Summary of FY 2016 Public Retirement System Actuarial Valuations⁶

Compiled by Sheri Scurr, Legislative Services Division

From TRS Board and PER Board June 30, 2016, Actuarial Valuations and Board of Investments Data

| System | Funded Ratio ¹ (percentage) | Covered Payroll ² on June 30, 2016 | ARC³ Shortfall (% payroll)⁴ | ARC Shortfall (as dollar amt - increases annually) ⁵ | Amortization period (years) |
|---------|--|--|-----------------------------------|--|--------------------------------|
| PERS-DB | 77% | \$1.2 billion | 0% | 0 | 26 |
| TRS | 69% | \$795.9 million | 0% | 6 0 | 24 |
| SRS | 83% | \$70.6 million | 3.39% | \$2,393,340 | does not amortize |
| MPORS | 69% | \$47.2 million | 0% | 6 0 | 18 |
| GWPORS | 84% | \$47.1 million | 2.08% | \$979,680 | does not amortize |
| FURS | 78% | \$43.1 million | 0% | 6 0 | 9 |
| HPORS | 66% | \$15.3 million | 0% | 6 0 | 28 |
| JRS | 166% | \$6.9 million | 0% | 6 0 | 0 |
| TOTAL | | | | \$ 3,373,029 | |

Notes:

- 1. "Funded Ratio" means current assets compared to current liabilities. When a plan is 100% funded, it means current assets are sufficient to pay 100% of current liabilities. The percentages in this column are rounded.
- 2. "Covered Payroll" means the annual salaries of all active members.
- 3. "ARC" means the Annual Required Contribution rate required to amortize the unfunded liabilities over 30 years as determined by the system's actuary. Unfunded liabilities are the liabilities that cannot be paid with current assets, but that are being paid off over time. This time period is the called the "amortization period".
- 4. The "ARC shortfall" as a <u>percent of payroll</u> is the <u>contribution rate increase</u> (i.e., contributions above current contributions) that is needed to amortize the system's unfunded liabilities in 30 years. If a plan's liabilities are being paid off over a period of 30 years or less, actuaries consider the system actuarially sound.
- 5. The ARC shortfall as a <u>dollar amount</u> is the amount of money required in the <u>first</u> year of the biennial budget, <u>in addition</u> to <u>current contributions</u> to amortize the system's unfunded liabilities in 30 years. This amount was calculated by legislative staff, so is not in the valuations, and is based on the June 30, 2016, snapshot of payroll. The actual amount will change as payroll changes.
- 6. Actuarial valuations are based on economic and demographic assumptions. The governing boards have the constitutional duty to adopt these assumptions, and they do so based on experience studies. Experience studies are conducted approximately every 5 years. The legislature may not alter these assumptions, but may request information based on different assumptions. The main actuarial assumptions for the FY 2016 actuarial valuations were as follows:

| TRS | MPERA Systems |
|-------|---------------|
| 7.75% | 7.75% |
| 4.0% | 4.0% |
| 3.25% | 3.0% |
| | 7.75% 4.0% |

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Sensitivity to Future Experiences:

Each actuarial valuation includes a section that includes a basic analysis of how sensitive estimated costs of benefits are to changes in the assumed rate of return on investments. The table below shows what the funded ratio and amortization period would be if the actuary where to assume a 1% lower rate of return instead of the 7.75% assumed rate. This is to illustrate how sensitive the plan's funding targets are to a 1% decrease in the rate of return assumption.

| System | Funded Ratio ¹ (percentage) | Amortization period (years) | Difference from 7.75% Assumption |
|---------|--|--------------------------------|-------------------------------------|
| PERS-DB | 69% | does not amortize | N/A |
| TRS | 62% | 51 yrs | (7.1%) / 27 yrs |
| SRS | 73% | does not amortize | N/A |
| MPORS | 60% | 46 yrs | (8.5%) / 28 yrs |
| GWPORS | 73% | does not amortize | N/A |
| FURS | 69% | 24 yrs | (9.7%) / 15 yrs |
| HPORS | 58% | does not amortize | N/A |
| JRS | 152% | 0 yrs | (14.3%) / 0 yrs |

