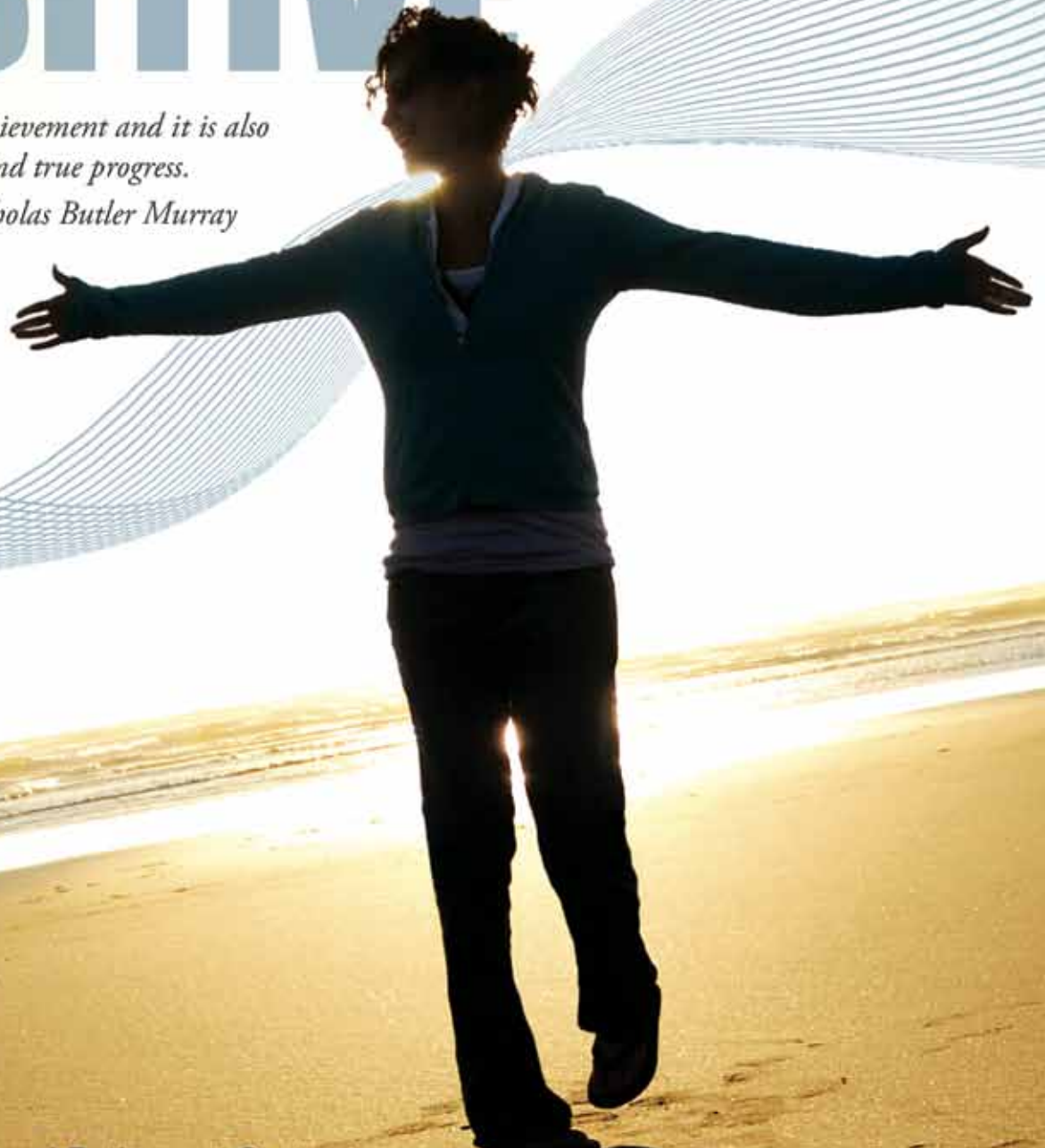


# PENSION POSITIVE

*Optimism is essential to achievement and it is also  
the foundation of courage and true progress.*

*- Nicholas Butler Murray*



Missouri State Employees' Retirement System  
A Component Unit of the State of Missouri

Comprehensive Annual Financial Report  
Fiscal Year Ended June 30, 2011

# PENSION POSITIVE



Missouri State Employees' Retirement System  
*A Component Unit of the State of Missouri*

Comprehensive Annual Financial Report  
*Fiscal Year Ended June 30, 2011*

Gary Findlay  
*Executive Director*

Gary Irwin  
*Chief Finance Officer*

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\* *Missouri State Employees' Plan*



## Our Mission & Core Values

To exceed customer expectations by providing outstanding benefit services through professional plan administration and sound investment practices.

### **Quality**

Strive to exceed the expectations of internal and external customers through innovation, competence, and teamwork. Seek to “do it right” the first time.

---

### **Respect**

Be sensitive to the needs of others, both within and outside the organization. Be courteous, considerate, responsive, and professional.

---

### **Integrity**

In all endeavors, act in an ethical, honest, and professional manner.

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### **Openness**

Be willing to listen to, and share information with, others.  
Be receptive to new ideas. Be trusting of others.

---

### **Accountability**

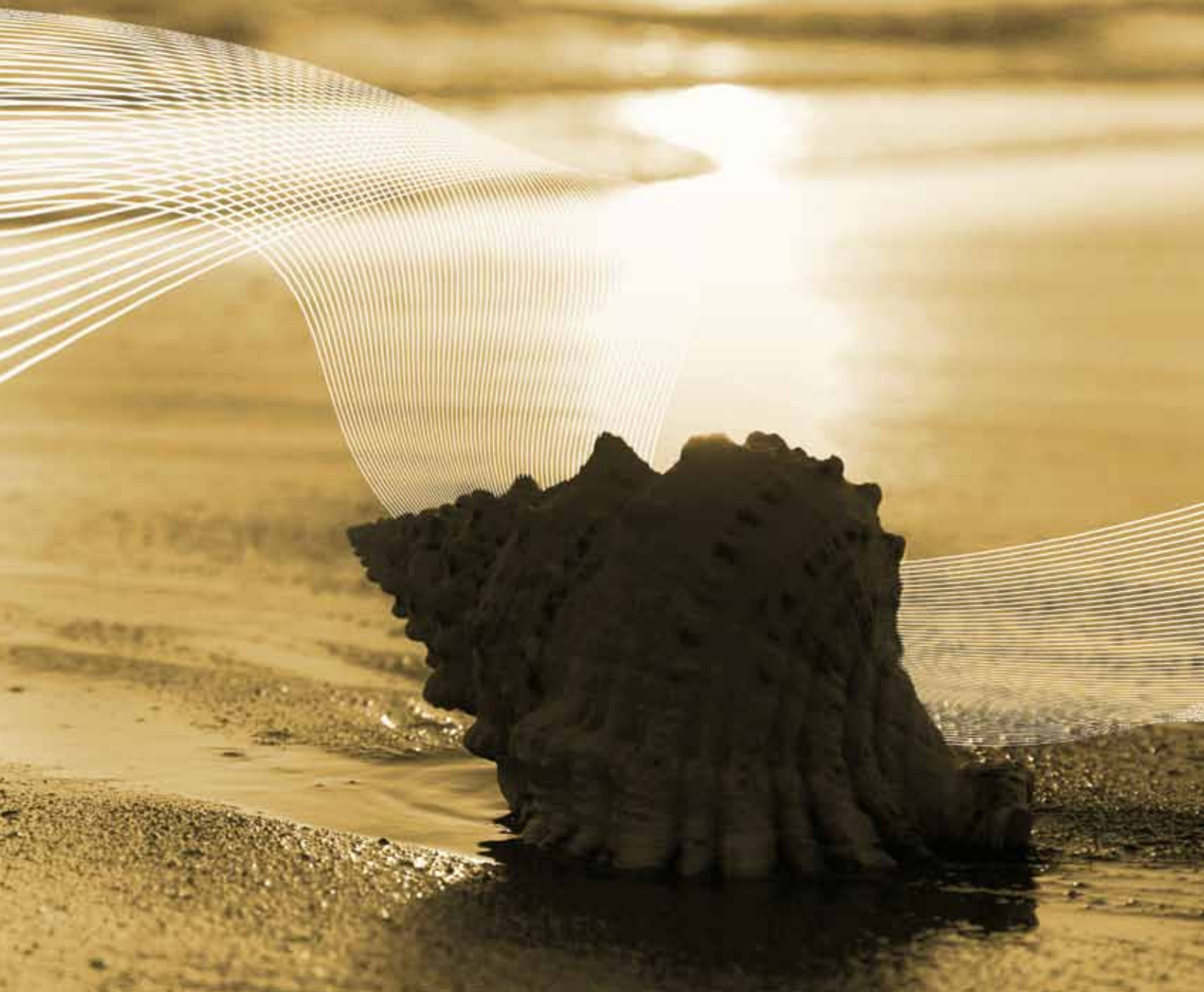
Take ownership of and responsibility for actions and their results. Learn from mistakes. Control system risks and act to protect the security of member information and system assets.

# POSITIVE ATTITUDES

Excellence. Always. That's our attitude at MOSERS. We are genuine in our commitment to exceptional customer service and our promise to deliver secure retirement benefits to our members. We strive to make every experience you have with MOSERS a positive one. Why? Because when you're happy, we're happy. It's just that simple.

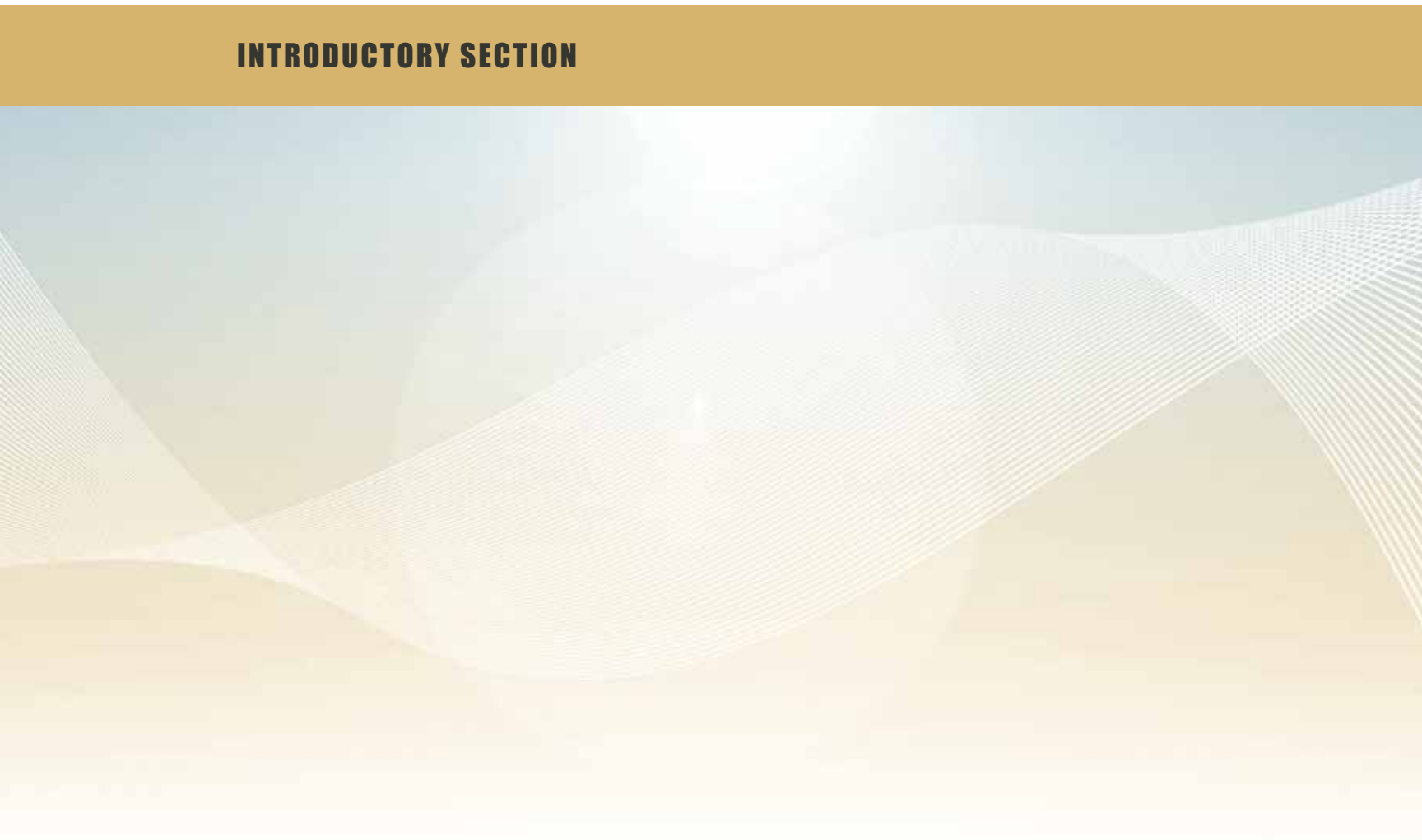
*Attitude is a little thing that makes a big difference.*

