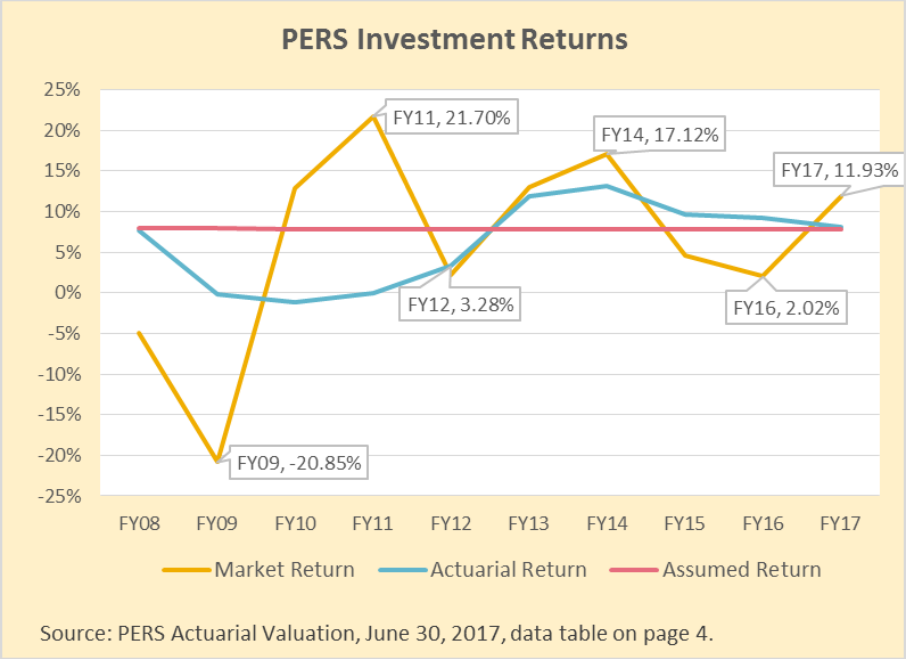
The following two tables show the funded ratio and amortization period for each of the DB retirement systems as of their June 30, 2017, actuarial valuations. The amortization periods that exceed the 30 years considered actuarially sound are highlighted by red text.

FUNDING STATUS AS OF JUNE 30, 2017, VALUATION		
Retirement System	**Funded Ratio (rounded)**	**Amortization Period for Unfunded Liabilities (rounded)**
PERS	73%	30 years
TRS	70%	22 years
JRS	167% *161% after SB 1, Nov. 2017 special session	0
HPORS	64%	37 years
SRS	81%	25 years
GWPORS	81%	70 years
MPORS	69%	16 years
FURS	76%	10 years
VFCA	81%	6 years

KEY ASSUMPTIONS FOR VALUATION		
Main Economic Assumptions Effective July 1, 2017	**TRS**	**MPERA Systems**
Investment Rate of Return	7.75%	7.65% (effective 7/1/17, so applied when calculating future liabilities)
Wage Growth	4.0%	3.50%
Price Inflation	3.25%	2.75%

Investment Return History

The following graphs and tables show the history of net market returns on investments in PERS and TRS compared to the actuarial returns and the actuarial assumed rates of return. Actuarial returns are the net market returns smoothed over 4 years.

