

**RETIREMENT PLAN DESIGN  
For State Employees  
(White Paper VI)  
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**Background**

Prior to 1999, frequent amendments to the defined benefit retirement plans administered by the Missouri State Employees' Retirement System (MOSERS) and the Missouri Department of Transportation and Patrol Employees' Retirement System (MPERS) resulted in a patchwork benefit structure that provided different benefits to various classifications of employees within the general employee population. In 1999, legislation was enacted that created a retirement plan for employees covered by both systems statutorily referred to as the Year 2000 Plan. (In the case of MOSERS-covered employees, the plan is commonly referred to as the MSEP 2000.) The foundation for the Year 2000 Plan rests on an overarching policy statement adopted by the Task Force on Total Compensation:

“To recruit, retain and pay employees who provide the highest quality services to the citizens of the state, the state employee benefits structure, combined with appropriate pay, should provide financial security to employees in an equitable and cost effective manner.”

This legislation, which became effective July 1, 2000, resolved many benefit equity issues. Retirement eligibility, benefit formulas, payment options and death-in-service provisions were redesigned and updated to be in alignment with the state's policy goals. Duty-related death was addressed through minimum survivor benefits and a triple indemnity life insurance provision added. A key feature of the plan was a change in the benefit formula to target an income replacement ratio of 75% (Year 2000 benefit plus social security) for employees who retired with 30 years of service. In addition, in-service cost-of-living adjustments (COLAs) were eliminated and a portability feature was added. Also, the design of the Year 2000 Plan eliminated the need for separate treatment of employees in public safety positions.

In 2002, the legislature enacted a cost-neutral BackDROP payment option. This measure provides management with a means of encouraging retirement eligible workers they wish to retain to delay their retirement. The BackDROP allows an employee to receive a lump sum payment at retirement in exchange for a reduced monthly benefit for life. To be eligible, an employee must continue working in a benefit eligible position at least two years beyond when qualified for normal eligibility. The BackDROP was seen as a tool to provide more flexibility in serving the needs of a fluctuating workforce. There is a perception that the BackDROP is costly – this is most likely the result of the lump sum amounts that are paid by the system at the time a qualifying member retires and elects that option. It is important to remember that a member's lump sum represents only 90% of what they would have received under a life income annuity between their BackDROP date and actual retirement date had they retired on their BackDROP date. In addition, the monthly life benefit under the BackDROP is based on less service and typically a lower final average salary than would have been the case for a member not selecting that option. (This is because the salary and service earned during the BackDROP period are excluded from the monthly benefit calculation.)

**Where We Are Today**

Over the past two years, the global economy has experienced a financial downturn unlike any encountered since the Great Depression. States across the country are grappling with budget deficits, dwindling revenues, and increased pension contributions resulting from investment losses. A number of states are considering plan design modifications to reflect economic realities and evolving changes in the demographic characteristics of modern society.

The purpose of this white paper is to explore potential changes to the MSEP 2000 that, based on today's demographic information and standard of living, would be adequate and fair for all stakeholders, affordable, and consistent with the personnel management objectives of the state.

### **Changing Demographics**

When social security was enacted in 1937, the average life expectancy for someone age 65 was about 13 years. Today, thanks to continued advances in medical science, the average life expectancy in the United States for a 65 year old is approximately 18 years or about five years longer than when age 65 was established as the original normal retirement age. (The key actuary involved in the design of the program initially thought that the normal retirement age should be 67 – he felt 60 was too young and 70 was too old so the difference was split and they settled on age 65.) Given the changes in longevity, Social Security was amended to gradually increase the minimum eligibility age for unreduced benefits to age 67.

As an additional consideration, due to longer life expectancies, rising healthcare costs, and too little savings, many eligible workers are choosing to postpone retirement well beyond the historical norm. Even after retirement, some will elect to supplement their retirement income by working part-time.

### *Trends at MOSERS*

A five-year statistical review of employees retiring under MOSERS illustrates the following patterns:

- The average retirement age for new retirees is approximately 59 years.
- The average service at retirement is approximately 23 years.
- The average entry age (age when first employed in a state position) for new retirees is approximately 35.
- The total number of employees who retired during this period is 10,779.
- Approximately 51% of those who retired under the MSEP 2000 retired under Rule of 80.
- Approximately 20% of those who retired under MSEP (closed plan) retired under Rule of 80.
- Approximately 38% of retirees who retired were eligible for BackDROP; of the 38% who were eligible, approximately 83% elected BackDROP.
- The total current active employee population eligible to retire immediately (including both normal and early) is 8,948 (excluding the colleges and universities).
- The total current active employee population eligible to retire (including both normal and early) through 2013 is 13,643.
- The retiree/beneficiary population has increased an average of 6.2% per year since 1997.