With 6.75% Investment Return Assumption

| | Montan | a's Public Employees' Re | tirement Plans: | Summary Tables | (Source: FY 2016 | Actuarial Valuatio | ons) | |
|--|---|---|-------------------------|---|--|--|---|--|
| | | Table | 1 – CONTRIBU | TIONS AND NORM | IAL COSTS | | | |
| SYSTEM Year enacted | TEACHERS' RETIREMENT SYSTEM (TRS) 1937 | PERS DEFINED BENEFIT PLAN (PERS-DBRP) 1945 | JUDGES (JRS) 1967 | HIGHWAY PATROL OFFICERS' (HPORS) 1945 | SHERIFFS' (SRS) 1974 | GAME WARDENS' AND PEACE OFFICERS' (GWPORS) 1963 | MUNICIPAL POLICE OFFICERS (MPORS) 1974 | FIREFIGHTER S' UNIFIED (FURS) 1981 |
| Employer contributions * percentages are of covered compensation **bolded date headings are "on and after" hire dates | School Districts: 8.77% (increases 0.1% each yr to 2024) plus State GF: 2.49% State agencies & University System: 11.15% (increases 0.1% each yr) plus State GF: 0.11% reduced if certain conditions met | State entities: 8.37% (includes base of 6.9% plus a supplemental amount that increases 0.1% each year to 2024, supplemental, reduced when amortization period is 25 years or less) Schools: 8.00% plus State GF 0.37% Local Gov't: 8.27% plus State GF: 0.1% | 25.81% | 7/1/13 28.15% | 10.115% Includes 0.58% supplemental amount that may be reduced if amortization is 25 years | 9.00% | 14.41% | 14.36% |
| Employee contributions | Tier One (pre-7/01/13): 7.15% plus 1% supplemental contribution until system is 90% funded Tier Two (7/1/13): 8.15% | 7.90% reduced to 6.9% when amortization period is 25 year or less | 7.00% | Pre-7/1/97 12% 7/1/97 or elected GABA (Guaranteed Annual Benefit Adjustment): 12.05% | 9.245% | 10.56% | 6/30/75 7.0% 7/1/97 8.5% 7/1/97 or elected GABA 9% | Pre-7/1/97 9.5% 7/1/97 or elected GABA 10.7% |
| Funding from other sources | U- System: 4.72% of MUS-RP payroll | Coal Tax: 29.8 Million | None | State GF: 10.18% | None | None | State GF : 29.37% | State GF : 32.61% |
| Total statutory contributions | 19.31% | 16.27% | 32.81% | 51.38% | 19.36% | 19.56% | 52.78% | 57.67% |
| Normal cost (i.e., cost of benefits as they accrue) | 9.87% | 11.34% | 24.14% | 24.94% | 17.91% | 18.06% | 27.72% | 26.48% |

Montana's Public Employees' Retirement Plans: Summary Tables (Source: FY 2016, Actuarial Valuations)