*- Winston Churchill*



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## **INTRODUCTORY SECTION**





## Professional Awards

### Certificate of Achievement for Excellence in Financial Reporting

*MOSERS' Comprehensive Annual Financial Report* for the fiscal year ended June 30, 2010, was awarded the Certificate of Achievement for Excellence in Financial Reporting by the Government Finance Officers Association of the United States and Canada (GFOA). This was the 22<sup>nd</sup> consecutive year that MOSERS has received this prestigious award. The Certificate of Achievement is the highest form of recognition for excellence in state and local government financial reporting. To be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized Comprehensive Annual Financial Report (CAFR). The CAFR must satisfy generally accepted accounting principles, applicable legal requirements and GFOA reporting standards.

### Public Pension Standards Award

MOSERS also received the Public Pension Coordinating Council (PPCC), Public Pension Standards Award in 2010, in recognition of meeting the professional standards for plan design and administration as set forth in the Public Pension Standards. This award is presented by the PPCC, a confederation of the National Association of State Retirement Administrators (NASRA), the National Conference on Public Employee Retirement Systems (NCPERS), and the National Council on Teacher Retirement (NCTR).



## Letter of Transmittal



Missouri State Employees' Retirement System

**Mailing Address**

PO Box 209 • Jefferson City, MO 65102-0209

**Building Location**

907 Wildwood Drive • Jefferson City, MO

October 17, 2011

The Board of Trustees  
Missouri State Employees' Retirement System  
907 Wildwood Drive  
Jefferson City, MO 65109

Dear Board Members:

It is my pleasure to submit the 2011 Comprehensive Annual Financial Report (CAFR) of the Missouri State Employees' Retirement System (MOSERS). To quote Charles Dickens from the opening paragraph of *A Tale of Two Cities*, "It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the season of Light, it was the season of Darkness, it was the spring of hope, it was the winter of despair, we had everything before us, we had nothing before us, . . ." His fictional account of the late eighteenth century can be applied to a variety of situations currently where the end result will largely depend on our outlook in assessing circumstances and the choices we make. We all have choices in how we elect to face challenges — in our leadership roles, those who are looking to us for guidance will be greatly influenced by our attitudes. If we are defeatists in our outlook and attitude, failure is a certainty.

At MOSERS, failure is not an option. It's not that we are too big to fail — rather, it is that we are too important to others to fail as there are tens of thousands of people who are relying on us for significant aspects of their financial security and they deserve our very best. Throughout this report, you will find results with respect to our activities during the past fiscal year providing evidence that, at MOSERS, we are doing our very best to accomplish our mission of exceeding customer expectations by providing outstanding benefit services through professional plan administration and sound investment practices. As the market conditions improved during FY10 and FY11, MOSERS recovered substantially from the unprecedented market conditions of two years ago, providing evidence that the operational and investment policies established by you, and your predecessors on the board, continue to provide exceptional guidance for achieving our goal of providing financial security to our members and cost efficiencies to our taxpayers.

Phone: (573) 632-6100 • (800) 827-1063  
MO Relay: 7-1-1 (Voice) • (800) 735-2966 (TTY)  
Email: [mosers@mosers.org](mailto:mosers@mosers.org) • Website: [www.mosers.org](http://www.mosers.org)

## Report Contents and Structure

This CAFR is designed to satisfy the reporting requirements of state law as stipulated in Sections 104.480, 104.1006, and 105.661 of the Revised Statutes of Missouri (RSMo), as amended. Management has prepared the basic financial statements of MOSERS and is responsible for the integrity and fairness of the information presented. Some amounts included in the financial statements and elsewhere may be based on estimates and judgments. These estimates and judgments were products of the best business practices available. The accounting policies followed in preparing the basic financial statements conform with U.S. generally accepted accounting principles. Financial information presented throughout the CAFR is consistent with that which is displayed in the basic audited financial statements.

Ultimate responsibility for the CAFR and the basic financial statements rests with the board of trustees. The executive director and the rest of MOSERS' staff assist the board members in fulfilling their responsibilities. Systems of internal controls and supporting procedures are maintained to provide assurances that transactions are authorized, assets are safeguarded, and proper records are maintained. These controls include standards in the hiring and training of employees, the establishment of an organizational structure, and the communication of policies and guidelines throughout the organization. Internal controls are reviewed through internal audit programs and all internal audit reports are submitted to the board of trustees.

The system's external auditor, Williams-Keepers LLC, conducted an independent audit of the basic financial statements in accordance with U.S. generally accepted auditing standards. This audit is described in the *Independent Auditor's Report* on page 21 of the *Financial Section*. Management has provided the external auditors with full and unrestricted access to MOSERS' staff to discuss their audit and related findings, to facilitate independent validation of the integrity of the plan's financial reporting and the adequacy of internal controls.

The Financial Section also contains Management's Discussion and Analysis that serves as an introduction to and overview of the financial statements. MOSERS is considered a component unit of the state of Missouri for financial reporting purposes and, as such, the financial statements in this report are also included in the *State of Missouri's Comprehensive Annual Financial Report*.

## Profile of MOSERS

MOSERS is an instrumentality of the state of Missouri that was established in 1957 by state law for the purpose of providing retirement benefits to most state employees. MOSERS provides for those retirement benefits through pension trust funds, in keeping with the fiduciary responsibilities of the board members and staff.

Subsequent to its creation, MOSERS was further assigned the task of providing most members of the retirement system with life and long-term disability insurance. MOSERS operates an internal service fund for the state of Missouri and contracts with insurance companies to provide those benefits through insured defined benefit plans. MOSERS maintains membership information on those eligible for the insurance coverage and collects and remits the premiums to the insurance company. Currently, the life and long-term disability insurance plans are insured through The Standard insurance company.

Effective September 1, 2007, a law change transferred responsibility for the administration of the Missouri State Employees' Deferred Compensation Program from the Missouri Deferred Compensation Commission to the MOSERS Board of Trustees. MOSERS makes investment options available to participants who retain responsibility for the investment of their individual accounts. Currently, the Missouri State Employees' Deferred Compensation Program is administered by ING. MOSERS accounts for the deferred compensation program as an internal service fund. Beginning November 1, 2011, the plan administrator role will be transferred to ICMA-RC (the International City/County Management Association Retirement Corporation).

On July 19, 2010, Governor Jay Nixon signed into law House Bill No. 1 that created a new tier defined benefit plan (MSEP 2011) for state employees first hired on or after January 1, 2011. The MSEP 2011 defined benefit plan does not impact members of MOSERS who had service with the state prior to January 1, 2011. Highlights of these changes can be found on page 31 in the *Notes to the Financial Statements*, and on page 124 of the *Actuarial Section*.

### **Budgeting**

The MOSERS Board of Trustees annually approves the administrative expense budgets for MOSERS' operations and investments sections. MOSERS' governance policy requires an exception report to the board of trustees by the executive director if expenses are expected to exceed budgeted amounts by 10% or if there are any unscheduled salary increases or staff expansions not included in the budget approved by the board before the beginning of the fiscal year. There were no budget exceptions to report for the year.

### **Succession Planning**

Succession planning strategies were continued in FY11 with an emphasis on employee development and retention as well as ways in which institutional knowledge could be captured and passed on. The operations section's succession planning program was initially implemented in July 2009. This program includes a selection process for high potential employees who are interested in preparing for higher level positions at MOSERS. The program is designed to capitalize on the experience our current staff already possesses and prepare them to move into higher level positions. The second group of succession planning participants has completed the program. We believe the program has been a success and for FY12 we opened up the program to include the investments and executive sections' staff. The importance of this type of program can be seen in the facts that we presently have thirteen employees who are eligible to retire and an additional twelve who will become eligible to retire between now and September 1, 2016. In combination, these employees represent one-third of our workforce.

### **Staff Compensation and Benefits**

Achievement of the MOSERS Performance Objectives (MPOs) is a critical part of the performance management process for the operations section. Staff members are provided with quarterly updates that chart progress towards achieving these goals. This process includes departmental meetings during which employees can discuss progress and offer alternatives for improvements. It also serves as a reminder to staff of their individual responsibility in achieving the organizational goals of MOSERS.

In FY11, MOSERS participated in the NASRA/McLagen salary survey and the Human Resources Management Association of Greater Kansas City salary survey. These surveys help us monitor the adequacy of staff pay.

## **Risk Management Enhancements**

Risk management is a critical component of our investment management program. A report from Charlesworth & Associates, MOSERS' risk management consultant, shows that our insurance "has been designed around the risks to which the system is exposed and the philosophy regarding funding of potential loss." Additionally, it is our consultant's opinion that "MOSERS continues to excel in risk management." Our risk management consultant helps us ensure that our coverage is consistent with industry standards and that we are receiving the best rates available. There are no asset protection exceptions to report for the year.

Last year, our information technology (IT) personnel began testing existing equipment, commercial applications and internal applications for Windows 7 capability, which offers enhanced system security features. IT has completed Windows 7 testing on the desktops (staff work-stations) and is currently implementing the system and replacing Windows XP throughout the organization.

The investments section retained Measurisk in January 2010 to provide a comprehensive risk measurement and reporting system, as was communicated in last year's report. The Office of Internal Audit conducted a review of the controls at MOSERS related to that system during this past fiscal year. One of the recommendations contained in that report was for the investment staff to conduct a due diligence review of Measurisk, which was conducted by three investment staff and the chief auditor in June 2011. While no issues or concerns were noted as the result of that review, the visit to Measurisk provided staff with more insight into the system, which will enhance the risk management functions.

The Office of Internal Audit, in cooperation with IT personnel at MOSERS, launched a fraud reporting tool on the MOSERS website. This allows individuals, who may become aware of actual or potential fraudulent situations, a mechanism to report their suspicions to MOSERS' internal auditors. An individual who uses the reporting tool may maintain anonymity.

## **Business Continuity Plan Implementation**

While MOSERS has had a sound business continuity plan in place since 2006, our goal is to continually make improvements. Last year, a business continuity steering committee was established to further refine and test the plan. The committee is developing multiple step-by-step action plans called MAPs (MOSERS Action Plans) that will outline the actions required to maintain and/or restore critical business functions in the event of an interruption of normal business operations. Ongoing, the business continuity plan is expected to be a "living, breathing document" that requires constant review, revision, training, and testing.