### **Potential Plan Design Changes**

Under laws in most states, accrued benefits may not be reduced once vested. As a result, efforts to control costs by changing benefits usually involve adopting a lower level of benefits for employees hired after the effective date of the changes. Accordingly, it is not uncommon to find plans having lower levels of benefits (usually referred to as “tiers”) for members hired more recently. This may be done to correct perceived flaws in the plan design in a cost neutral fashion (such as when the MSEP 2000 was enacted) or it may be done as a cost containment measure. While establishing a new tier gives governments some ability to control the cost of future benefits, it may take years before material reductions in employer contributions emerge.

As it relates to whether or not potential plan design changes should apply only to future hires, there are legal concerns that a statutory change that would apply to future service for existing hires would diminish retirement benefits of current employee members and possibly be determined by the courts to be unconstitutional.

**Alternative New Tier Defined Benefit Plan**

As it pertains to the general employee plan, there are strong arguments for maintaining the basic plan structure to avoid recreating the public safety issues that were resolved with the enactment of the Year 2000 Plan. Similarly, term limits and elections continue to be an issue for legislators and statewide elected officials. However, there have been no significant modifications to the Judicial Plan since July 2000 when the legislature enacted in-service COLAs for retired judges who had worked beyond the date when they were first eligible for unreduced benefits. The in-service COLA provision for active judges was originally enacted in 1995.

Given the change in life expectancies and the state’s desire to lower the costs associated with employee benefits, there are some modifications which, if adopted, could have a significant financial impact on future contribution rates over time.

The tables that follow illustrate the differences in the current level of benefits afforded to state employees as compared to an alternative new tier defined benefit plan for members of the Year 2000 Plan hired on or after January 1, 2011.

**New Tier for Future Hires  
Employed On or After January 1, 2011  
General Employee Plan**

| <b>Present Benefits</b>   | <b>Alternative Proposed Benefits</b>   |
|---|--|
| Normal Retirement Eligibility <ul style="list-style-type: none"> <li>• Age 62/5 yrs. service</li> <li>• Age 48 (Rule of 80)</li> </ul>  | Normal Retirement Eligibility for General Employees <ul style="list-style-type: none"> <li>• Age 67/10 yrs. service</li> <li>• Age 55 (Rule of 90)</li> </ul> Normal Retirement Eligibility for Highway Patrol <ul style="list-style-type: none"> <li>• Age 60 and active</li> <li>• Age 55/10 yrs. service</li> </ul> |
| Early Retirement Eligibility <ul style="list-style-type: none"> <li>• Age 57/5 yrs. service</li> </ul>  | Early Retirement Eligibility for General Employees <ul style="list-style-type: none"> <li>• Age 62/10 yrs. service (with reduction)</li> </ul>   |
| Vesting <ul style="list-style-type: none"> <li>• 5 years</li> </ul>   | Vesting <ul style="list-style-type: none"> <li>• 10 years</li> </ul>   |
| Member Contributions <ul style="list-style-type: none"> <li>• None</li> </ul>   | Member Contributions <ul style="list-style-type: none"> <li>• 4% of pay (with 4% interest on refunds)</li> </ul>   |
| Purchased Service <ul style="list-style-type: none"> <li>• Subsidized military and other full-time, nonfederal, governmental service</li> </ul>                                 | No Service Purchases   |
| BackDROP <ul style="list-style-type: none"> <li>• Allows an employee to receive a lump sum payment at retirement in exchange for a reduced monthly benefit for life.</li> </ul> | No BackDROP  |

**New Tier for Future Hires  
Employed On or After January 1, 2011  
Statewide Elected Official Plan**

| <b>Present Benefits</b>   | <b>Alternative Proposed Benefits</b>   |
|---|--|
| Normal Retirement Eligibility <ul style="list-style-type: none"> <li>• Age 55/4 yrs. service</li> <li>• Age 50 (Rule of 80)</li> </ul>          | Normal Retirement Eligibility <ul style="list-style-type: none"> <li>• Age 62/4 yrs. service</li> <li>• Age 55 (Rule of 90)</li> </ul> |
| Member Contributions <ul style="list-style-type: none"> <li>• None</li> </ul>   | Member Contributions <ul style="list-style-type: none"> <li>• 4% of pay (with 4% interest on refunds)</li> </ul>                       |
| Purchased Service <ul style="list-style-type: none"> <li>• Subsidized military and other full-time, nonfederal, governmental service</li> </ul> | No Service Purchases   |