Table 2 – ACTURIAL DATA

| SYSTEM Year enacted | TEACHERS' RETIREMENT SYSTEM (TRS) 1937 | PERS DEFINED BENEFIT PLAN (PERS- DBRP) 1945 | JUDGES (JRS) 1967 | HIGHWAY PATROL OFFICERS' (HPORS) 1945 | SHERIFFS' (SRS) 1974 | GAME WARDENS' AND PEACE OFFICERS' (GWPORS) 1963 | MUNICIPAL POLICE OFFICERS (MPORS) 1974 | FIREFIGHTERS' UNIFIED (FURS) 1981 |
|--|--|--|-------------------------|---|----------------------------|--|--|--|
| Actuarial value of assets | \$3.8 billion | \$5.2 billion | \$91.2 million | \$133.9 million | \$310.5 million | \$160.6 million | \$357 million | \$365.3 million |
| Actuarial Accrued Liability (AAL) | \$5.5 billion | \$6.8 billion | \$54.8 million | \$203.3 million | \$373.4 million | \$191 million | \$518.9 million | \$466.7 million |
| Unfunded portion of accrued actuarial liability | \$1.7 billion | \$1.5 billion | \$(36.4 million) | \$69.5 million | \$62.6 million | \$30.5 million | \$162 million | \$101.4 million |
| Funded ratio (rounded) | 69% | 77% | 166% | 66% | 83% | 84% | 69% | 78% |
| Percentage of contributions available to fund unfunded liabilities | 9.23% | 4.72% | 8.52% | 26.20% | 1.28% | 1.33% | 24.86% | 30.99% |
| Years to amortize unfunded liability | 24 years | 26 years | 0 years | 28 years | Does not amortize | Does not amortize | 18 years | 9 years |
| Percentage being paid above (in parentheses) or below the ARC | (1.15)% | (0.04)% | (36.24)% | (1.18)% | 3.39% | 2.08% | (6.99)% | (18.65)% |
| Projected ARC shortfall as rough annual dollar amount | \$0 | \$0 | \$0 | \$0 | \$2,393,340 | \$979,680 | \$0 | \$0 |

| | Montana' | s Public Employees' Retire | ement Plans: Sum | nmary Tables <i>(Sou</i> | ırce: June 30, 20 | 916, Actuarial Valua | ation) | |
|---|---|--|--|---|--|--|---|--|
| | | | | BILITY AND BASI compensation x y | | | | |
| SYSTEM Year enacted | TEACHERS' RETIREMENT SYSTEM (TRS) | PERS DEFINED BENEFIT PLAN (PERS-DB) | JUDGES (JRS) | HIGHWAY PATROL OFFICERS' (HPORS) | SHERIFFS' (SRS) | GAME WARDENS' AND PEACE OFFICERS' (GWPORS) | MUNICIPAL POLICE OFFICERS' (MPORS) | FIREFIGHTER S' UNIFIED (FURS) |
| Service and age eligibility criteria for full retirement | Tier One (pre-7/01/13): 25 yrs, any age or 5 yrs, age 60 Tier Two (7/01/13) 30 yrs, age 55 or 5 yrs, age 60 | Pre-7/01/11 30 yrs service, any age or 5 yrs, age 60 or any yrs, age 65 7/01/11 5 yrs, age 65, or any yrs, age 70 | 5 years, age 60 | 20 years, any age | 20 years, any age | 20 years, age 50 or 5 years, age 55 | 20 years, any age or 5 years, age 50 | 20 years any age or 5 years, age 50 |
| Minimum service for vesting | 5 years | 5 years | 5 years | Pre-7/01/13 5 yrs 7/01/13 10 yrs | 5 years | 5 years | 5 years | 5 years |
| Highest average compensation (HAC) period used in benefit calculation | Tier One (pre-7/01/13): 3 years Tier Two (7/01/13) 5 years | Pre-7/01/11 3 years 7/01/11 5 years | 3 years | 3 years | Pre-7/01/11 3 years 7/01/11 5 years | Pre-7/01/11 3 years 7/01/11 5 years | 3 years (final avg, not highest avg.) | 3 years |
| Service retirement benefit multiplier | 1.67% per year Tier Two (7/01/13) 1067% but if attained 30 yrs service and age 60: 1.85% per year (professional retirement option) | Pre-7/01/11 less than 25 yrs: 1.78571% 25 yrs or more: 2% 7/01/11 less than 10 yrs: 1.5% 10- 29 yrs: 1.78571% 30 yrs or more: 2% Money Purchase Option The greater of the above or actuarial equivalent of 2X member's accumulated contributions plus interest set by board (0.25% - for FY 2016-17) | up to 15 years: 3.33% 15 yrs or more: 1.785% for each year more than 15 years | 2.6% per year | 2.5% per year | 2.5% per year | 2.5% per year | 2.5% per year |
| Social Security coverage | Yes (most members) | Yes (most members) | Yes | No | Yes | Yes | No | No |