## **Deferred Compensation and College and University Retirement Plans**

As mentioned earlier, MOSERS is responsible for oversight of the State of Missouri Deferred Compensation Plan. This includes, but is not limited to, contracting with the record-keeper and communications service provider and the investment managers as well as ensuring that the plan is in compliance with federal and state law.

Plan participation is voluntary for eligible members including college and university employees. As of June 30, 2011, there were 55,075 participants (37,147 active and 17,928 terminated/retired). Of those employees eligible, nearly 56% participate in the plan. Participant account assets total \$1,530,489,399. The plan consists of 13 custom-designed target date investment options, a stable income fund, a brokerage window option, and 30 closed legacy mutual fund options (consisting of a variety of domestic equity, international equity, fixed income, and lifestyle/balanced mutual funds).

As of June 30, 2011, plan participation was down 3% from June 30, 2010. Total participants decreased by 2,166 during the fiscal year. This decline continues as a result of lower enrollments and ceased contributions in response to suspension of the plan incentive matching program in March 2010.

During the 2011 session of the Missouri Legislature, a bill was passed that allows for the automatic enrollment of new employees into the State of Missouri Deferred Compensation Plan, beginning July 1, 2012, at 1% of pay. This provision is intended to make saving for retirement easier for state employees. Employees will have the choice to opt out of the plan and receive a refund of any contributions within 30 days of hire.

Deferred Compensation staff at MOSERS completed a search for record keeping services for the State of Missouri Deferred Compensation Plan. The current five-year contract with ING was nearing expiration, and it is common practice to conduct a review of the current provider and initiate a bid process. Following an extensive review of responses to the request for proposal, the decision was made to transition plan record keeping services to ICMA-RC.

The board also has responsibility for oversight of the College and University Retirement Plan (CURP). CURP is a 401(a) defined contribution plan for education employees hired after June 30, 2002, by the regional colleges and universities that participate in MOSERS. The employer contribution rate is 1% of payroll less than the normal cost of the defined benefit plan for general state employees. TIAA-CREF is responsible for third-party administration and for providing investment products and education to members of the plan. Current plan assets total \$31,249,651 with 1,723 participants.

### **Web Enhancements**

Two years after launching the new MOSERS website, the website design and development team focused on enhancing the online user experience by launching features like Document Express, webinars and additional informational videos. The MOSERS website continues to be the place where members can access all of their MOSERS information in one place; a one-stop shop where members can get the latest news, view benefit information, and chat online with a benefit counselor.

### **Technology Updates**

In FY11, the main production IBM System I (iSeries) server which houses our custom-built pension administration system was replaced. The server that was replaced became the backup server and it was installed at another secure location. The two servers are running concurrently which provides for instantaneous backup.

A long standing project to convert our old microfiche records to our imaging system was completed during the year. This allows us to more quickly identify former state service and to more accurately reflect member records if those members return to state employment. A project was also initiated to place all of our personnel files into electronic form. This will protect our personnel files in the case of a disaster and allows for quick desktop retrieval of personnel file data.

An electronic walk-in distribution system was implemented which alerts benefit counselors when there are members waiting, so there is less wait time for walk-ins and other guests in the building. Another benefit of this system is that many fields requiring member information for a counseling session to be successful are pre-populated at the front desk, freeing up more of the counselors' time.

Members on disability or a leave of absence had been asking for the ability to have reoccurring insurance premiums withheld from their checking accounts so they don't have to mail checks to MOSERS on a monthly basis. MOSERS now has the ability to accept online web payments for insurance premiums or automatically withdraw the monthly premiums from members' bank accounts, saving the member check and postage costs.

The 1099-R form was amended to include medical deductions as a service to retired members. The member also has the ability to reprint their form electronically through the secure member portion of the website.

### **Cost Effectiveness Measurement (CEM)**

CEM measures the cost of service on an annual per participant basis (including active members and benefit recipients). MOSERS has 87,000 participants while the median number within our peer group is 93,000 and the peer average is 99,900. Our cost of \$72 per active member and annuitant was below the peer median of \$76 and well below the peer average of \$103. In addition, our overall complexity score remains below the peer average.

To keep costs down and enhance our processing time, measures were initiated to simplify processes, eliminate programs, and/or provide enhanced security. These measures include:

- **Missouri Quality Award** - The MQA program is another tool to help identify opportunities for improvement at MOSERS and to help identify MOSERS as a leader in pension plan management using the Baldrige Criteria for Performance Excellence. A three-tiered approach was implemented called "Spot On. Excellence. Always." as a pillar around which all staff can gather as we complete an employee engagement survey, the MQA Show-Me-Challenge analysis, and implement a strategic planning process that will prepare MOSERS to best handle our members needs well into the future.
- **New Day/Document Express** - The Document Express project is an online, secure document repository for members that was successfully implemented in January. We continue to transition communications to this format.
- **Member contributions** - Over the past year, a significant portion of our IT resources have been focused on implementing legislation that established a new plan tier for state employees first hired on or after January 1, 2011. Extensive modifications have been made to the existing pension administration system to accept, manage and refund member contributions, along with administering new vesting and eligibility requirements.
- **Streamlined fax process** - We consolidated most of our fax numbers so that when we receive a fax from a member or agency it goes to a central destination and is queued, similar to incoming telephone calls. From here, any staff can view the queue to identify recently received faxes, allowing staff to quickly process the information and place the document in a member's folder rather than deal with a paper document via scanning.
- **Electronic communications** - Over the last year, significant progress was made on our transition to electronic communication. All of our major mass mailings, which consist primarily of newsletters and benefit statements, are distributed electronically, to the extent possible, rather than via traditional hardcopy and U.S. mail. The savings in postage and printing costs from this initiative has been material.

## Summary of Financial Information

The following schedule is a comparative summary of the pension trust funds' additions and deductions for the years ended June 30, 2011, and June 30, 2010.

	Pension Trust Funds	
	Year Ended June 30, 2011	Year Ended June 30, 2010
Additions	\$1,708,542,321	\$1,152,297,853
Deductions	(647,802,147)	(575,126,868)
Net change	\$1,060,740,174	\$ 577,170,985

The following schedule is a comparative summary of the revenues and expenses of the Internal Service Funds (insurance and deferred compensation activity) for the years ended June 30, 2011, and June 30, 2010.

	Internal Service Funds	
	Year Ended June 30, 2011	Year Ended June 30, 2010
Operating revenues	\$ 84,032,268	\$ 99,281,435
Operating expenses	(83,877,672)	(99,039,086)
Nonoperating revenue	11,071	9,816
Net change	\$ 165,667	\$ 252,165

Additional financial information can be found in the *Management Discussion and Analysis Report*, the financial statements, and schedules included in the *Financial Section* of this report.

## Investments

MOSERS' investments generated a return of 21.0% (net of fees) for FY11. This return was 0.7% under the current 1-year policy benchmark of 21.7% but significantly outperformed the actuarial investment return assumption by 12.5%. This year's return generated \$1.4 billion of additional retirement security for our members and savings to the taxpayers.

The largest asset class, public equities, returned 28.4% for the year. Within the alternative investments asset class, real assets and private investments posted strong absolute returns of 20.6% and 22.4%, respectively. The table on page 72 illustrates each sub-asset classes' contribution to the total return. Additional information regarding the investments of the pension trust funds can be found in the *Investment Section* of this report.

### Plan's Financial Condition

The funding objective of MOSERS' pension trust funds is to meet long-term benefit promises through contributions that remain approximately level as a percent of member payroll over decades of time. Historical information relating to progress in meeting this objective is presented on pages 47-52. During the year ended June 30, 2011, the funded ratio of the Missouri State Employees' Plan, which covers 104,687 participants, decreased from 80.4% to 79.2%, primarily the result of the unfavorable investment market experience in previous years. Funding of the Judicial Plan, which covers 930 participants, began on July 1, 1998. During the year ended June 30, 2011 the funded ratio of the Judicial Plan increased from 23.3% to 25.0%, which is in keeping with the expectation that the funded ratio will increase 2-3% per year under normal circumstances. Additional information regarding the financial condition of the pension trust funds can be found in the *Actuarial Section* of this report.

### Awards

MOSERS has again received the Certificate of Achievement for Excellence in Financial Reporting from GFOA as well as the PPCC, Public Pension Standards Award for 2010. These prestigious awards recognize MOSERS for financial and professional standards of excellence. Presentation of these notable awards can be found on page 5.

Also this fiscal year, MOSERS received a First Place Award from the National Association of Government Communicators (NAGC) for the FY10 CAFR. The MOSERS CAFR was one of fifteen entries considered for the annual Blue Pencil & Gold Screen Award, which salutes superior communications efforts of government agencies and recognizes the people who create them. In addition, the communications team also received a "Best Overall Issue" Ranly Award from the Missouri Association of Publications for the *PensionsPlus* newsletter, summer 2010 edition.

These awards are gratifying to MOSERS' staff and increase MOSERS' stature as a leader among our peers.

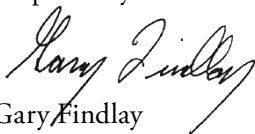
### Conclusion

This report is a product of the combined efforts of MOSERS' staff and advisors functioning under your leadership. It is intended to provide complete and reliable information that facilitates the management decision making process, serves as a means for determining compliance with legal requirements, and allows for the evaluation of responsible stewardship of the system funds. As in the past, MOSERS received an unqualified opinion from our independent auditor on the financial statements included in this report. The opinion of the independent auditor is on page 21.

Copies of this report are provided to the Governor, State Auditor, the Joint Committee on Public Employee Retirement of the General Assembly, and all state agencies that form the link between MOSERS and its members. Their cooperation contributes significantly to the success of MOSERS. We hope all recipients of this report find it informative and useful.

I would like to take this opportunity to express my gratitude to you, the staff, the advisors, and other people who have worked so diligently to assure the continued successful operation of the system.

Respectfully submitted,



Gary Findlay  
Executive Director



## Letter from the Board Chair



Missouri State Employees' Retirement System

**Mailing Address**

PO Box 209 • Jefferson City, MO 65102-0209

**Building Location**

907 Wildwood Drive • Jefferson City, MO

October 17, 2011

Dear Members:

On behalf of the board of trustees, I am pleased to present the MOSERS *Comprehensive Annual Financial Report* for the fiscal year ended June 30, 2011. This report provides information on the financial status of your retirement system while also highlighting changes that occurred during the year. The *Financial Section* of this report is prepared following all appropriate accounting principles and is appropriately attested to by the system's Certified Public Accountants.

The board is pleased to report that MOSERS' investments generated a return of 21% (net of fees) this fiscal year. This one year return significantly exceeded the actuarial economic assumption return of 8.5% by 12.5% and generated a total of \$1.4 billion on behalf of members and Missouri taxpayers.

Long-term performance is the best indicator of success. For the past 15-year period ended June 30, 2011, MOSERS' total fund return outperformed 95% of the public pension funds in the Rogerscasey universe of public pension plans with assets in excess of \$1 billion. In addition, the MOSERS 15-year investment return exceeded the policy benchmark by 1.3%.

Your retirement system continues to achieve high marks in the delivery of customer service to our members. One of the ways operational performance is measured is through CEM Benchmarking Inc.'s Pension Administration Benchmarking Analysis. This year CEM evaluated 88 leading pension systems, including systems in the U.S., Canada, Australia, the Netherlands and Denmark, and identified 12 U.S. public pension plans as the most relevant peer group based upon membership size and system assets. The CEM survey rated MOSERS' service delivery as the highest in our peer group with lower than average costs – the sixth time the system has received such a rating during an eleven-year period. The system is continually working on improvements in service delivery.