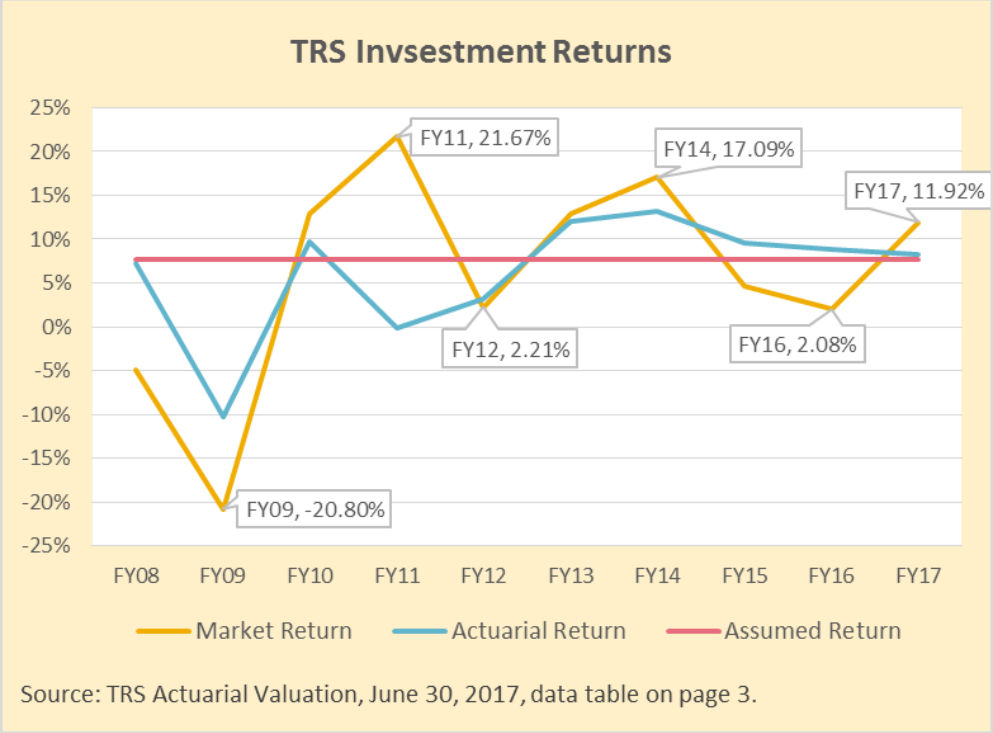


Source: PERS Actuarial Valuation, June 30, 2017, data table on page 4.

Year	Market Return	Actuarial Return	Assumed Return
FY08	-4.91%	7.62%	8.00%
FY09	-20.85%	-0.16%	8.00%
FY10	12.91%	-1.18%	7.75%
FY11	21.70%	-0.08%	7.75%
FY12	2.27%	3.28%	7.75%
FY13	12.99%	11.91%	7.75%
FY14	17.12%	13.21%	7.75%
FY15	4.60%	9.63%	7.75%
FY16	2.02%	9.27%	7.75%
FY17	11.93%	8.08%	7.75%

	5-Year Net Return	10-Year Net Return	20-Year Net Return
*PERS	9.41%	5.42%	6.37%

*Source: RVK Quarterly Performance Report to Montana Board of Investments, Sept. 30, 2017.



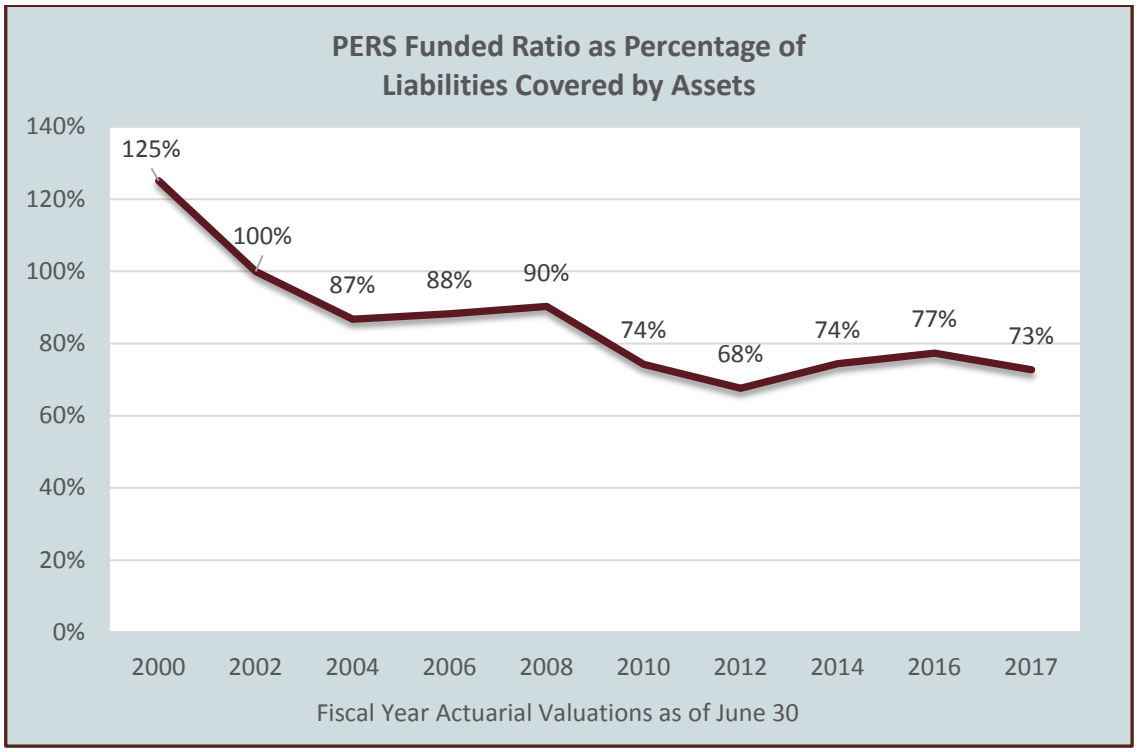
Source: TRS Actuarial Valuation, June 30, 2017, data table on page 3.