**New Tier for Future Hires  
Employed On or After January 1, 2011  
Legislative Plan**

| <b>Present Benefits</b>  | <b>Alternative Proposed Benefits</b>   |
|--|--|
| Normal Retirement Eligibility <ul style="list-style-type: none"> <li>• Age 55 with 3 biennial assemblies</li> <li>• Age 50 (Rule of 80)</li> </ul> | Normal Retirement Eligibility <ul style="list-style-type: none"> <li>• Age 62 with 3 biennial assemblies</li> <li>• Age 55 (Rule of 90)</li> </ul> |
| Member Contributions <ul style="list-style-type: none"> <li>• None</li> </ul>  | Member Contributions <ul style="list-style-type: none"> <li>• 4% of pay (with 4% interest on refunds)</li> </ul>                                   |
| Purchased Service <ul style="list-style-type: none"> <li>• Subsidized military and other full-time, nonfederal, governmental service</li> </ul>    | No Service Purchases   |

**New Tier for Future Hires  
Employed On or After January 1, 2011  
Judicial Plan**

| <b>Present Benefits</b>   | <b>Alternative Proposed Benefits</b>  |
|---|---|
| Normal Retirement Eligibility <ul style="list-style-type: none"> <li>• Age 62/12 yrs. service</li> <li>• Age 60/15 yrs. service</li> <li>• Age 55/20 years service</li> </ul> | Normal Retirement Eligibility <ul style="list-style-type: none"> <li>• Age 67/12 yrs. service</li> <li>• Age 62/20 yrs. service</li> </ul>      |
| Early Retirement Eligibility <ul style="list-style-type: none"> <li>• Age 60 &lt;15 yrs. service</li> <li>• Age 62 &lt;12 yrs. service</li> </ul>                             | Early Retirement Eligibility <ul style="list-style-type: none"> <li>• Age 67&lt;12 yrs. service</li> <li>• Age 62&lt;20 yrs. service</li> </ul> |
| Normal Form of Payment <ul style="list-style-type: none"> <li>• Unreduced 50% Survivor Option</li> </ul>  | Normal Form of Payment <ul style="list-style-type: none"> <li>• Single life (reduced survivor options)</li> </ul>                               |
| Member Contributions <ul style="list-style-type: none"> <li>• None</li> </ul>   | Member Contributions <ul style="list-style-type: none"> <li>• 4% of pay (with 4% interest on refunds)</li> </ul>                                |
| In-Service COLA <ul style="list-style-type: none"> <li>• Members who work beyond age 60 have increased benefits upon retirement.</li> </ul>                                   | In-Service COLA <ul style="list-style-type: none"> <li>• None</li> </ul>  |
| Purchased Service <ul style="list-style-type: none"> <li>• Subsidized military and other full-time, nonfederal, governmental service</li> </ul>                               | No Service Purchases  |

Highlights of this alternative include:

- Changes in normal retirement eligibility for most classifications designed to coincide with the current ultimate minimum eligibility age of 67 for unreduced social security benefits for those born after 1959. (The age for normal retirement for highway patrol officers would be set age 55.)
- Rule of 80 would be increased to a Rule of 90 and the corresponding minimum eligibility age would be increased from age 48 to age 55.
- The age for early retirement for general employees would be increased from age 57 to age 62 (option available with a reduction).
- Five-year vesting would be increased to ten-year vesting for general employees.
- Member contributions for all classifications equivalent to 4% of pay on a pretax basis; 4% interest would be paid on member accounts at the end of the fiscal year based on the beginning fiscal year balance. Refunds would be payable within 90 days of termination for those qualifying for refunds. Member contributions and interest are fully refundable and portable, including for non-vested employees who terminate and leave state service.
- Elimination of subsidized service purchases for all employee classifications. This would include elimination of purchases of military and other full-time nonfederal governmental service.
- Elimination of the portability provision that was enacted in the Year 2000 Plan.
- Elimination of the BackDROP provision that was enacted in 2002.