The board experienced some turnover this past year due to term endings and reappointments. On behalf of the board, staff, and members, I would like to thank Wayne Bill, Bob Patterson, Representative Bill Deeken, and David Steelman for their hard work and individual contributions to the system. Trustees serve many hours and it is truly a personal service with no remuneration. The board also welcomed Laura Davis, Marty Drewel, Representative Mike Leara, and Lori Neidel this year, and we look forward to serving and working with them.

I wish to thank all of the other MOSERS board members for their hard work and contributions to the system this year. The wide diversity and exceptional knowledge that the board of trustees brings to each board meeting is one reason for our system's continued success. Additionally, the board thanks the MOSERS staff for maintaining a high level of expertise and professionalism required for excellence in our retirement system. Staff continues to focus on our members and maintain a pension plan that serves our membership well. The board and the staff look forward to continuing to meet your future needs. If you have any questions regarding this report or any other aspect of MOSERS, please contact us at MOSERS, P.O. Box 209, Jefferson City, MO 65102 or call 1-800-827-1063. You may also visit our website at [www.mosers.org](http://www.mosers.org).

Sincerely,

Donald Martin, Chair  
Board of Trustees

Phone: (573) 632-6100 • (800) 827-1063  
MO Relay: 7-1-1 (Voice) • (800) 735-2966 (TTY)  
Email: [mosers@mosers.org](mailto:mosers@mosers.org) • Website: [www.mosers.org](http://www.mosers.org)

## Board of Trustees



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## Administrative Organization



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---

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Chief Operations Officer (COO)*

---

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JoAnn Looten - *Manager of Records & Facility*

Krista Myer - *Manager of Communications*

Scott Simon - *Manager of Benefit Services*



Rick Dahl - *Deputy Executive Director  
Chief Investment Officer (CIO)*

---

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Jim Mullen - *Manager of Public Debt*

Pat Neylon - *Manager of Public Equity*

Scott Peppard - *Manager of Alternative Investments*

Christine Rackers - *Manager of Investment Policy & Communications*

Cindy Rehmeier - *Manager of Deferred Compensation*

Tricia Scrivner - *Manager of Hedge Fund Investments*

## About MOSERS

### Purpose

MOSERS was established September 1, 1957, and is governed by laws of the state of Missouri.

MOSERS provides retirement, survivor, and disability benefits, as well as life insurance and deferred compensation plan management to its members.

MOSERS administers retirement benefits for most state employees, including members of the Missouri General Assembly, elected state officials, and judges. MOSERS is responsible for administering the law in accordance with the expressed intent of the Missouri General Assembly and bears a fiduciary obligation to the state employees who are its members and beneficiaries.

### Administration

State law provides that responsibility for the administration of MOSERS is vested in an 11-member board of trustees. The board is comprised of:

- Two members of the Senate appointed by the President Pro Tem of the Senate.
- Two members of the House of Representatives appointed by the Speaker of the House.
- Two members appointed by the Governor.
- The State Treasurer.
- The Commissioner of Administration.
- Three other system members: two active members elected by the active and terminated-vested members, and one retiree elected by the retired members.



The day-to-day management of MOSERS is delegated to the executive director who is appointed by the board and serves at its pleasure. The executive director acts as advisor to the board on all matters pertaining to the system, contracts for professional services, and employs the remaining staff needed to manage the system.

### Organization

The executive director, COO, and CIO are responsible for planning, organizing, and administering the operations of the system under the broad policy guidance and direction of the board. MOSERS' office is divided into seven administrative sections that perform specific functions for the system.

### Executive Services

The executive services team provides administrative support by assisting the executive director, COO, and CIO in the major legal, operational, and oversight functions of the retirement, benefit, and communication programs.

### Accounting

Accounting is responsible for all financial records of the programs administered by MOSERS, including the preparation of financial and statistical reports. Accounting performs the purchasing functions for MOSERS and interfaces with the investment custodian, Office of Administration accounting, various payroll and personnel departments, life insurance companies, actuaries, banks, and the IRS on all accounting-related issues.

### Benefit Services

Benefit services is responsible for contact with the members regarding the benefit programs directly administered by MOSERS, which include retirement, life insurance, and long-term disability.

### Communications

Communications is responsible for providing clearly written and attractively designed publications, and conducting educational seminars to inform members about benefit programs administered by MOSERS. Communications and the information technology section are jointly responsible for MOSERS' website.

### Information Technology

Information technology is responsible for establishing and maintaining the automated systems that support MOSERS' daily operations. MOSERS takes full advantage of technology to automate and integrate almost every aspect of the business. Key technologies include a document imaging system, a custom-built benefits management system and a computer-based telephone system.

## **Investments**

The primary function of the investment department is to provide internal investment management and consulting services to the board and the executive director. Other functions include hiring and terminating external investment managers, making strategic allocation decisions, analyzing the overall asset allocation, rebalancing the portfolio, and informing and advising the board and executive director on financial and economic developments which may affect the system. The investment staff also works with the general asset consultant, the hedge fund asset consultant and the executive director in selecting and monitoring external money managers. Information regarding the investment professional service providers can be found in the *Investment Section*.

## **Records and Facility Management**

Records and facility management is responsible for establishing and maintaining all membership records including maintenance of the data on the electronic imaging system, balancing payroll deductions for insurance, and entering the payroll, service, and leave data into the system's retirement database. This section is also responsible for mail services and general building maintenance.

## Outside Professional Services

### Actuary

- Gabriel, Roeder, Smith & Co.

### Auditor

- Williams-Keepers, LLC

### Governmental Consultant

- Gamble & Schlemeier, LTD

### Legal Counsel

- Thompson Coburn, LLP

### Master Custodian

- Bank of New York Mellon

### Investment Management Consultants

- Blackstone Alternative Asset Management, LP  
*Hedge Fund Asset Consultant*
- Summit Strategies Group  
*General Asset Consultant*
- TimberLink, LLC  
*Timberland Consultant*

### Risk Management Consultant

- Charlesworth & Associates, LC

### Third-Party Administrators

- ING  
*Deferred Compensation Plan*
- The Standard Insurance Company  
*Disability and Life Insurance*
- TIAA-CREF  
*College & University Retirement Plan*

### Securities Lending Advisor

- Deutsche Bank AG,  
New York Branch

### Investment Advisors

- Actis Capital, LLP
- Alinda Capital Partners, LLC
- Alliance Bernstein Defined Contribution Investments
- AQR Capital Management, LLC
- Ashmore Investment Management, Ltd.
- Axiom Asia Private Capital
- Axxon Management, Ltda.
- Baillie Gifford International, LLC
- Bayview Asset Management, LLC
- BlackRock Financial Management, Inc.
- Blackstone Alternative Asset Management, LP
- Blackstone Distressed Securities Advisors, LP
- Blackstone Real Estate Advisors
- Blakeney Management
- Brevan Howard Capital Management, Ltd.
- Bridgepoint Capital, Ltd.
- Bridgewater Associates, LP
- CarVal Investors, LLC

- Catalyst Capital Group, Inc.
- Catterton Partners
- Claren Road Asset Management, LLC
- COMAC Capital, LLP
- Davidson Kempner Capital Management, LLC
- DDJ Capital Management, LLC
- Development Partners International
- DG Capital Management
- Diamondback Capital Management, LLC
- DRI Capital, Inc.
- EIG Global Energy Partners, LLC
- Elliott International Capital Advisors, Inc.
- Eminence Capital
- Empyrean Capital Partners, LP
- Eton Park Capital Management, LP
- Farallon Capital Management, LLC
- Fortress Investment Group, LLC
- GFI Energy Ventures, LLC
- Glenview Capital Management, LLC
- Global Forest Partners, LP
- Grantham, Mayo, Van Otterloo & Co., LLC

*Continued on page 20*

## Outside Professional Services

*Continued from page 19*

- Harvest Fund Advisors, LLC
- HBK Investments, LP
- JLL Partners
- King Street Capital Management, LP
- Legg Mason Capital Management, Inc.
- Leuthold Weeden Capital Management
- Linden Capital Partners, LLC
- Mastholm Asset Management, LLC
- Merit Energy Company
- MHR Fund Management, LLC
- Millennium Technology Ventures, LP
- Moon Capital Management, LP
- Morant Wright Management, Ltd.
- New Mountain Capital, LLC
- Nippon Value Investors
- NISA Investment Advisors, LLC
- Oaktree Capital Management, LP
- Pacific Alternative Asset Management Company, LLC
- Parish Capital Advisors, LLP
- Perry Corp.
- Pershing Square Capital Management, LP
- Pharo Global Advisors Ltd.
- Resource Management Service, LLC
- Silchester International Investors
- Silver Creek Capital Management, LLC
- Silver Lake Partners
- State Street Global Advisors
- Silver Point Capital, LP
- Stone Harbor Investment Partners, LP
- The Campbell Group, LLC
- TPG Credit Management, LP
- TPG-Axon Capital Management, LP
- Veritas Capital Fund Management, LLC
- Viking Global Investors, LP
- Visium Asset Management, LP
- Wellington Management Company, LLP

# POSITIVE RESULTS

The background of the page features a silhouette of a lighthouse on the right side, set against a bright, hazy sunset sky. In the lower portion of the image, the silhouette of a cable-stayed bridge is visible, with its numerous cables fanning out across the scene. The overall color palette is warm, dominated by golden yellows and oranges from the sunset.

At MOSERS, we believe that what gets measured, gets managed. Cost Effectiveness Measurement Benchmarking, Inc. (CEM) plays an integral role in our organizational performance objectives and best practice reviews. This valuable service annually rates our performance relative to other pension plans in the U.S. and around the world. The results help us to identify ways in which we can meet and exceed our members' customer service expectations in a cost-effective manner. This year our service has once again been ranked #1 among our peers and our cost was well below the peer average cost. Our focus is clear and we're creating positive results!

*We can chart our future clearly and wisely only when we know the path which has led to the present.*

*- Adlai E. Stevenson*



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## Independent Auditor's Report



2005 West Broadway, Suite 100, Columbia, MO 65203  
OFFICE (573) 442-6171 FAX (573) 777-7800

3220 West Edgewood, Suite E, Jefferson City, MO 65109  
OFFICE (573) 635-6196 FAX (573) 644-7240

www.williamskeepers.com

The Board of Trustees  
Missouri State Employees' Retirement System

We have audited the accompanying basic financial statements of the Missouri State Employees' Retirement System (MOSERS), a component unit of the state of Missouri, as of and for the year ended June 30, 2011, as listed in the accompanying table of contents. We have also audited the financial statements of MOSERS' internal service funds as of and for the year ended June 30, 2011, as displayed in MOSERS' basic financial statements. These financial statements are the responsibility of MOSERS' management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with U.S. generally accepted auditing standards. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of MOSERS, as well as MOSERS' internal service funds, as of June 30, 2011, and the respective changes in financial position and cash flows, where applicable, for the year then ended, in conformity with U.S. generally accepted accounting principles.

The management discussion and analysis and the schedules of funding progress and employer contributions as listed in the table of contents are not a required part of the basic financial statements but are supplementary information required by U.S. generally accepted accounting principles. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the required supplementary information for the years ended June 30, 2011, 2010, 2009, 2008, 2007, and 2006. However, we did not audit the information and express no opinion on it.

Our audits were made for the purpose of forming an opinion on the financial statements taken as a whole. The additional financial information as listed in the table of contents is presented for purposes of additional analysis and is not a required part of the basic financial statements of MOSERS. Such information has been subjected to the auditing procedures applied in the audits of the financial statements and, in our opinion, is fairly stated in all material respects in relation to the financial statements taken as a whole.

The *Introductory, Investment, Actuarial, and Statistical Sections* have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we express no opinion on them.