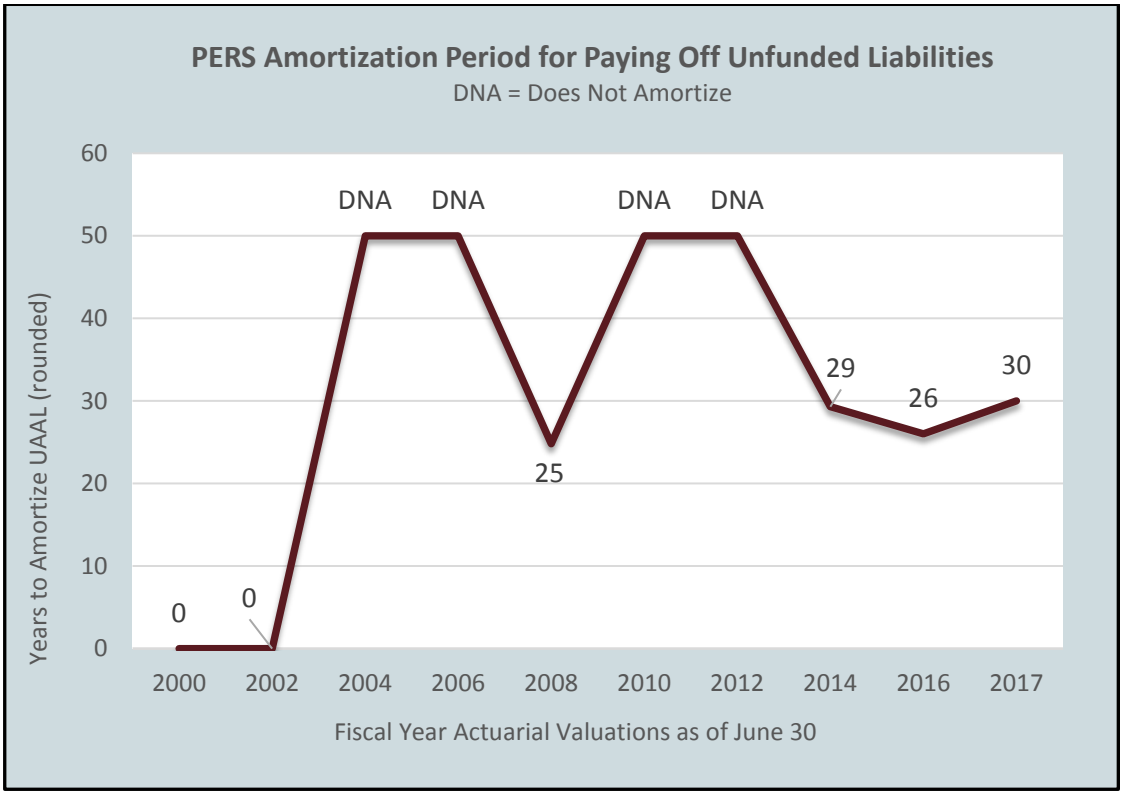
Year	Market Return	Actuarial Return	Assumed Return
FY08	-4.88%	7.18%	7.75%
FY09	-20.80%	-10.26%	7.75%
FY10	12.87%	9.78%	7.75%
FY11	21.67%	-0.13%	7.75%
FY12	2.21%	3.21%	7.75%
FY13	12.94%	11.99%	7.75%
FY14	17.09%	13.21%	7.75%
FY15	4.57%	9.59%	7.75%
FY16	2.08%	8.79%	7.75%
FY17	11.92%	8.24%	7.75%