| | Montana's Public Employees' Retirement Plans: Summary Tables (Source: June 30, 2016, Actuarial Valuations) | | | | | | | |
|---|---|---|-------------------------|---|----------------------------|--|--|--|
| | | | Table 4 | - ACTIVE MEMBE | ERSHIP | | | |
| SYSTEM Year enacted | TEACHERS' RETIREMENT SYSTEM (TRS) 1937 | PERS DEFINED BENEFIT PLAN (PERS-DBRP) 1945 | JUDGES (JRS) 1967 | HIGHWAY PATROL OFFICERS' (HPORS) 1945 | SHERIFFS' (SRS) 1974 | GAME WARDENS' AND PEACE OFFICERS' (GWPORS) 1963 | MUNICIPAL POLICE OFFICERS (MPORS) 1974 | FIREFIGHTERS' UNIFIED (FURS) 1981 |
| Total active members (full- and part-time) | 19,048 | 28,390 | 55 | 228 | 1,364 | 989 | 762 | 644 |
| Average age | 45 years* | 48.3 | 58.9 | 40.2 | 40.1 | 40.2 | 38.4 | 40.1 |
| Average hire age | 34 years* | 39 | 49.7 | 30.2 | 32.9 | 32.3 | 29.8 | 29.3 |
| Average years of service | 11 years* | 9.3 | 9.2 | 10.0 | 7.2 | 7.9 | 8.6 | 10.8 |
| Average annual salary (full-time members) | \$52,776 | \$41,763 | \$125,825 | \$67,000 | \$51,755 | \$47,632 | \$61,987 | \$66,955 |
| Number of participating employers | 372 | 541 | 1 | 1 | 57 | 7 | 32 | 25 |
| Employers' covered payroll (annual valuation compensation) | \$795.9 million | \$1,185 million | \$6.9 million | \$15.3 million | \$70.6 million | \$47.1 million | \$47.2 million | \$43.1 million |

*excludes part-time active members with annual compensation of less than \$1,000

| | Montana's Public Employees' Retirement Plans: Summary Tables (Source: June 30, 2016, Actuarial Valuations) | | | | | | | |
|--|---|---|-------------------------|---|----------------------------|--|--|--|
| | | Tabl | le 5 – RETIREE AN | ND BENEFIT RE | CIPIENT DATA | | | |
| SYSTEM Year enacted | TEACHERS' RETIREMENT SYSTEM (TRS) 1937 | PERS DEFINED BENEFIT PLAN (PERS-DBRP) 1945 | JUDGES (JRS) 1967 | HIGHWAY PATROL OFFICERS' (HPORS) 1945 | SHERIFFS' (SRS) 1974 | GAME WARDENS' AND PEACE OFFICERS' (GWPORS) 1963 | MUNICIPAL POLICE OFFICERS (MPORS) 1974 | FIREFIGHTERS' UNIFIED (FURS) 1981 |
| Number of benefit recipients | 15,164 | 21,333 | 68 | 329 | 620 | 250 | 768 | 621 |
| Average age of current retirees | 71 years | 72 years | 76.3 years | 68.1 | 64.9 | 66.6 | 66.0 | 69.3 |
| Average age at retirement | 59 years | 59.5 years | 63.9 years | 50.7 | 54.5 | 57.8 | 47.4 | 52.6 |
| Average years of service at retirement | 25 years | 20.1 years | 17.4 years | 22.8 | 18.3 | 18.3 | 19.0 | 23.7 |
| Average annual benefit (service retirement) | \$22,188 | \$16,487 | \$50,975 | \$31,772 | \$25,840 | \$21,144 | \$29,347 | \$34,731 |
| Total benefits paid in FY 2016 | \$325,897,000 | \$344,103,875 | 3,416,023 | \$10,482,414 | \$15,476,437 | \$5,068,318 | \$21,960,690 | \$20,896,200 |
| Benefits paid as a percentage of system assets (actuarial value) | 8.58% | 7% | 4% | 8% | 5% | 3% | 6% | 6% |