As it pertains to judges, in addition to the changes outlined previously regarding normal and early retirement eligibility, member contributions, and service purchases, additional changes that may merit consideration would include:

- Eliminating the unreduced joint and 50% survivor option and in-service COLA provisions presently available in the Judicial Plan in order to mirror the changes that were adopted in the MSEP 2000 for the general population.
- Precluding a retired judge who returns to work in a benefit eligible position covered by another state-sponsored retirement plan from receiving an annuity from the judicial plan while simultaneously working in a benefit eligible position. Such a retired judge would, however, be eligible to accrue service under the other plan. This change would mirror the provisions adopted in the MSEP 2000 covering the general population.

In regard to member contributions for defined benefit plans, it is important to understand that a 4% of pay contribution rate for employees does not translate to a 4% of pay reduction in the employer contribution rate (even if applied to all of the active member population as opposed to just new hires). This is because contributions are collected on the payroll of the total covered group, including those who are not yet vested in the system. Presently, when non-vested members terminate nothing is paid out by the system on their behalf. If both MOSERS and MPERS were contributory systems, non-vested members who terminate would receive a refund of their contributions. In considering the rate by which employee contributions would reduce the employer rate, the employee rate must be evaluated net of refunds and interest.

The tables that follow illustrate the financial impact of the alternative new tier defined benefit plan for the MSEP/MSEP 2000 as administered by MOSERS, the Year 2000 Plan as administered by MPERS, and the Judicial Plan.

**MSEP/MSEP 2000/MOSERS  
Projected Ten Year Savings**

| Fiscal Year | Val Payroll Projected | Pre 2011 Payroll | Post 2011 Payroll (new hires) | Projected Employer Contributions |                |                     |                        |        |  |
|-------------|-----------------------|------------------|-------------------------------|----------------------------------|----------------|---------------------|------------------------|--------|--|
|             |                       |                  |                               | Before Proposed Changes          |                | Estimated Reduction | After Proposed Changes |        |  |
|             |                       |                  |                               | Rate                             | Dollars B      |                     | Dollars                | Rate   |  |
| 2009        | \$2,002,402,087       | \$2,002,402,087  | \$ 0                          |                                  |                |                     |                        |        |  |
| 2010        | 2,002,402,087         | 2,002,402,087    | 0                             |                                  |                |                     |                        |        |  |
| 2011        | 2,082,498,170         | 1,979,956,204    | 102,541,967                   | 13.81%                           | \$ 287,592,997 | \$ 6,039,245        | \$ 281,553,752         | 13.52% |  |
| 2012        | 2,165,798,097         | 1,862,341,745    | 303,456,352                   | 14.85%                           | 321,621,017    | 17,759,544          | 303,861,473            | 14.03% |  |
| 2013        | 2,252,430,021         | 1,755,013,968    | 497,416,053                   | 15.93%                           | 358,812,102    | 29,056,347          | 329,755,755            | 14.64% |  |
| 2014        | 2,342,527,222         | 1,654,290,178    | 688,237,044                   | 17.34%                           | 406,194,220    | 40,525,721          | 365,668,499            | 15.61% |  |
| 2015        | 2,436,228,311         | 1,557,481,836    | 878,746,474                   | 18.41%                           | 448,509,632    | 51,404,417          | 397,105,215            | 16.30% |  |
| 2016        | 2,533,677,443         | 1,464,563,998    | 1,069,113,445                 | 18.29%                           | 463,409,604    | 62,835,201          | 400,574,403            | 15.81% |  |
| 2017        | 2,635,024,541         | 1,374,960,567    | 1,260,063,974                 | 18.10%                           | 476,939,442    | 73,780,687          | 403,158,755            | 15.30% |  |
| 2018        | 2,740,425,523         | 1,288,256,428    | 1,452,169,095                 | 17.91%                           | 490,810,211    | 85,227,234          | 405,582,977            | 14.80% |  |
| 2019        | 2,850,042,544         | 1,204,041,381    | 1,646,001,163                 | 17.72%                           | 505,027,539    | 96,616,442          | 408,411,097            | 14.33% |  |
| 2020        | 2,964,044,245         | 1,122,830,807    | 1,841,213,438                 | 17.54%                           | 519,893,361    | 107,891,211         | 412,002,150            | 13.90% |  |