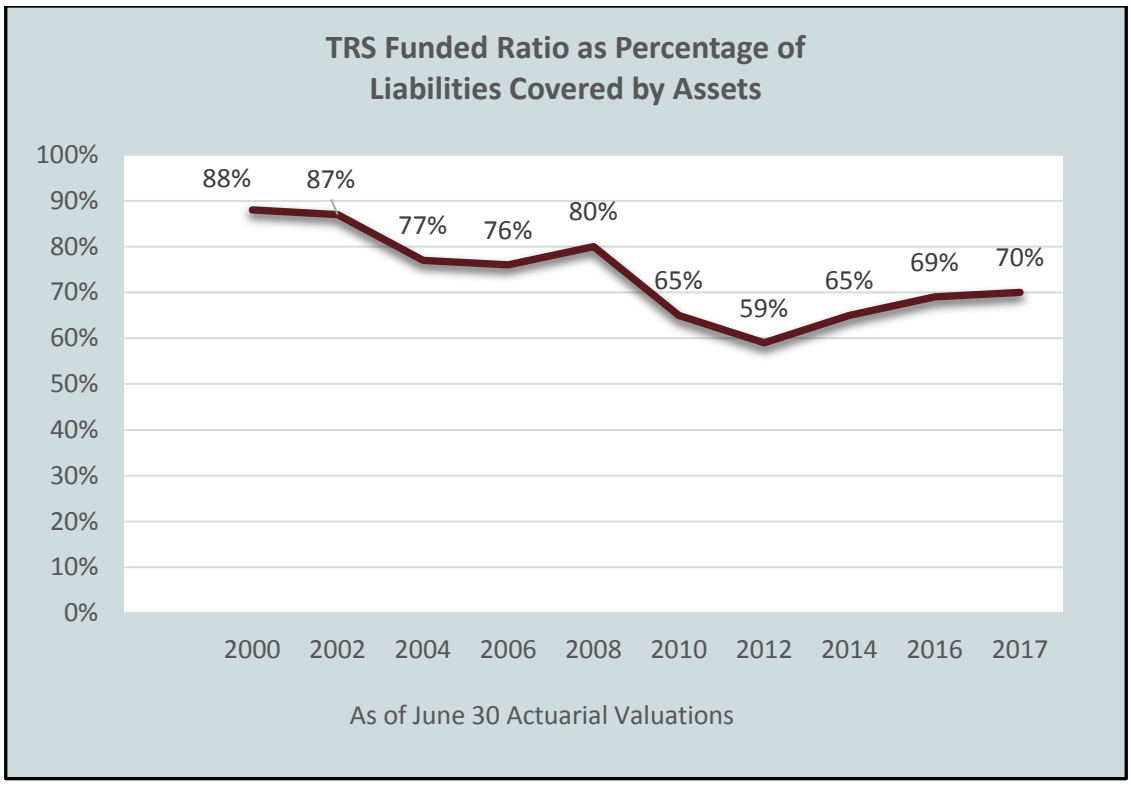
	5-Year Net Return	10-Year Net Return	20-Year Net Return
*TRS	9.41%	5.42%	6.38%