| | Montana's Public Employees' Retirement Plans: Summary Tables (Source: Montana Code Annotated - 2015) Table 6 – POSTRETIREMENT BENEFIT INCREASES | | | | | | | |
|---|--|---|--|---|--|--|--|--|
| SYSTEM Year enacted | TEACHERS' RETIREMENT SYSTEM (TRS) 1937 | PERS DEFINED BENEFIT PLAN (PERS-DBRP) 1945 | JUDGES (JRS) 1967 | HIGHWAY PATROL OFFICERS' (HPORS) 1945 | SHERIFFS' (SRS) 1974 | GAME WARDENS' AND PEACE OFFICERS' (GWPORS) 1963 | MUNICIPAL POLICE OFFICERS (MPORS) 1974 | FIREFIGHTERS' UNIFIED (FURS) 1981 |
| Minimum benefit or Guaranteed Annual Benefit Adjustment (GABA) | GABA Tier One (Pre-7/01/13) 1.5% Tier Two (7/01/13) Equal to or greater than 0.50% but no more than 1.50% depending on the funding status of the plan* | GABA Pre-7/01/07 3.0% 7/01/07 1.5% 7/01/13 1.5% reduced 0.1% for every 2 years system is below 90% funded | Minimum Pre-7/01/97 Benefits increased same as salary of sitting judge GABA 7/01/97 or elected GABA 3.0% | Minimum Pre-7/01/97 2% of base salary of probationary officer GABA 7/01/97 or elected GABA 3.0% 07/01/13 1.5% | GABA Pre-07/01/07 3.0% 07/01/07 1.5% | GABA Pre-07/01/07 3.0% 07/01/07 1.5% | Minimum Pre-7/01/97 ½ of monthly salary of new officer GABA 7/01/97 or elected GABA 3.0% | Minimum Pre-7/01/97 ½ of monthly salary of new firefighter GABA 7/01/97 or elected GABA 3.0% |
| Waiting period for GABA | 3 years | Pre-7/01/07 1 year | 1 year | Pre-7/01/13 1 year 7/01/2013 3 years | 1 year | 1 year | 1 year | 1 year |

Note: *The TRS GABA for those hired on or after 7/01/2013 is: If system liabilities are at least 90% funded and the provision of the increase is not projected to cause the system's liabilities to be less than 85% funded, the GABA will be set by the board to an amount that is at least 0.5% but no more than 1.5%. The benefit increase will be effective on January 1.