*Williams Keepers LLC*

October 17, 2011

American Institute of Certified Public Accountants  
Missouri Society of Certified Public Accountants  
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Superior service. Creative solutions. Exceptional clients.

## Management Discussion and Analysis

The basic financial statements contained in this section of the *Comprehensive Annual Financial Report* consist of:

The *Statements of Plan Net Assets* which report the pension trust funds assets, liabilities, and resulting net assets where  $\text{Assets} - \text{Liabilities} = \text{Net Assets}$  available at the end of the fiscal year. It is a snapshot of the financial position of the pension trust funds at that specific point in time.

The *Statements of Changes in Plan Net Assets* which summarize the pension trust funds' financial transactions that have occurred during the fiscal year where  $\text{Additions} - \text{Deductions} = \text{Net Change in Net Assets}$ . It supports the change that has occurred to the prior year's net asset value on the *Statements of Plan Net Assets*.

The *Balance Sheet* of the internal service funds is similar to the *Statements of Plan Net Assets* in that it is also a snapshot of the financial position of the internal service funds where  $\text{Net Assets} + \text{Liabilities} = \text{Assets}$ .

The *Statements of Revenues, Expenses, and Changes in Net Assets* of the internal service funds is similar to the *Statements of Changes in Plan Net Assets* in that it also reports a summary of the financial activity that occurred over the period of the fiscal year where  $\text{Revenues} - \text{Expenses} = \text{Net Revenue}$  and supports the change to the prior year's net assets.

The *Statements of Cash Flows* of the internal service funds reports the financial transactions of the fiscal year of the internal service funds on a cash basis. It is similar to the *Statements of Revenues, Expenses and Changes in Net Assets*; however, the focus of this statement is on the change to cash balances with accrued income and expense items eliminated.

The *Notes to the Financial Statements* are an integral part of the above financial statements and include additional information not readily evident in the statements themselves.

The required supplementary *Management Discussion and Analysis* information and the *Required Supplementary Information* and *Additional Financial Information* following the *Notes to the Financial Statements* provide detailed historical information considered useful in evaluating the condition of the plans administered by MOSERS.

MOSERS' overall pension fund financial condition improved during the fiscal year ended June 30, 2011 (FY11). Pension fund net assets increased by \$1,060,740,174 during the fiscal year, primarily as result of an increase in investment values and their associated income. The investments of the pension trust funds generated a 21.0% return for the year, up from the prior year's return of 14.3%.

The MSEP plan experienced a decrease in its funded status from 80.4% to 79.2% and the Judicial Plan experienced an increase in its funded status from 23.3% to 25.0%. The change in the valuation asset market corridor adopted by the MOSERS Board of Trustees in 2009 returned to +/- 20% for FY11.

The internal service funds net assets increased by \$165,667. The goals of the internal service funds are to maintain the funds at a level that enables it to meet its obligations of contracting the premiums for the life and long-term disability insurance benefits for state employees; maintain the membership data necessary to track the premiums due from the state and its employees and payable to the insurance carrier; manage the state employees deferred compensation program; and collect and remit the state and employee contributions to the deferred compensation plan administrator.

The following schedules present summary comparative financial statements of the pension trust funds and internal service funds for FY11 and FY10. For each schedule there is a brief summary of the significant changes noted in those schedules.

## Pension Trust Funds

### Summary Comparative Statements of Plan Net Assets Analysis

The largest components of the net assets of the pension trust funds are the investments, cash and short-term investments, and securities lending collateral.

The increase in the fair value of investments is primarily attributable to the favorable market conditions experienced during FY11, as evidenced by an increase in MOSERS' total investment return from 14.3% last year to 21.0% this year. During the fiscal year ended June 30, 2011, MOSERS was properly positioned to

take advantage of the market rebound that occurred during the first three quarters of the fiscal year and provided significant downside protection during the last quarter. Detailed information regarding MOSERS' investment portfolio is included in the *Investment Section* of this report.

Investment income payable and investment purchases payable decreased as a result of general market fluctuations.

The increase in securities lending collateral is primarily attributable to MOSERS' decision to increase the size of the lending portfolio after the transition to a new agent lender in the second quarter of 2010. As a result,

utilization rates were higher during the fiscal year. Margins were slightly higher from the previous fiscal year making it more attractive to loan securities. As of fiscal year end, approximately 10% of the collateral received has been invested in asset-backed and corporate bonds, down from 35% of the prior year. This resulted in a reduction of the invested collateral short-fall last year from \$9.7 million to \$.8 million in FY11.

Cash and short-term investments increased due to a greater amount of funds held in the beta cash reserves in anticipation of the needs of the beta overlay program.

### Summary Comparative Statements of Plan Net Assets

#### Pension Trust Funds

	As of June 30, 2011	As of June 30, 2010	Amount of Change	Percentage Change
Cash and short-term investments	\$ 807,270,837	\$ 630,869,896	\$ 176,400,941	27.96%
Receivables	27,244,113	45,578,213	(18,334,100)	(40.23)
Investments	7,073,472,800	6,199,292,141	874,180,659	14.10
Invested securities lending collateral	643,085,121	192,640,173	450,444,948	233.83
Capital assets	3,061,064	3,190,347	(129,283)	(4.05)
Other assets	50,454	50,312	142	0.28
Total assets	<u>8,554,184,389</u>	<u>7,071,621,082</u>	<u>1,482,563,307</u>	20.96
Administrative expense payables	2,901,861	2,204,046	697,815	31.66
Investment purchase payables	16,139,126	23,438,954	(7,299,828)	(31.14)
Foreign currency payable	863,785	0	863,785	100.00
Investment income payable	8,218,700	25,586,275	(17,367,575)	(67.88)
Securities lending collateral	643,842,013	202,323,418	441,518,595	218.22
Other liabilities	15,301,498	11,891,157	3,410,341	28.68
Total liabilities	<u>687,266,983</u>	<u>265,443,850</u>	<u>421,823,133</u>	158.91
Net assets	<u>\$7,866,917,406</u>	<u>\$6,806,177,232</u>	<u>\$1,060,740,174</u>	15.58

### *Summary Comparative Statements of Changes in Plan Net Assets Analysis*

The slight increase in contributions received is primarily attributable to an increase in the contribution rate for the general employees group from 12.75% to 13.81% for the year partially offset by a decrease in covered payrolls.

The increase in investment income in FY11 over FY10 is attributable to the generally favorable market conditions experienced by the investments of the fund. The increase in securities lending income is primarily due to increased utilization of the program in conjunction with slightly higher margins from the previous fiscal year making it more attractive to loan securities. Additional information regarding the investments and securities lending activity can be found in the *Investment Section* of this report.

The total benefit payments increase is due to a net increase in the number of benefit recipients plus cost-of-living adjustments provided to existing benefit recipients. Detailed schedules of these changes can be found on pages 116-121 of the *Actuarial Section* of this report.

Service transfers are dependent on the number of members electing to transfer their service out of MOSERS and the cost of that service transferred. Refunds are dependent on the number of members MOSERS is able to locate who have contributions remaining in the system. During FY11, there were 84 members electing to transfer their service out of MOSERS.

Of the 84 members, 82 were transfers to MoDot and Patrol Employees' Retirement System (MPERS) along with the actuarial liability of \$17,609,276 for those members electing to transfer under HB 1868 enacted in FY11.

### **Internal Service Funds**

#### *Summary Comparative Balance Sheets Analysis*

The decrease in premiums receivable is attributable to normal fluctuations in the month-end balance of life and long-term disability insurance premiums receivable during the year, which are dependent on the number of members participating and amount of their coverage.

The decrease in accounts receivable-other is due to increased receipts received in conjunction with the revenue sharing arrangement with the deferred compensation plan administrator. To cover the administration costs of the program, each quarter MOSERS receives a flat amount of \$25,000 plus, beginning in 2009, 0.07% annualized of the ING Stable Income Fund. The fourth quarter ING Stable Income Fund revenue sharing payment of \$124,997 remained receivable at fiscal year end.

The increase in investments is attributable to normal fluctuations in the investment in overnight repurchase agreements of the funds held pending transmission to the life and long-term disability insurance company and to the deferred compensation administrator.

The increase in premiums payable is attributable to normal fluctuations in the month-end balances of premiums payable for the year, similar to the fluctuations of the premiums receivable.

Other liabilities decreased primarily as a result of the decrease in reimbursements due to the pension trust funds for the internal service fund's portion of shared expenses which had not been transferred at year end.

#### *Summary Comparative Statements of Revenues, Expenses, and Changes in Net Assets Analysis*

Premium receipts and premium disbursements decreased slightly due to normal fluctuations in the amount of optional life insurance coverage selected by state employees.

The decrease in deferred compensation receipts and disbursements is primarily attributable to a decreased number in the workforce contributing to the plan as well as the discontinuation of the employer match in March 2010.

Miscellaneous income decreased as a result of lower receipts from the revenue sharing arrangement with the deferred compensation plan administrator.

Premium refunds increased slightly as a result of timing differences resulting from changes in insurance coverage.

Administrative expenses increased primarily as a result of an increase in expenses for attorney services, building maintenance and software subscriptions.

Investment income increased primarily due to an overall increase in the investments held in the 90-day treasury bills during the fiscal year.

### Summary Comparative Statements of Changes in Plan Net Assets

Pension Trust Funds	Year Ended June 30, 2011	Year Ended June 30, 2010	Amount of Change	Percentage Change
Contributions	\$ 294,737,248	\$ 281,842,348	\$ 12,894,900	4.58%
Investment income - investing activities	1,411,602,826	868,603,852	542,998,974	62.51
Investment income - securities lending activities	1,534,523	1,204,378	330,145	27.41
Miscellaneous income	667,724	647,275	20,449	3.16
Total additions	1,708,542,321	1,152,297,853	556,244,468	48.27
Benefits	622,913,485	567,514,834	55,398,651	9.76
Service transfers and refunds	17,745,828	466,076	17,279,752	3,707.50
Administrative expenses	7,142,834	7,145,958	(3,124)	(0.04)
Total deductions	647,802,147	575,126,868	72,675,279	12.64
Net increase (decrease)	1,060,740,174	577,170,985	483,569,189	83.78
Net assets beginning of year	6,806,177,232	6,229,006,247	577,170,985	9.27
Net assets end of year	\$7,866,917,406	\$6,806,177,232	\$1,060,740,174	15.58

### Summary Comparative Balance Sheets

Internal Service Funds	As of June 30, 2011	As of June 30, 2010	Amount of Change	Percentage Change
Cash	\$ 8	\$ 8	\$ 0	0.00%
Premiums receivable	982,915	1,013,226	(30,311)	(2.99)
Accounts receivable - other	124,998	129,521	(4,523)	(3.49)
Investments	3,443,331	3,103,073	340,258	10.97
Total assets	\$4,551,252	\$4,245,828	\$305,424	7.19
Premiums payable	\$3,220,853	\$2,999,451	\$221,402	7.38
DC contributions payable	0	55,327	(55,327)	(100.00)
Other liabilities	380,462	406,780	(26,318)	(6.47)
Total liabilities	3,601,315	3,461,558	139,757	4.04
Unrestricted net assets	949,937	784,270	165,667	21.12
Total liabilities and net assets	\$4,551,252	\$4,245,828	\$305,424	7.19

### Summary Comparative Statements of Revenues, Expenses, and Changes in Net Assets

Internal Service Funds	Year Ended June 30, 2011	Year Ended June 30, 2010	Amount of Change	Percentage Change
Premium receipts	\$28,829,638	\$29,098,799	\$ (269,161)	(0.92)%
Deferred compensation receipts	54,221,226	69,143,267	(14,922,041)	(21.58)
Miscellaneous income	981,404	1,039,369	(57,965)	(5.58)
Total operating revenue	84,032,268	99,281,435	(15,249,167)	(15.36)
Premium disbursements	28,804,638	29,077,825	(273,187)	(0.94)
Deferred compensation disbursements	54,221,226	69,143,267	(14,922,041)	(21.58)
Premium refunds	24,999	20,974	4,025	19.19
Administrative expenses	826,809	797,020	29,789	3.74
Total operating expenses	83,877,672	99,039,086	(15,161,414)	(15.31)
Net operating income	154,596	242,349	(87,753)	(36.21)
Investment income	11,071	9,816	1,255	12.79
Net revenues over expenses	165,667	252,165	(86,498)	(34.30)
Net assets beginning of year	784,270	532,105	252,165	47.39
Net assets end of year	\$ 949,937	\$ 784,270	\$ 165,667	21.12

*Summary Comparative  
Statements of Cash Flows Analysis*

The decrease in cash flows from operating activities is primarily attributable to a decrease in cash payments received from employers and members over that of FY10.