**CLOSED PLAN/YEAR 2000 PLAN/MPERS  
Projected Ten Year Savings**

| Fiscal Year | Val Payroll Projected | Pre 2011 Payroll | Post 2011 Payroll (new hires)* | Projected Employer Contributions |                |                     |                       |        |  |
|-------------|-----------------------|------------------|--------------------------------|----------------------------------|----------------|---------------------|-----------------------|--------|--|
|             |                       |                  |                                | Before Proposed Changes          |                | Estimated Reduction | After Proposed Change |        |  |
|             |                       |                  |                                | Rate                             | Dollars        |                     | Dollars               | Rate   |  |
| 2009        | \$377,652,245         | \$377,652,245    | \$ 0                           |                                  |                |                     |                       |        |  |
| 2010        | 391,814,205           | 391,814,205      | 0                              |                                  |                |                     |                       |        |  |
| 2011        | 406,507,238           | 399,070,294      | 7,436,944                      | 41.27%                           | \$ 167,776,154 | \$ 441,755          | \$ 167,334,399        | 41.16% |  |
| 2012        | 421,751,260           | 394,703,705      | 27,047,555                     | 43.26%                           | 182,453,304    | 1,606,625           | 180,846,679           | 42.88% |  |
| 2013        | 437,566,933           | 389,839,444      | 47,727,489                     | 47.31%                           | 207,009,437    | 2,835,013           | 204,174,424           | 46.66% |  |
| 2014        | 453,975,693           | 384,474,718      | 69,500,975                     | 47.31%                           | 214,772,290    | 4,128,358           | 210,643,932           | 46.40% |  |
| 2015        | 470,999,781           | 377,777,063      | 93,222,718                     | 47.31%                           | 222,826,251    | 5,537,429           | 217,288,822           | 46.13% |  |
| 2016        | 488,662,272           | 370,230,934      | 118,431,338                    | 47.31%                           | 231,182,235    | 7,034,821           | 224,147,414           | 45.87% |  |
| 2017        | 506,987,107           | 362,143,891      | 144,843,216                    | 47.31%                           | 239,851,569    | 8,603,687           | 231,247,882           | 45.61% |  |
| 2018        | 525,999,123           | 353,358,842      | 172,640,281                    | 47.31%                           | 248,846,002    | 10,254,833          | 238,591,169           | 45.36% |  |
| 2019        | 545,724,090           | 344,023,065      | 201,701,025                    | 47.31%                           | 258,177,727    | 11,981,041          | 246,196,686           | 45.11% |  |
| 2020        | 566,188,743           | 333,660,098      | 232,528,645                    | 47.31%                           | 267,859,392    | 13,812,201          | 254,047,191           | 44.87% |  |

**JUDICIAL PLAN  
Projected 10 Year Savings**

| Fiscal Year | Val Payroll Projected | Pre 2011 Payroll | Post 2011 Payroll (new hires) | Projected Employer Contributions |               |                     |                        |        |  |
|-------------|-----------------------|------------------|-------------------------------|----------------------------------|---------------|---------------------|------------------------|--------|--|
|             |                       |                  |                               | Before Proposed Changes          |               | Estimated Reduction | After Proposed Changes |        |  |
|             |                       |                  |                               | Rate                             | Dollars B     |                     | Dollars                | Rate   |  |
| 2009        | \$45,505,512          | \$45,505,512     | \$ 0                          |                                  |               |                     |                        |        |  |
| 2010        | 45,505,512            | 45,505,512       | 0                             |                                  |               |                     |                        |        |  |
| 2011        | 47,325,732            | 45,758,359       | 1,567,374                     | 60.03%                           | \$ 28,411,449 | \$ 167,452          | \$ 28,243,997          | 59.68% |  |
| 2012        | 49,218,762            | 44,050,309       | 5,168,452                     | 59.82%                           | 29,442,829    | 546,494             | 28,896,335             | 58.71% |  |
| 2013        | 51,187,512            | 41,925,260       | 9,262,253                     | 59.43%                           | 30,419,162    | 976,105             | 29,443,057             | 57.52% |  |
| 2014        | 53,235,013            | 39,695,739       | 13,539,274                    | 59.30%                           | 31,570,309    | 1,428,645           | 30,141,664             | 56.62% |  |
| 2015        | 55,364,413            | 37,412,400       | 17,952,013                    | 59.07%                           | 32,705,026    | 1,894,730           | 30,810,296             | 55.65% |  |
| 2016        | 57,578,990            | 35,246,865       | 22,332,124                    | 58.32%                           | 33,578,158    | 2,353,072           | 31,225,086             | 54.23% |  |
| 2017        | 59,882,149            | 32,553,457       | 27,328,693                    | 57.54%                           | 34,457,902    | 2,882,045           | 31,575,857             | 52.73% |  |
| 2018        | 62,277,435            | 29,901,729       | 32,375,706                    | 56.78%                           | 35,362,884    | 3,414,560           | 31,948,324             | 51.30% |  |
| 2019        | 64,768,533            | 27,426,161       | 37,342,372                    | 56.04%                           | 36,295,183    | 3,936,824           | 32,358,359             | 49.96% |  |
| 2020        | 67,359,274            | 24,974,982       | 42,384,292                    | 55.31%                           | 37,255,810    | 4,472,051           | 32,783,759             | 48.67% |  |