| | Montana's Public Employees' Retirement Plans: Summary Tables (Source: Montana Board of Investments) | | | | | | | | |
|---|---|---|-----------------------------------|---|-----------------------------------|--|--|--|--|
| | | | Table | 7 – INVESTMENT | DATA | | | | |
| SYSTEM Year enacted | TEACHERS' RETIREMENT SYSTEM (TRS) 1937 | PERS DEFINED BENEFIT PLAN (PERS-DBRP) 1945 | JUDGES (JRS) 1967 | HIGHWAY PATROL OFFICERS' (HPORS) 1945 | SHERIFFS' (SRS) 1974 | GAME WARDENS' AND PEACE OFFICERS' (GWPORS) 1963 | MUNICIPAL POLICE OFFICERS (MPORS) 1974 | FIREFIGHTERS' UNIFIED (FURS) 1981 | |
| Amount invested (fair value on 6/30/16) | \$3.62 billion | \$5.02 billion | \$87.45 million | \$128.57 million | \$298.64 million | \$154.41 million | \$ 329.53 million | \$337.33 million | |
| Actual rate of return: FY 2016 and 10-year actual | 2.08% - 1 year 5.89% - 10-year | 2.07% - 1-year 5.89% - 10-year | 2.08% - 1-year 5.89% - 10-year | 2.07% - 1-year 5.89% - 10-year | 2.08% - 1-year 5.87% - 10-year | 2.07% - 1-year 5.87% - 10-year | 2.09% - 1-year 5.85% - 10-year | 2.08% - 1-year 5.87% - 10-year | |
| Rate of return on board composite benchmark: FY 2016 and 10-yr | 2.83% - 1-year 6.22% - 10-year | 2.84% - 1-year 6.21% - 10-year | 2.85% - 1-year 6.21% - 10-year | 2.85% - 1-year 6.22% - 10-year | 2.85% - 1-year 6.21% - 10-year | 2.86% - 1-year 6.20% - 10-year | 2.84% - 1-year 6.16% - 10-year | 2.85% - 1-year 6.18% - 10-year | |
| Actuarial value of return in FY 2016 with 4-year smoothing | 8.79% | 9.27% | 8.64% | 8.76% | 8.66% | 8.42% | 8.37% | 8.33% | |
| Asset allocation all pension funds | Domestic Equity – International Equit Private Equity – 1 Fixed Income –23 Real Estate –9.27 Cash Equivalents | ty –15.44% 1.15% .65% % | | | | | | | |
| Pension funds by investment pool | ension funds by Montana International Pool –\$3,765,627,511 Montana International Pool –\$1,541,646,604 | | | | | | | | |

Montana's Public Employees' Retirement Plans: Summary Tables (Source: FY 2016, Actuarial Valuations)

Table 8 – CASH FLOW DATA

Notes on cash flow: Investment strategy must take into how much of the pension fund's assets need to be kept in more liquid investments in order to pay benefits as they come due. The more mature a plan becomes (i.e., the more retirees there are compared to current employees), the more cash is needed to cover benefit payments. If a plan has a "negative cash flow", it means that cash flowing out to pay benefits is greater than the cash flowing in from current contributions. However, the nature of a retirement plan is that contributions are not being spent as they come in, but are being invested to earn interest over time to pay for the individual's benefit in retirement. Thus, cash flow information helps provide context with respect to the liquidity needs of the pooled investment portfolio, but cash flow information is not a key indicator of the overall actuarial soundness of the pension fund. Actuarial soundness is best indicated by the plan's funded ratio (assets compared to liabilities) and progress toward 100% funding where current assets covered current liabilities. How fast this progress is made is reflected in the amortization schedule. Nonetheless, the more a pension fund's assets must be invested in shorter-term investments or kept in cash, the lower the interest earning potential on those assets. This table is offered to provide legislators with perspective on how cash flow needs may affect the overall investment earning potential of the fund.

| SYSTEM Year enacted | TEACHERS' RETIREMENT SYSTEM (TRS) 1937 | PERS DEFINED BENEFIT PLAN (PERS- DBRP) 1945 | JUDGES (JRS) 1967 | HIGHWAY PATROL OFFICERS' (HPORS) 1945 | SHERIFFS' (SRS) 1974 | GAME WARDENS' AND PEACE OFFICERS' (GWPORS) 1963 | MUNICIPAL POLICE OFFICERS (MPORS) 1974 | FIREFIGHTER S' UNIFIED (FURS) 1981 |
|--|--|--|--------------------------|---|------------------------------|--|--|---|
| Active employees / retirees (includes beneficiaries) | 19,048 active 15,164 retirees | 28,390 active 21,333 retirees | 55 active 68 retirees | 228 active 329 retirees | 1,364 active 620 retirees | 989 active 250 retirees | 762 active 768 retirees | 644 active 621 retirees |
| Total contributions (A) | \$205.3 million | \$230.5 million | \$2.54 million | \$8.1 million | \$14.3 million | \$9.3 million | \$25.1 million | \$24.9 million |
| Total benefits & expenses paid (B) | \$328.4 million | \$359.9 million | \$3.62 million | \$10.8 million | \$16.9 million | \$6.4 million | \$23.6 million | \$21.2 million |
| Difference (A-B) | (\$123 million) | (\$129 million) | (\$1.08 million) | (\$2.7 million) | (\$2.6 million) | \$2.9 million | \$1.5 million | \$3.7 million |
| Total investment income | \$71.5 million | \$101 million | \$1.78 million | \$2.6 million | \$6.1 Million | \$3.2 million | \$7.1 million | \$7.3 million |
| Net cash flow | (\$51.6 million)/ 1.39% of assets | (\$28.1 million)/ 0.56% of assets | \$700,000 | (\$100,000) | \$3.5 million | \$6 million | 8.6 million | \$11 million |
| Total assets (market value) | \$3.7 billion | \$5 billion | \$87.8 million | \$129 million | \$299 million | \$154.7 million | \$343.6 million | \$351.6 million |
| Benefits & expenses as a percentage of total assets | 9% | 7% | 4% | 8% | 5% | 4% | 7% | 6% |