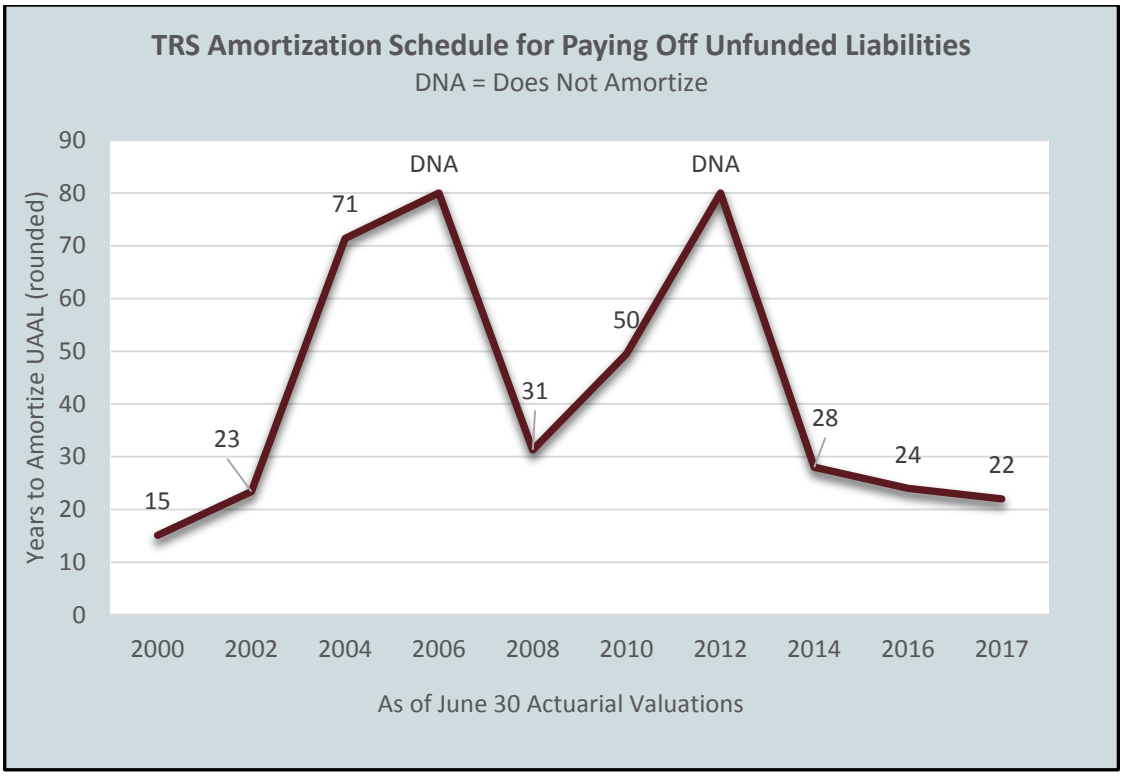
*Source: RVK Quarterly Performance Report to Montana Board of Investments, Sept. 30, 2017.

FUNDING STATUS HISTORY






TRS Funded Ratio as Percentage of Liabilities Covered by Assets
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
88%
87%
77%
76%
80%
65%
59%
65%
69%
70%
2000
2002
2004
2006
2008
2010
2012
2014
2016
2017
As of June 30 Actuarial Valuations


TRS Amortization Schedule for Paying Off Unfunded Liabilities
DNA = Does Not Amortize
Years to Amortize UAAL (rounded)
90
80
70
60
50
40
30
20
10
0
DNA
DNA
71
50
31
23
15
28
24
22
2000
2002
2004
2006
2008
2010
2012
2014
2016
2017
As of June 30 Actuarial Valuations