**Missouri State Retirement Investment Board**

Also included in the legislation are provisions that would create a Missouri state retirement investment board to manage assets for MOSERS and MPERS, and other Missouri retirement systems and plans subject to approval by the board; however, the bill would preclude the Missouri public school retirement system and the public education employee retirement system (PSRS and PEERS), the Public School Retirement System of St. Louis, the Public School Retirement System of Kansas City, the Missouri local government employee's retirement system (LAGERS), any retirement plan established by the Bi-State Development Agency, and any retirement plan established by the Regional Investment District from using the services of the investment board.

Under these provisions, the state retirement investment board would provide investment oversight and management of all investment assets of MOSERS and MPERS and would also administer the deferred compensation fund for state employees and the existing college and university retirement plan (CURP), a defined contribution plan, presently overseen by MOSERS. The investment board's authority would be limited to providing investment management services and investment advisory services to the participating systems. Initial capital would be provided by the MOSERS and MPERS trust funds in equal portions. Provisions exist, however, that would prevent the board from accepting responsibility for managing any assets until the boards of MOSERS and MPERS irrevocably elect to transfer oversight and management of the investment assets to the board. If the board of trustees of either system elects not to transfer such assets, then the powers and duties of the board lapse, and the board does not oversee or manage any funds.

Assuming elections are made by both systems, the investment board would be comprised of a board of directors consisting of seven individuals, with the executive directors of MOSERS and MPERS and the commissioner of administration being three of the seven. Initially, the other four members would be appointed by the governor, subject to senate confirmation, from a list of eight nominees submitted by the executive directors of MOSERS and MPERS. The governor would have the right to reject any nominees and, in such case, the executive directors would be required to submit a list of two nominees not previously recommended for each position on the board until no positions remain vacant. At the onset, director terms would be staggered in duration with each of the four appointed members eventually serving four-year terms. The qualifications for appointed director positions would include at least five years experience in banking, finance, or the investment business in general, including public investments, securities, and economics. The investment board would be responsible for overseeing the organization's business. Provisions exist that would allow MOSERS and MPERS to transfer their investment employees to the investment board to provide initial staffing and such employees would receive compensation as determined by the board. All employees of the board would be considered state employees and members of MOSERS.

The investment board would be subject to the open records provisions of Chapter 610, RSMo, as well as the conflict of interest and investment fiduciary provisions of Chapter 105, RSMo, and would be subject to audit by the state auditor. Members of the investment board would be precluded from business relationships with service providers to the board for two years following the conclusion of their membership on the board and members of the general assembly and statewide elected officials would be precluded from either serving on the board or working for the board or having a business relationship with any service provider to the board while in office or within five years after leaving state office. Members of the MOSERS and MPERS boards of trustees would also be prohibited from working for the investment board or having a business relationship with any service provider of the investment board for two years following the conclusion of their service on either retirement system board.

Under the proposal, any assets transferred to the investment board from the participating retirement systems together with any proceeds and reinvestments could be invested as a single pool with appropriate accounting to identify the proportionate interests of each system in particular assets, or asset classes. The assets held in the collective trust would be for the exclusive purpose of satisfying the obligations of each participating system to pay retirement and other benefits pursuant to applicable laws and plan documents for each system and for paying administrative expenses associated with satisfying such obligations. The board would also

make payments to participating systems at the direction of an authorized person from each system. The investment board would not be responsible for the administration of any benefits provided by a participating system.