Montana's Public Employees' Retirement Plans: Summary Tables (Source: June 30, 2016, Actuarial Valuation)

Table 9 – VOLUNTEER FIREFIGHTER'S COMPENSATION ACT

(Established in 1935)

| Eligible fire companies (as defined in 19-17-109, MCA) | 220 |
|---|---|
| Members | 1,895 active members 1,425 benefit recipients |
| Minimum age and service requirements | For full benefit: Age 55 and 20 years of service For reduced benefit: Age 60 and 10 years of service |
| Vesting | 10 Years |
| Basic benefit formula | Full: \$175 per month, but after 20 years of service, increased by \$7.50 per year of service up to 30 years. If retired after July 1, 2011, after 30 years of service, increased by \$7.50 per year only if the fund is actuarially sound and the amortization period remains 20 years or less. Reduced: normal benefit amount is prorated by years of service less than 20 |
| Disability benefit | \$7.50 per year of service, with a minimum of \$75 per month and with the same maximum as a regular retirement benefit. The benefit can increase for over 30 years of service if the system is funded in 20 years or less. |
| Survivorship benefit | \$7.50 per year of service (maximum of 40 months including any amounts retiree received). |
| Average age of active members | 45.6 years of age |
| Average years of service of active members | 9.8 years of service |
| Average benefit for full service retiree | \$ 165.00 per month |
| Contributions | State General Fund: amount equal to 5% of insurance premium taxes collected (See Sections 19-17-301 and 50-3-109, MCA) |
| Actuarial value of assets | \$35.3 Million |
| Actuarial liabilities | \$44 million |
| Unfunded liability | \$8.7 million |
| Years to amortize unfunded liability | 7 years |
| Funded ratio | 80% |

Montana's Public Employees' Retirement Plans: Summary Tables (Source: MPERA and Board of Investments)

Table 10 – PERS DEFINED CONTRIBUTION (DC) RETIREMENT PLANJune 30, 2016

| Membership | New hires have 12 months to make a one-time, irrevocable choice between the DB and DC plans – default is DB plan |
|--|--|
| Active membership | 2,409 – 8% of total active members of PERS |
| Employee Contributions | 7.9% of salary – all allocated to individual member accounts Reduced to 6.9% when PERS-DB plan amortization period is less than 25 years. |
| Employer and State GF Contributions | 8.37% of salary (reduced when PERS-DB amortization period is less than 25 years Contributions allocated as follows: - 8.03 % to member accounts - 0.04% to an educational fund - 0.3% to disability trust fund |
| Total contributions to member accounts | 15.93% reduced to 11.09% when PERS-DB plan amortization period is less than 25 years |
| Total Amount Invested | \$ 154.5 million |
| Investment Choices | 28 funds (5 categories) evaluated quarterly. Options range from aggressive to conservative and include mutual funds, bond funds, and Target Date funds. |
| Vesting | 5 years for employer contributions and investment earnings |
| Benefits | Contributions plus investment earnings, minus administrative expenses; payable at any time after termination, with a possible federal tax penalty for withdrawal before age 59½. |
| Disability Benefit | A defined disability benefit based on a 1/56 x HAC x years of service formula, same as provided in the PERS-DBRP. |
| Death/survivorship benefit | Member's account balance |
| Plan Administration | PERB is the plan's board of trustees Empower Retirement Services is the plan's record keeper |