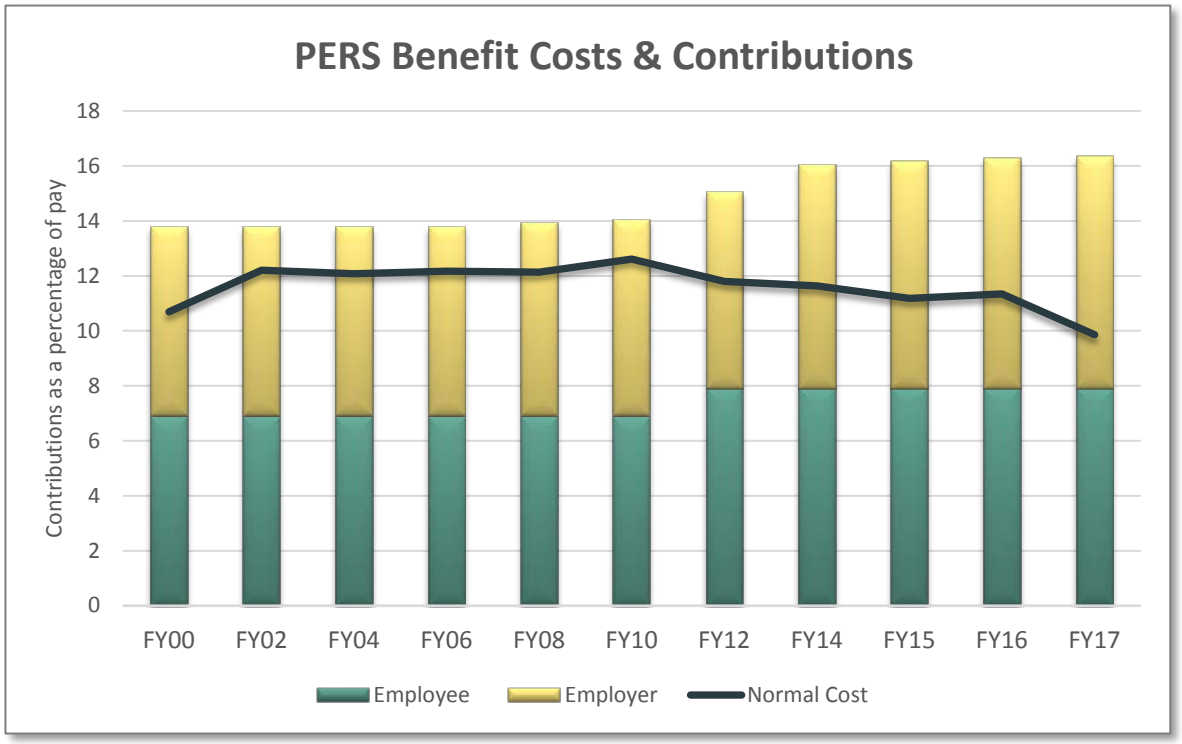
Benefit Costs & Contributions History

The actuarial cost of benefits as they accrue is called the normal cost. Unfunded Actuarially Accrued Liabilities (UAAL) are liabilities incurred when plan experience causes unanticipated costs, such as benefit increases being applied to past service or investment returns being lower than assumed.

For a plan to be actuarially sound, contributions must be sufficient both to cover the normal cost and to pay off the UAAL within a 30-year amortization period. Benefit reductions for new hires decrease the normal cost of the benefits for new hires. This allows a greater percentage of future contributions to be available (after normal costs are covered) to pay off the UAAL.

Legally, employee contributions may only be used to cover the normal cost of benefits, not the UAAL. This means employee contributions may not be increased to a rate that is higher than the normal cost. As illustrated in the following graphs and tables, enactment of the GABA increased normal costs. However, subsequent reductions in the GABA and other benefit reductions have been slowly decreasing normal costs as new employees have been hired. The decreases in normal costs combined with increases in employee and employer contribution rates has increased the amount available to pay off the UAAL and so improved the funding status of the plans. It also means employees are paying a larger portion of the normal cost.