The establishment of an investment board to manage assets for MOSERS and MPERS, and possibly other interested pension funds (excluding the funds previously cited) would, generally speaking, work to the financial advantage of the state of Missouri over the long term. Net cumulative savings of \$27 million in the first year and, over a five-year period, a cumulative \$149 million, are largely due to an expectation of increased investment performance and economies of scale associated with consolidation of two investment programs. The expected increase in investment performance would be attributable to the ability of a professional investment staff/board to make strategic investment decisions and add additional asset diversification to the combined portfolios.

It is expected that there would be administrative cost savings in combining the investment programs. At the least, the investment operations cost for the new investment board would be cost neutral compared to current systems' investment operations expenses.

Components of the total estimated net savings are comprised of:

### **Savings**

- Custody Fee Savings – Today, each system contracts with a custodian bank for custody services for the assets. Consolidation of assets calls for only one custodian. While there are some cost increases due to the custodian handling more accounts, the overall effect is an elimination of nearly 60% of the cost of one custodian for an estimated annual savings of \$124,000.
- Consulting Fee Savings – Today, each system contracts with a general asset consultant for investment research, data gathering, independent review, due diligence on internally managed funds. With the consolidation of assets, only one consultant would be needed, saving approximately \$225,000 annually.
- Manager Fees Savings - A consolidated asset base means that the incremental dollars would be managed at the lowest marginal rate effective in the managers tier fee structure. A larger asset base is also expected to increase negotiating power for lower management fees in the future. In the traditional investment management industry, fees are based on dollars under management; therefore a larger asset base facilitates fee savings when considered on the basis of total dollars invested. The manager fee savings are estimated to be approximately \$2,290,000 annually.

### **Increase in Earnings**

- The most significant fiscal impact of combining assets for investment purposes would be an expected increase in investment performance. While an increase in future returns is not a “given”, historical results indicate a strong possibility of substantial gains in investment earnings overall. Investment returns for MOSERS and MPERS were compared for various periods. The long-term (since 1991) excess return was calculated at 1.99%. Additional investment earnings of 1.99% on the 12/31/09 market value of MPERS assets would produce an increase of approximately \$27 million annually in investment earnings for the pension trust.

### **One-Time Transition Costs**

- In the first year there would be transition costs for portfolio transactions (trading) in order to merge the assets into one investment pool. Transaction (trading) costs cannot be avoided when consolidating investment portfolios of two systems. These one-time costs are expected to total approximately \$2,300,000 and would be paid only in the year the transition is made to the investment board model.



A cost analysis chart illustrating savings appears below. It should be noted the cost analysis reflects combined savings on both the MOSERS and MPERS investment portfolios.

| <b>MOSERS and MPERS Investment Function Merger Cost Analysis*</b> |                     |                     |                     |                      |                      |
|---|---------------------|---------------------|---------------------|----------------------|----------------------|
| <b>Category</b>   | <b>Year 1</b>       | <b>Year 2</b>       | <b>Year 3</b>       | <b>Year 4</b>        | <b>Year 5</b>        |
| Transition Cost   | (\$2,301,162)       | \$0                 | \$0                 | \$0                  | \$0                  |
| Custody Fees Savings  | \$124,169           | \$124,169           | \$124,169           | \$124,169            | \$124,169            |
| Consulting Fee Savings  | \$225,000           | \$225,000           | \$225,000           | \$225,000            | \$225,000            |
| Manager Fees Savings  | \$2,291,923         | \$2,291,923         | \$2,291,923         | \$2,291,923          | \$2,291,923          |
| Performance Returns Increase                                      | \$26,683,831        | \$27,215,511        | \$27,757,785        | \$28,310,863         | \$28,874,962         |
| Total Yearly Net Savings  | \$27,023,760        | \$29,856,603        | \$30,398,877        | \$30,951,955         | \$31,516,054         |
| Cumulative Net Savings  | <b>\$27,023,760</b> | <b>\$56,880,363</b> | <b>\$87,279,240</b> | <b>\$118,231,195</b> | <b>\$149,747,249</b> |

\*The cost analysis reflects combined savings on both the MOSERS and MPERS portfolios.

**Conclusion**

The severe decline in the financial markets has resulted in significantly higher contribution rates for many public plans at a time when sponsoring governments are under substantial fiscal stress. As a result, many governments are examining strategies to mitigate this impact by managing contribution rates, changing benefits, or changing actuarial methods and assumptions. These efforts are useful to the extent they recognize short-term contribution rate volatility without jeopardizing the sustainability of the plans or the sufficiency of the benefits.<sup>1</sup>

It is essential to recognize that in order for a defined benefit plan to be sustainable, the benefits cannot be too generous nor can they be so low that they would be seen by employees as having little or no value. The modifications proposed in the alternative new tier defined benefit plan could be deemed reasonable given changes in demographics and yet the plan should continue to meet the state’s personnel management objectives while gradually reducing the contribution rate required to fund employee retirement benefits over time.