The increase in cash flows from

noncapital financing activities is primarily attributable to a decrease in the amount of life and long-term disability premium refund checks that remained outstanding at year end.

The increase in cash flows from investing activities is primarily attributable to an increase in the cash flows from net purchase and maturities of overnight repurchase agreements of \$120,770 and an increase in the

investment income received of \$1,255.

*Request for Information*

This financial report is designed to provide a general overview of the system's finances for all those with interest in the system. Questions concerning any of the information provided in this report or request for additional information should be addressed to MOSERS at P.O. Box 209, Jefferson City, MO 65102.

**Summary Comparative Statements of Cash Flows**

Internal Service Funds

	Year Ended June 30, 2011	Year Ended June 30, 2010	Amount of Change	Percentage Change
Cash flows from operating activities	\$ 329,505	\$ 452,171	\$(122,666)	(27.13)%
Cash flows from noncapital financing activities	(318)	(952)	634	66.60
Cash flows from investing activities	(329,187)	(451,211)	122,024	27.04
Net change in cash	0	8	(8)	
Cash balances beginning of year	8	0	8	
Cash balances end of year	<u>\$ 8</u>	<u>\$ 8</u>	<u>\$ 0</u>	

*Basic Financial Statements*

## Statements of Plan Net Assets

### Pension Trust Funds - As of June 30, 2011

	MSEP	Judicial Plan	Total
<b>Assets</b>			
Cash and short-term investments	\$ 797,296,584	\$ 9,974,253	\$ 807,270,837
<u>Receivables</u>			
State contributions	10,368,139	1,150,477	11,518,616
Investment sales	15,164,689	189,712	15,354,401
Other	366,511	4,585	371,096
Total receivables	25,899,339	1,344,774	27,244,113
<u>Investments at fair value</u>			
U.S. treasury securities	771,141,946	9,647,056	780,789,002
Corporate bonds	103,978,726	1,300,783	105,279,509
Convertible bonds	2,464,703	30,834	2,495,537
Government bonds & gov't mortgage-backed securities	73,710,513	922,125	74,632,638
Common stock	1,055,724,362	13,207,208	1,068,931,570
Preferred stock	3,244,060	40,583	3,284,643
Limited partnerships	3,803,006,298	47,575,957	3,850,582,255
Bank loans	72,395,834	905,678	73,301,512
Collateralized mortgage obligations	164,524,228	2,058,213	166,582,441
International equities	918,029,589	11,484,634	929,514,223
U.S. dollar-denominated international corporate bonds	17,856,089	223,381	18,079,470
Total investments	6,986,076,348	87,396,452	7,073,472,800
Invested securities lending collateral	635,139,468	7,945,653	643,085,121
<u>Capital assets</u>			
Land	263,984	3,302	267,286
Building and building improvements	3,524,167	44,088	3,568,255
Furniture, fixtures, and equipment	1,632,771	20,426	1,653,197
Software	33,902	424	34,326
Total capital assets	5,454,824	68,240	5,523,064
Accumulated depreciation	(2,431,581)	(30,419)	(2,462,000)
Net capital assets	3,023,243	37,821	3,061,064
Prepaid expenses and other	49,831	623	50,454
Total assets	8,447,484,813	106,699,576	8,554,184,389
<b>Liabilities</b>			
Administrative expense payables	2,866,007	35,854	2,901,861
Investment purchases payables	15,939,719	199,407	16,139,126
Foreign currency payable	853,112	10,673	863,785
Securities lending collateral	635,887,008	7,955,005	643,842,013
Investment incentive fees payable	14,556,964	182,109	14,739,073
Investment income payable	8,117,154	101,546	8,218,700
Employee vacation and overtime liability	555,476	6,949	562,425
Total liabilities	678,775,440	8,491,543	687,266,983
Net assets held in trust for pension benefits	\$7,768,709,373	\$98,208,033	\$7,866,917,406

See accompanying *Notes to the Financial Statements*.



*Basic Financial Statements***Statements of Changes in Plan Net Assets**

Pension Trust Funds - Year Ended June 30, 2011

	MSEP	Judicial Plan	Total
<b>Additions</b>			
<u>Contributions</u>			
State contributions	\$ 263,418,048	\$27,702,682	\$ 291,120,730
Employee contributions	599,761	59,958	659,719
Member purchases of service credit	2,814,551	0	2,814,551
Service transfer contributions	142,248	0	142,248
Total contributions	266,974,608	27,762,640	294,737,248
<u>Investment income</u>			
<i>From investing activities:</i>			
Net appreciation in fair value of investments	1,091,260,864	13,651,773	1,104,912,637
Interest	46,149,678	577,337	46,727,015
Dividends	29,218,499	365,526	29,584,025
Swap income	295,394,113	3,695,407	299,089,520
Other	32,673,270	408,746	33,082,016
Total investing activity income	1,494,696,424	18,698,789	1,513,395,213
Investing activity expenses:			
Management fees	(95,396,305)	(1,193,416)	(96,589,721)
Custody fees	(378,205)	(4,731)	(382,936)
Consultant fees	(897,579)	(11,229)	(908,808)
Performance measurement fees	(458,185)	(5,732)	(463,917)
Internal investment activity expenses	(3,404,415)	(42,590)	(3,447,005)
Total investing activity expenses	(100,534,689)	(1,257,698)	(101,792,387)
Net income from investing activities	1,394,161,735	17,441,091	1,411,602,826
<i>From securities lending activities:</i>			
Securities lending income	2,323,353	29,065	2,352,418
Securities lending expenses:			
Borrower rebates	(540,092)	(6,757)	(546,849)
Management fees	(267,697)	(3,349)	(271,046)
Total securities lending activities expenses	(807,789)	(10,106)	(817,895)
Net income from securities lending activities	1,515,564	18,959	1,534,523
Total net investment income	1,395,677,299	17,460,050	1,413,137,349
Miscellaneous income	659,474	8,250	667,724
Total additions	1,663,311,381	45,230,940	1,708,542,321
<b>Deductions</b>			
Benefits	516,839,532	25,488,531	542,328,063
BackDROP & lump sum benefits	80,585,422	0	80,585,422
Service transfer payments	17,745,828	0	17,745,828
Administrative expenses	7,054,581	88,253	7,142,834
Total deductions	622,225,363	25,576,784	647,802,147
Net increase	1,041,086,018	19,654,156	1,060,740,174
Net assets held in trust for pension benefits:			
Beginning of year	6,727,623,355	78,553,877	6,806,177,232
End of year	\$7,768,709,373	\$98,208,033	\$7,866,917,406

See accompanying *Notes to the Financial Statements*.

*Basic Financial Statements***Balance Sheets**

Internal Service Funds - As of June 30, 2011

	Life & LTD	Deferred Compensation	Total
<b>Assets</b>			
Cash	\$ 0	\$ 8	\$ 8
Premiums receivable	982,915	0	982,915
Accounts receivable other	0	124,997	124,997
Due to/(due from)	(891,281)	891,281	0
Investments at fair value	3,392,945	50,387	3,443,332
Total assets	<u>\$3,484,579</u>	<u>\$1,066,673</u>	<u>\$4,551,252</u>
<b>Liabilities and net assets</b>			
<i>Liabilities</i>			
Premiums payable	\$3,220,853	\$ 0	\$3,220,853
Deferred compensation contributions payable	0	0	0
Checks outstanding net of deposits	1,540	0	1,540
Other	378,922	0	378,922
Total liabilities	<u>3,601,315</u>	<u>0</u>	<u>3,601,315</u>
<i>Unrestricted net assets (deficit)</i>	<u>(116,736)</u>	<u>1,066,673</u>	<u>949,937</u>
Total liabilities and net assets	<u>\$3,484,579</u>	<u>\$1,066,673</u>	<u>\$4,551,252</u>

See accompanying *Notes to the Financial Statements*.**Statements of Revenues, Expenses, and Changes in Plan Net Assets**

Internal Service Funds - Year Ended June 30, 2011

	Life & LTD	Deferred Compensation	Total
<b>Operating revenues</b>			
Premium receipts	\$28,829,638	\$ 0	\$28,829,638
Deferred compensation receipts	0	54,221,226	54,221,226
Miscellaneous income	476,484	504,920	981,404
Total operating revenues	<u>29,306,122</u>	<u>54,726,146</u>	<u>84,032,268</u>
<b>Operating expenses</b>			
Premium disbursements	28,804,638	0	28,804,638
Deferred compensation disbursements	0	54,221,226	54,221,226
Premium refunds	24,999	0	24,999
Administrative expenses	634,289	192,520	826,809
Total operating expenses	<u>29,463,926</u>	<u>54,413,746</u>	<u>83,877,672</u>
Operating revenues (under) over operating expenses	<u>(157,804)</u>	<u>312,400</u>	<u>154,596</u>
<b>Nonoperating revenues</b>			
Investment income	10,951	120	11,071
Net revenues (under) over expenses	<u>(146,853)</u>	<u>312,520</u>	<u>165,667</u>
Net assets July 1, 2010	30,117	754,153	784,270
Net assets (deficit) June 30, 2011	<u>\$ (116,736)</u>	<u>\$ 1,066,673</u>	<u>\$ 949,937</u>

See accompanying *Notes to the Financial Statements*.

*Basic Financial Statements***Statements of Cash Flows**

Internal Service Funds - Year Ended June 30, 2011

	Life & LTD	Deferred Compensation	Total
<b>Cash flows from operating activities</b>			
Cash received from employer and members	\$ 29,336,433	\$ 54,730,669	\$ 84,067,102
Payments to outside carriers	(28,582,259)	(54,226,168)	(82,808,427)
Refunds of premiums to members	(24,999)	0	(24,999)
Cash payments to employees for services	(306,738)	(136,033)	(442,771)
Cash payments to other suppliers of goods and services	(264,728)	(196,672)	(461,400)
Net cash provided by operating activities	<u>157,709</u>	<u>171,796</u>	<u>329,505</u>
<b>Cash flows from noncapital financing activities</b>			
Implicit funding of checks outstanding net of deposits	1,540	0	1,540
Implicit repayment of prior years checks outstanding net of deposits	(1,858)	0	(1,858)
Net cash used in noncapital financing activities	<u>(318)</u>	<u>0</u>	<u>(318)</u>
<b>Cash flows from investing activities</b>			
Purchase of investment securities	(746,370,653)	(7,986,076)	(754,356,729)
Proceeds from sale and maturities of investment securities	746,202,311	7,814,160	754,016,471
Cash received from investment income	10,951	120	11,071
Net cash used by investing activities	<u>(157,391)</u>	<u>(171,796)</u>	<u>(329,187)</u>
Net increase in cash	0	0	0
Cash balances June 30, 2010	0	8	8
Cash balances June 30, 2011	<u>\$ 0</u>	<u>\$ 8</u>	<u>\$ 8</u>
<b>Reconciliation of operating revenues under operating expenses to net cash provided by operating activities</b>			
Operating revenues over (under) operating expenses	\$ (157,804)	\$ 312,400	\$ 154,596
<i>Adjustments to reconcile operating revenues over (under) operating expenses to net cash provided (used) by operating activities</i>			
Change in assets and liabilities:			
Increase in operational accounts receivable	30,312	4,522	34,834
Increase (decrease) in operational accounts payable	285,201	(145,126)	140,075
Total adjustments	<u>315,513</u>	<u>(140,604)</u>	<u>174,909</u>
Net cash provided by operating activities	<u>\$ 157,709</u>	<u>\$ 171,796</u>	<u>\$ 329,505</u>

See accompanying *Notes to the Financial Statements*.