PERS



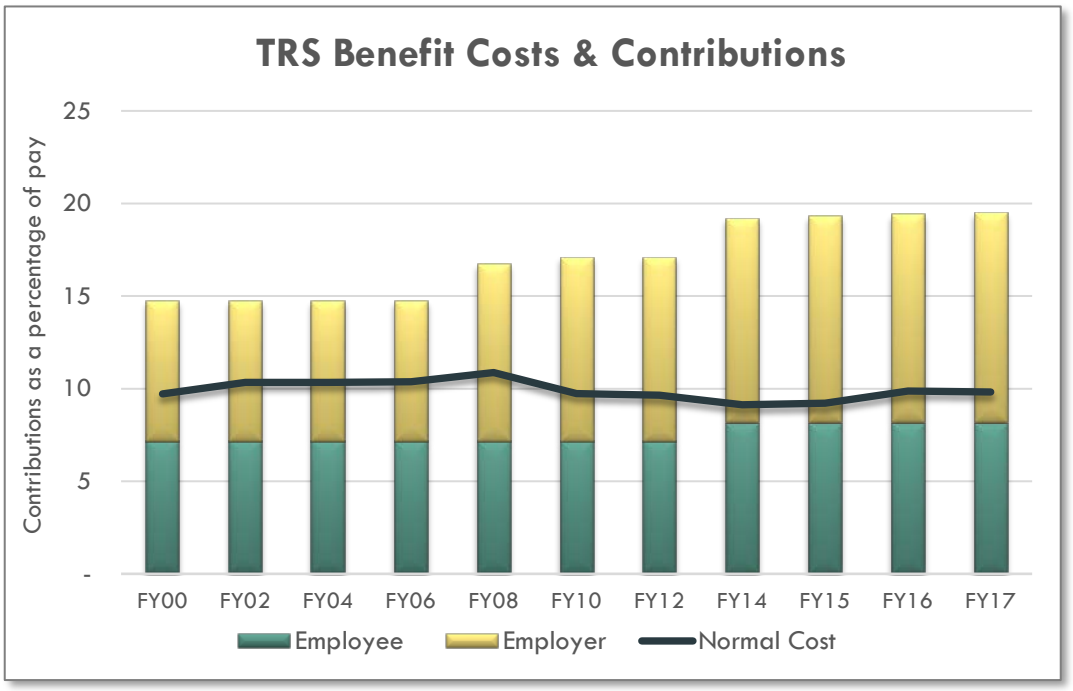
PERS Benefit Costs & Contributions					
Year	**Normal Cost**	**Employee Contributions***	**Employer Contributions**	**Total Contributions**	**Available for UAAL**
FY 00	10.69%	6.90%	6.90%	13.80%	3.11%
FY 02	12.21	6.90	6.90	13.80	1.59
FY 04	12.08	6.90	6.90	13.80	1.72
FY 06	12.17	6.90	6.90	13.80	1.63
FY 08	12.13	6.90	7.04	13.94	1.81
FY 10	12.61	6.90	7.17	14.07	1.46
FY 12	11.80	7.90	7.17	15.07	3.27
FY 14	11.63	7.90	8.17	16.07	7.42
FY 15	11.18	7.90	8.27	16.17	7.34
FY 16	11.34	7.90	8.37	16.27	4.68
FY 17	9.86	7.90	8.47	16.37	6.30

Note:
* The employee contribution rate will be reduced by 1% (to 6.9%) when the amortization schedule would not exceed 25 years.

Detail on PERS Employer Contributions – FY 2017					
	Base Contribution Rate (Section 19-3-316(1), MCA)	**State Offset to Local and School Employers (Section 19-3-319(1), MCA)**	**Additional Temporary (Section 19-3-316(3), MCA)**	**Additional Offset for School Employers (Section 19-3-319(2), MCA)**	**Total Employer Contribution**
State and University System Employers	6.9%		1.57%*, **		8.47%
Local Governments	6.8%	0.1%	1.57%*, **		8.47%
School/Community College Districts	6.8%	0.1%	1.30%*, **	.27%**	8.47%

Notes:
* Increases by 0.1% each fiscal year until June 30, 2024.
** Terminates when the amortization period is 25 years or less.