In addition, the establishment of a state retirement investment board to manage assets for MOSERS and MPERS, and possibly other interested pension funds (excluding the funds previously cited) would likely work to the financial advantage of the state of Missouri over the long term.

Combined estimated savings during the five year period following enactment of this legislation appear in the table below:

**Combined Cost Savings of Pension Reform Legislation \***

| <b>Year</b> | <b>MOSERS New Tier Savings</b> | <b>MPERS New Tier Savings</b> | <b>Judicial New Tier Savings</b> | <b>Pension Trust Savings</b> | <b>Total Savings</b> |
|-------------|--------------------------------|-------------------------------|----------------------------------|------------------------------|----------------------|
| 2011        | \$ 6,039,245                   | \$ 441,755                    | \$ 167,452                       | \$ 27,023,760                | \$ 33,672,212        |
| 2012        | 17,759,544                     | 1,606,625                     | 546,494                          | 29,856,603                   | 49,769,266           |
| 2013        | 29,056,347                     | 2,835,013                     | 976,105                          | 30,398,877                   | 63,266,342           |
| 2014        | 40,525,721                     | 4,128,358                     | 1,428,645                        | 30,951,955                   | 77,034,679           |
| 2015        | 51,404,417                     | 5,537,429                     | 1,894,730                        | 31,516,054                   | 90,352,630           |
| Total       | \$ 144,785,274                 | \$ 14,549,180                 | \$ 5,013,426                     | \$ 149,747,249               | \$ 314,095,129       |

\*Savings includes all funds (general revenue, federal, and other funds.)

<sup>1</sup> GRS Insight, Preserving Financially Sound Defined Benefit Pensions in Challenging Market Environments, October 2009.

Revision Notes

Revised 6/23/10 to reflect removal of state auditor language; the addition of opt-in provisions by MOSERS/MPERS boards of trustees; the addition of provisions to prohibit trustees of MOSERS and MPERS boards working for the board or having a business relationship with any service provider of the board for two years following the conclusion of their service as trustees; the addition of exclusions preventing the Public School Retirement System of St. Louis, the Public School Retirement System of Kansas City, any retirement plan established by the Bi-State Development Agency, and any retirement plan established by the Regional Investment District from using the services of the investment board; the addition of provisions to transfer the administration of the deferred compensation program and the CURP to the investment board; and the removal of general provisions described in White Paper V that affect the Kansas City Public School Retirement System. (White Paper VI).

Revised 4/16/10 to reflect MPERS updated actuarial valuation which modifies the age for normal retirement for Highway Patrol Officers to age 60 and active and age 55 with 10 yrs. of service (White Paper V).

Revised 4/13/10 to reflect the adoption of Senate Amendment #1 (which modifies the age for normal retirement for Highway Patrol Officers to age 60 and active and age 55 with 10 yrs. of service) and Senate Amendment #2 (which allows the governor the right to reject board nominees until an agreement is reached); revisions also include adding descriptions of the provisions affecting the Kansas City Public School Retirement System (White Paper V).

Revised 4/8/10 to correct an error in the Combined Cost Savings Table of SS for SB 714 (White Paper IV).

Revised 4/7/10 to change the Missouri Pension Trust Company to the Missouri State Retirement Investment Board; also includes revised actuarial valuation numbers that reflect the removal of the BackDROP and provision that would have required employee contributions of 4% of pay for those making in excess of \$100,000 per year (White IV).

Revised 4/1/10 to include MPERS' cost savings for new tier defined benefit plan changes for future hires employed on or after January 1, 2011; also modified to include fiscal analysis and savings associated with SB 714 and SB 1050 (White Paper III).

Revised 3/25/10 to exclude the BackDROP provision for new hires employed on or after January 1, 2011 (the original design of the BackDROP was cost-neutral so it was assumed that removing it would still be cost-neutral); also modified normal retirement and early retirement eligibility for the highway patrol to accommodate mandatory retirement at age 62 for new hires employed on or after January 1, 2011 (White Paper II).