# Notes to the Financial Statements

Year Ended June 30, 2011

## (1) Plan Descriptions and Contribution Information

### *Missouri State Employees' Plan (MSEP)*

The MSEP is a single-employer, public employee retirement plan with two benefit structures known as the MSEP (closed plan) and MSEP 2000, which are administered by the Missouri State Employees' Retirement System (MOSERS) in accordance with Sections 104.010 and 104.312 to 104.1215 of the Revised Statutes of Missouri (RSMo). As established under Section 104.320, RSMo, MOSERS is a body corporate and an instrumentality of the state. In the system are vested the powers and duties specified in Sections 104.010 and 104.312 to 104.1215, RSMo and such other powers as may be necessary or proper to enable it, its officers, employees, and agents to carry out fully and effectively all the purposes of Sections 104.010 and 104.312 to 104.1215, RSMo.

Responsibility for the operation and administration of the system is vested in the MOSERS Board of Trustees. Due to the nature of MOSERS' reliance on funding from the state of Missouri and the overall control of the plan document by the legislative and executive branches of state government, the MSEP is considered a component unit of the state of Missouri financial reporting entity and is included in the state's financial reports as a pension trust fund.

The board intends to follow a financing pattern which computes and requires contribution amounts which, expressed

as a percent of active member payroll, will remain approximately level from year-to-year and from one generation of citizens to the next generation.

Complete recognition of the year-to-year swings in the market value of system assets would produce contribution rate changes that would run counter to the "approximately level" goal. To address that issue a common actuarial practice referred to as asset smoothing is used. Application of that practice results in full recognition of returns at the assumed rate and recognizing any annual investment return gain or loss relative to the assumed rate over a period of five years.

At any point in time the actuarial value of assets will be more or less than the market value but, if the smoothing method is prudent and properly constructed, those values will converge over time.

As of June 30, 2011 and 2010, the actuarial value of assets was 103% and 118% respectively, of the market value for the Missouri State Employees Plan.

Generally, all full-time state employees hired before July 2000, who were not covered under another state-sponsored retirement plan are eligible for membership in the MSEP (closed plan). Full-time state employees hired after July 2000 and before January 2011 are eligible for membership in the MSEP 2000. Employees hired on or after January 2011 are eligible for membership in the MSEP 2011 tier of the MSEP 2000. MOSERS

participates as an employer in the MSEP and MSEP 2000.

### **As of the June 30, 2011 valuation, membership in the MSEP consisted of the following:**

Retirees and beneficiaries currently receiving benefits		35,315
Terminated employees entitled to, but not yet receiving benefits		17,712
<b>Active</b>		
Vested	36,209	
Nonvested	<u>15,451</u>	<u>51,660</u>
Total membership		<u><u>104,687</u></u>

The MSEP provides retirement, survivor, and disability benefits.

### **MSEP (closed plan)**

General state employees are fully vested for benefits upon receiving 5 years of credited service. Under the MSEP (closed plan), general employees may retire with full benefits upon the earliest of attaining:

- Age 65 and active with 4 years of service;
- Age 65 with 5 years of service;
- Age 60 with 15 years of service; or
- Age 48 with age and service equaling 80 or more - "Rule of 80."

General employees may retire early at age 55 with at least 10 years of service with reduced benefits.

The base benefit in the general employee plan is equal to 1.6% multiplied by the final average pay multiplied by years of credited service.

For members hired prior to August 28, 1997, cost-of-living adjustments (COLAs) are provided annually based on 80% of the percentage increase in the average consumer price index (CPI) from one year to the next, with a minimum rate of 4% and maximum rate of 5% until the cumulative amount of COLAs equals 65% of the original benefit. Thereafter, the 4% minimum rate is eliminated. For members hired on or after August 28, 1997, COLAs are provided annually based on 80% of the percentage increase in the average CPI from one year to the next, up to a maximum rate of 5%.

Qualified, terminated-vested members may make a one-time election to receive the present value of their benefit in a lump sum payment.

To qualify, a member must have terminated with at least 5, but less than 10 years of service, be less than age 60, and have a benefit present value of less than \$10,000.

Contributions are determined through annual actuarial valuations. Administration of the MSEP is financed through contributions to this plan from the state of Missouri and investment earnings.

#### **MSEP 2000**

General state employees are fully vested for benefits upon receiving 5 years of credited service. Under the MSEP 2000, general employees may retire with full benefits upon the earliest of attaining:

- Age 62 with 5 years of service; or
- Age 48 with age and service equaling 80 or more - "Rule of 80."

General employees may retire early at age 57 with at least 5 years of service with reduced benefits.

The base benefit in the general employee plan is equal to 1.7% multiplied by final average pay multiplied by years of credited service.

For those retiring under "Rule of 80," an additional temporary benefit equivalent to 0.8% multiplied by final average pay multiplied by years of credited service is payable until age 62.

COLAs are provided annually based on 80% of the percentage increase in the average CPI from one year to the next, up to a maximum rate of 5%.

Contributions are determined through annual actuarial valuations. Administration of the MSEP 2000 is financed through contributions to this plan from the state of Missouri and investment earnings.

The state of Missouri is required to make all contributions to the MSEP. Prior to September 1, 1972, contributions by members were required. Accumulated employee contributions made prior to that time, plus interest through August 28, 1997, are refundable to the member or designated beneficiaries upon request.

For a more detailed summary of benefits for general employees and a description of benefits available to legislators and elected officials under the MSEP (closed plan) and the MSEP 2000, refer to the *Summary of Plan Provisions* contained in the *Actuarial Section* of this report.

#### **MSEP 2011 Tier**

On July 19, 2010, Governor Jay Nixon signed into law House Bill No. 1, that created new tier defined benefit plans for members of the Missouri State Employees' Retirement System (MOSERS) and the MoDOT and Patrol Employees' Retirement System (MPERS) hired on or after January 1, 2011.

This tier (MSEP 2011) for MOSERS members includes all new employees first hired on or after January 1, 2011, as members of the MSEP 2000.

Highlights of this tier 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.
- "Rule of 80" increased to a "Rule of 90" and the corresponding minimum eligibility age increased from age 48 to age 55.
- The age for early retirement for general employees increased from age 57 to age 62 (option available with a reduction).
- Five-year vesting increased to ten-year vesting for general employees.
- Member contributions for all classifications equivalent to 4% of pay on a pretax basis; 4% interest will be credited to member accounts at the end of the fiscal year based on the beginning fiscal year balance.
- Eliminates subsidized service purchases for all employee classifications. This includes the elimination of subsidized purchases of military and other full-time nonfederal governmental service.

- Eliminates the portability provision that was enacted in the MSEP 2000 Plan.
- Eliminates the BackDROP provision that was enacted in 2002.

The MSEP 2011 does not impact employees currently or previously employed by the state (current members of MOSERS).

### **Judicial Plan**

The Judicial Plan is a single-employer, public employee retirement plan administered in accordance with Sections 476.445 to 476.690, RSMo. Responsibility for the operation and administration of the Judicial Plan is vested in the MOSERS Board of Trustees. Due to the nature of MOSERS' reliance on funding from the state of Missouri and the overall control of the plan document by the legislative and executive branches of state government, the Judicial Plan is considered a component unit of the state of Missouri financial reporting entity and is included in the state's financial reports as a pension trust fund.

Judges and commissioners of the supreme court or the court of appeals, judges of the circuit court, probate court, magistrate court, court of common pleas, court of criminal corrections, justices of the peace, or commissioners or deputy commissioners of the circuit court appointed after February 29, 1972, commissioners of the juvenile division of the circuit court appointed pursuant to Section 211.023, RSMo, commissioners of the drug court pursuant to Section 478.466, RSMo, or commissioners of the family court are eligible for membership in the Judicial Plan.

### **As of the June 30, 2011 valuation, membership in the Judicial Plan consisted of the following:**

Retirees and beneficiaries currently receiving benefits	486
Terminated employees entitled to, but not yet receiving benefits	45
<b>Active</b>	
Vested	399
Nonvested	<u>0</u> 399
Total membership	<u>930</u>

The Judicial Plan provides retirement, survivor, and disability benefits. Members are immediately eligible for benefits.

Under the Judicial Plan, members may retire with full benefits upon the earliest of attaining:

- Age 62 with 12 years of service;
- Age 60 with 15 years of service; or
- Age 55 with 20 years of service.

Employees may retire early at age 62 with less than 12 years of service or age 60 with less than 15 years of service with a reduced benefit that is based upon years of service relative to 12 or 15 years.

In the Judicial Plan, the base benefit for members with 12 or more years of service is equivalent to 50% of compensation on the highest court served.

For members hired prior to August 28, 1997, COLAs are provided annually based on 80% of the percentage increase in the average CPI from one year to the next, with a minimum rate of 4% and maximum rate of 5% until

the cumulative amount of COLAs equals 65% of the original benefit. Thereafter, the 4% minimum rate is eliminated. For members hired on or after August 28, 1997, COLAs are provided annually based on 80% of the percentage increase in the average CPI from one year to the next, up to a maximum rate of 5%.

Qualified, terminated-vested members may make a one-time election to receive the present value of their benefit in a lump sum payment. To qualify, a member must have terminated with at least 5, but less than 10 years of service, be less than age 60, and have a benefit present value of less than \$10,000.

Funding of the Judicial Plan on an actuarial basis began on July 1, 1998. Contributions are determined through annual actuarial valuations. The state of Missouri is required to make all contributions to the Judicial Plan. Administration of the Judicial Plan is financed through contributions to this plan from the state of Missouri and investment earnings.

### **Judicial 2011 Tier**

House Bill No. 1, created new tier defined benefit plan for members of the Judicial Plan. This tier (Judicial Plan 2011) includes all new judicial members first hired on or after January 1, 2011.

For a more detailed summary of benefits for members of the Judicial Plan, refer to the *Summary of Plan Provisions* contained in the *Actuarial Section* of this report.

## Schedule of Funded Status

	Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Annual Covered Payroll (c)	UAAL Percentage of Covered Payroll ((b-a)/c)
MSEP	6/30/2011	\$8,022,481,408	\$10,123,544,043	\$2,101,062,635	79.2%	\$1,875,569,816	112.0%
Judges	6/30/2011	98,398,628	393,484,589	295,085,961	25.0	45,888,020	643.1
				<b>MSEP</b>		<b>Judicial Plan</b>	
Valuation date				6/30/2011		6/30/2011	
Actuarial cost method				Entry age		Entry age	
Amortization method				Level percent		Level percent	
Remaining amortization period				30 years open		30 years open	
Asset valuation method				5-year smoothed market +/- 20% market corridor		5-year smoothed market +/- 20% market corridor	
Actuarial assumptions:							
Investment rate of return				8.50%		8.50%	
Projected salary increases				4.3-7.5%		4.0-5.6%	
COLAs				4%*		4%**	
Price inflation				3.20%		3.20%	

\* On a compound basis, 4% for the first 12 years, 3.1% for the 13<sup>th</sup> year, and 2.56% per year thereafter.