TRS



TRS Benefit Costs & Contributions					
Year	**Normal Cost**	**Employee Contributions***	**Employer Contributions***	**Total Contributions**	**Available for UAAL**
FY00	9.71%	7.15%	7.58%	14.73%	5.02%
FY02	10.33	7.15	7.58	14.73	4.40
FY04	10.34	7.15	7.58	14.73	4.39
FY06	10.37	7.15	7.58	14.73	4.36
FY08	10.87	7.15	9.58	16.73	5.86
FY10	9.74	7.15	9.96	17.11	7.37
FY12	9.64	7.15	9.96	17.11	7.47
FY14	9.13	8.15	11.06	19.21	10.08
FY15	9.21	8.15	11.16	19.31	10.10
FY16	9.87	8.15	11.26	19.41	9.54
FY17	9.82	8.15	11.36	19.51	9.69

Note:

* See the next two tables for details on the TRS employee and employer contribution rates.

Detail on TRS Employee Contributions - FY 2017			
Employee	**Base Contribution Rate** (Section 19-20-602, MCA)	**Supplemental Contribution Rate** (Section 19-20-608, MCA)	**Total Employee Contribution**
Tier One Members hired before July 1, 2013	7.15%	1% The TRS Board may decrease this if the funded ratio is equal to or greater than 90%, and the amortization period is less than 15 years. After decreases, the TRS Board may increase this to a maximum of 1% if the funded ratio is equal to or less than 80% and the amortization period is greater than 20 years. Any adjustments must be based on the average funded ratios and amortization periods of the last 3 actuarial valuations.	8.15%
Tier Two Members hired on or after July 1, 2013	8.15%	1% (not currently being imposed) The TRS Board may impose this supplemental contribution in increments of 0.5%, up to a maximum of 1%, if TRS funded ratio is less than 80% and the amortization period is greater than 20 years. After increases, the TRS Board may decrease this rate if the funded ratio is equal to or greater than 90% and the amortization period is less than 15 years. Any adjustments must be based on the average funded ratios and amortization periods of the last 3 actuarial valuations.	8.15% currently May be increased up to 9.15% maximum

Detail on TRS Employer Contribution Rate – FY 2017					
Employer	**Base Contribution** (Section 19-20-605, MCA)	**State Offset/ Supplemental** (Section 19-20-607, MCA)	**Supplemental Contribution** (Section 19-20-609, MCA)	**General Fund** (Section 19-20-604, MCA)	**Total GF and Employer Contribution**
State and University System	9.85%	N/A	1.4%*	0.11%**	11.36%
School District and Community Colleges	7.47%	2.38%	1.4%*	0.11%**	11.36%

Notes:

* This contribution increases by 0.1% each fiscal year until June 30, 2024, to a total increase of 2%. The TRS Board may decrease this supplemental rate if the funded ratio is equal to or greater than 90% and the amortization period is less than 15 years. After decreases, the TRS Board may increase this supplemental rate back up to a maximum of 1% if the funded ratio is equal to or less than 80% and the amortization period is greater than 20 years. Any adjustments must be based on the average funded ratio and amortization period for the last 3 actuarial valuations.

**Terminates if the amortization period will be 10 years or less.

In Summary

Since investment returns dropped sharply in 2001 and again in 2008, unfunded liabilities have increased significantly in Montana's DB pension systems. This caused funded ratios to decrease and amortization schedules to sharply increase. Consequently, several systems became actuarially unsound. Legislative actions along with a slowly recovering market have stabilized the systems. Currently, only two systems remain unsound: HPORS and GWPORS. However, the unfunded liabilities in those two systems do amortize, just not in 30 years or less.

Legislative actions since 2005 have consisted of cash infusions from the state general fund, benefit reductions for new hires in 2007, 2011, and 2013, increases in employee and employer contributions, and providing additional state supplemental contributions.

The benefit reductions are slowly reducing the normal cost of benefits in the systems. This reduction in normal costs, along with the contribution increases, is allowing for more of the employer and state contributions to be used to pay off system unfunded liabilities.

Additionally, the retirement boards have lowered their investment return assumptions, while actual investment returns are improving.