Montana's Public Employees' Retirement Plans: Summary Tables (Source: MPERA and Board of Investments)

Table 11 – DEFERRED COMPENSATION PLAN (457)

| Membership | Voluntary supplemental retirement savings plan available to all employees of the State, Montana University System, and contracting political subdivisions. |
|------------------------------|--|
| Number of Participants | 4,708 Active members |
| Employee Contributions | Voluntary, pre-tax deferral or designated ROTH deferral |
| Employer Contributions | None, unless specified in an employer contract |
| Total Amount Invested | \$448.2 million |
| Number of Investment Choices | 20 funds (5 categories) |
| Vesting | Participants are fully vested in their accounts immediately |
| Benefit Eligibility | Not available to distribute until separation from service, retirement, death, or upon an unforeseeable emergency, while still employed, provided IRS-specified criteria are met. |
| Benefit Amount | Lump sum or periodic benefit payment, at the option of the participant. Based on individual account balance and plan provisions. IRS permitted rollovers are also possible. |
| Death/survivorship Benefit | Member's account balance |
| Plan Administration | PERB is the plan's board of trustees Great-West Retirement Services is the plan's record keeper |

Montana's Public Employees' Retirement Plans: Summary Tables (Source: Office of Commissioner of Higher Education and Board of Investments)

Table 12 – MONTANA UNIVERSITY SYSTEM RETIREMENT PROGRAM (MUS-RP)June 30, 2016

| Membership | All administrative, scientific, and instructional staff of the University System and classified staff that elected MUS-RP rather than the PERS-DC plan. Contributing (active): 4,239 Non-contributing (inactive, retired, etc): 4,969 Avg. age: 49 yrs Avg. yrs of membership: 10.8 yrs |
|--|---|
| Retirement eligibility | A plan member may "retire" (i.e., access the MUS-RP account) any time after service is terminated. There are federal tax penalties for withdrawal prior to age 59½. |
| Benefit | An MUS-RP member's benefit depends on total contributions to the member's individual account, plus investment earnings, minus administrative expenses. The MUS-RP is administered by TIAA (Teachers' Insurance and Annuity Association) Avg. account balance: \$ 61,419 |
| Death and survivor benefits | The full account value in member's annuity account is payable to the beneficiary. The benefit can be paid in a single sum, as an annuity to the beneficiary for life, or as an annuity for a fixed period of years. The annuity may also be deferred as federal law permits. |
| Total Amount Invested | \$ 565.5 million |
| Investment Choices | 27 choices (6 asset classes) |
| Total MUS-RP payroll covered | \$251.7million |
| Contributions to member accounts as a percentage of payroll | Contract and Professional Staff:Classified Staff:Employer: 5.956%Employer: 8.43%Employee: 7.044%Employee: 7.90%TOTAL:13.0%TOTAL: 16.33% |
| Supplemental employer contributions to TRS for unfunded liability. | Contract and Professional Staff: to TRS for unfunded liability: 4.72%Classified Staff: to PERS for education: .04% |
| Increase required in supplemental contribution rate to amortize unfunded liability by 2033 as required under 19-20-621, MCA | 5.02% increase needed to the 4.72% to reach a total supplemental of 9.75% <u>Note:</u> As of June 30, 2014, valuation, which is the most recent. This increase is needed if the legislature wishes to continue to have the unfunded liability created in TRS when the MUS-RP was established paid by the U-System and not subsidized by the TRS pension fund. |