\*\* On a compound basis, 4% for the first 12 years, 3.067% for the 13<sup>th</sup> year, and 2.56% per year thereafter.

Multi-year trend information related to the table above demonstrates whether the actuarial value of plan assets are increasing or decreasing over time relative to the actuarial accrued liabilities for benefits can be found in the required supplementary information following the *Notes to the Financial Statements*.

### **Missouri State Insured Defined Benefit Insurance Plan**

The Missouri State Insured Defined Benefit Insurance Plan is accounted for as an internal service fund of the state of Missouri and is administered by MOSERS. It provides basic life insurance in an amount equal to one times annual salary while actively employed (with a \$15,000 minimum) to eligible members of the MSEP and MSEP 2000 (except employees of the Missouri Department of Conservation and certain state colleges and universities), MSEP

2011 and members of the Judicial Plan and certain members of the Public School Retirement System.

The plan also provides duty-related death benefits, optional life insurance for active employees and retirees who are eligible for basic coverage, and a long-term disability plan for certain eligible members. For a more detailed description of insurance benefits, refer to the *Summary of Plan Provisions - Life Insurance Plans* in the *Actuarial Section* of this report.

Due to the nature of MOSERS' reliance on funding from the state of Missouri and the overall control of the plan document by the legislative and executive branches of state government, the Missouri State Insured Defined Benefit Insurance Plan is considered a component unit of the state of Missouri financial reporting entity and is included in the state's financial

reports as an internal service fund. Administration of the Missouri State Insured Defined Benefit Insurance Plan is financed through contributions to this plan from the state of Missouri.

This plan experienced a negative fund balance in FY11 due to administrative expenses exceeding revenues. Contracts negotiated for future years are anticipated to reverse this trend.

### **State of Missouri's Deferred Compensation Plan**

The state of Missouri's Deferred Compensation Plan is accounted for as an internal service fund and is administered by MOSERS.

Effective September 1, 2007, legislation transferred responsibility for the administration of the state of Missouri's Deferred Compensation Plan from the State of Missouri's Deferred Compensation Commission to the MOSERS Board of Trustees.

The plan administration of individual accounts and the investment products available are handled by outside providers and paid from charges to the participants and revenue sharing arrangements. Investment of deferred compensation funds are managed by participants who choose from available options. MOSERS' role is to provide investment options to the participants. MOSERS participates in a revenue sharing arrangement with the plan administrator to cover a portion of participant fees and MOSERS' administrative costs. Funds collected related to the revenue sharing arrangements are shown in the Due to/(due from) accounts.

### Prospective Plan Provision Changes

On July 8, 2011, Governor Nixon signed into law HB 282, retirement legislation that contained provisions affecting the Missouri State Employees' Retirement Plan, the Missouri Department of Transportation and Highway Patrol Employees' Retirement System (MPERS), and the Missouri Deferred Compensation as well as employees of the Missouri Development Finance Board (MDFB).

This legislation contained provisions that results in new hires employed on or after July 1, 2012, being automatically enrolled at 1% of pay in the Deferred Compensation Plan that is administered by MOSERS as well as language providing for MOSERS and MPERS to transfer funds between the two systems in connection with service credit transfers occurring on or after September 1, 2011. The legislation also included provisions that make any full-time employee of MDFB who is employed on or after September 1, 2011, a state employee

### Revenue Sharing

	Employee Charges	Revenue Sharing	Total
ING	\$1,887,489	\$1,014,247	\$2,901,736
MOSERS	0	504,920	504,920
Total	\$1,887,489	\$1,519,167	\$3,406,656

and member of MOSERS. Provisions further allow MDFB employees to purchase credited service toward retirement based on their employment with MDFB prior to September 1, 2011. Lastly, the legislation contains provisions that require all public employee defined benefit retirement plans covered under Chapter 105, RSMo, to submit quarterly investment reports to the Joint Committee on Public Employee Retirement (JCPER) in the form and manner requested by the committee.

MOSERS completed a search for recordkeeping services for the State of Missouri Deferred Compensation Plan. The current 5-year contract with ING was nearing expiration, and it is common practice to conduct a review of the current provider and perform a bid process. Following an extensive review of responses to our request for proposal, the decision was made to transition Plan recordkeeping services to ICMA-RC (Retirement Corporation). The transition to the new provider will take place in November 2011.

### (2) Summary of Significant Accounting Policies and Plan Asset Matters

#### *Basis of Accounting*

The financial statements of the MSEP, the Judicial Plan, the Missouri State Insured Defined Benefit Insurance Plan and state of Missouri's Deferred

Compensation Plan were prepared using the accrual basis of accounting.

Contributions are due to MOSERS when employee services have been performed and paid. Contributions are recognized as revenues when due pursuant to statutory requirements. Benefits and refunds are recognized when due and payable and expenses are recorded when the corresponding liabilities are incurred, regardless of when contributions are received or payment is made. The direct method of reporting cash flows is used.

#### *Estimates*

The preparation of financial statements in conformity with accounting principles generally accepted in the U.S. requires management to make estimates and assumptions that affect the reported amounts of net assets held in trust for pension benefits at June 30, 2011. Actual results could differ from those estimates.

#### *Method Used to Value Investments*

Section 104.440, RSMo allows the board of trustees to invest the trust fund assets in accordance with the prudent person rule. Investments of the pension trust funds and the internal service funds are reported on the basis of fair market value. The schedule on page 42 provides a summary of the fair values of the investments as reported on the *Statements of Plan Net Assets* of the pension trust funds and balance sheet of the internal service funds.



Fair values for the equity real estate investments are based on appraisals. Fair values of the limited partnership investments are based on valuations of the underlying companies of the limited partnerships as reported by the general partner. Certain limited partnerships reflect values on a quarter lag basis due to the nature of those investments and the time it takes to value them. Fair value of the commingled funds is determined based on the underlying asset values. The remaining assets are primarily valued by the investment custodian using the last trade price information supplied by various pricing data vendors.

**Cash**

Custodial credit risk for cash deposits and investments is the risk that, in the event of a bank failure, the system and plans' deposits may not be returned to them. The board adopted the following policy on June 18, 2009:

*The executive director shall require that banks managing demand deposit accounts for any retirement plan associated with MOSERS (MOSERS' defined benefit plan and the deferred compensation plan/state incentive compensation plan) to hold, at minimum, collateral security in either MOSERS' name or the state of Missouri Deferred Compensation Plan and in an amount equal to or more than the amount on deposit that exceeds the*

*Federal Deposit Insurance Corporation (FDIC) insured amount. The types of collateral security shall be included on a list maintained by the State Treasurer's office in accordance with Section 30.270 RSMo, but in no case may a bank pledge collateral that does not specifically allow MOSERS to release the collateral or pledge collateral that represents securities of the pledging banks.*

Cash balances represent both demand deposit accounts held at the bank and investment cash on deposit with the investment custodian. To maximize investment income, the float caused by outstanding checks is invested in an overnight sweep account, thus causing a possible negative book balance. Negative book balances are reflected in the liabilities section of the balance sheet of the internal service fund and included in the cash and short-term investments on the *Statements of Plan Net Assets* of the pension trust funds.

The table below is a schedule of the aggregate book and bank balances of all cash accounts.

Funds held in the sweep account are not covered by Federal Deposit Insurance Corporation (FDIC) insurance. Effective July 1, 2009, the Repurchase Agreement was amended to remove the bank's right to substitute other appropriate securities under this agreement. Central Trust Bank pledged the

following securities to MOSERS on June 30, 2011, as collateral for overnight repurchase agreements:

- \$5,000,000 Federal National Mortgage Association  
– maturity date - 10/25/2013  
– fair value - \$5,003,205
- \$5,000,000 Small Business Administration Pool #508484  
– maturity date - 08/25/2020  
– fair value - \$2,556,180
- \$15,784,741 Federal National Mortgage Association Pool #889637  
– maturity date - 07/01/2034  
– fair value - \$8,285,593
- \$5,000,000 Small Business Administration Pool #509071  
– maturity date - 04/25/2036  
– fair value - \$5,000,000

**Credit Risk**

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations to MOSERS. As of June 30, 2011, MOSERS' fixed income assets that are not government guaranteed represented 55% of the fixed income portfolio. In preparing this report, credit risk associated with all fixed income holdings including collateral for repurchase agreements and securities lending collateral has been included. The tables on the following page summarize MOSERS' fixed income portfolio exposure levels and credit qualities.

**Aggregate Book and Bank Balances**

	Cash Balances	
	Book	Bank/Investment Custodian
Pension Trust Funds - investment custodian	\$ 16,095,271	\$16,095,271
Pension Trust Funds - demand deposits	(12,314,737)	121,439
Internal Service Fund - insurance plan demand deposits	(1,541)	48
Internal Service Fund - deferred compensation plan demand deposits	8	8

As a matter of practice, there are no overarching limitations for credit risk exposures within the overall fixed income portfolio. Each individual portfolio within fixed income is managed in accordance with operational guidelines that are specific as to permissible credit quality ranges, exposure levels within individual quality tiers, and average credit quality. MOSERS is notified by the investment manager when an investment with a quality rating of CC or lower is purchased and in those circumstances of downgrades subsequent to purchase, in which case the investment manager has been given permission to hold the

security, usually due to mitigating circumstances such as a very short maturity or a much higher rating from one of the other ratings agencies but may include situations in which the investment manager believes that worst case recovery values exceed market pricing.

Credit risk for derivative instruments held by the system results from counterparty risk assumed by MOSERS. This is essentially the risk that the counterparty to a MOSERS transaction will be unable to meet its obligation. Information regarding MOSERS' credit risk related to derivatives is found

under the derivatives disclosures on pages 39-41 of these notes.

Policies related to credit risk pertaining to MOSERS' securities lending program are found under the securities lending disclosures found on page 40 of these notes.

#### *Concentration of Credit Risk*

Concentration of credit risk is the risk of loss that may be attributed to the magnitude of a government's investment in a single-issuer. There is no single-issuer exposure within the MOSERS' portfolio that comprises 5% or more of the overall portfolio. Therefore, there is no concentration of credit risk.

#### Average Credit Quality and Exposure Levels of Nongovernment Guaranteed Securities

Fixed Income Security Type	Market Value June 30, 2011	Percent of all Fixed Income Assets	Weighted Average Credit Quality	Ratings Dispersion Requiring Further Disclosure
Collateralized mortgage obligations	\$ 150,718,506	5.7%	BBB-	See below
Non-U.S. sovereign	45,422,197	1.7	BBB	See below
Asset backed securities	40,787,572	1.5	A	See below
Corporate bonds	270,648,259	10.1	BBB+	See below
Bank loans	73,306,047	2.8	B+	See below
Bank deposits	250,062,503	9.4	FDIC insured	None
Repurchase agreements	570,201,846	21.4	Not rated	None
Pooled investments	70,574,291	2.6	AAA	See below
Total nongov't guaranteed securities	<u>\$1,471,721,221</u>	<u>55.2%</u>		
Total fixed income securities	\$2,666,524,400			

#### Ratings Dispersion Detail - Market Value

Credit Rating Level	Collateralized Mortgage Obligations	Non-U.S. Sovereign	Asset-Backed Securities	Corporate Bonds	Bank Loans	Pooled Investments
Agency	\$ 70,516,950		\$21,516,682	\$ 64,040,892		
AAA				812,999		\$70,574,291
AA				16,862,093		
A	1,803,151	\$16,178,503		96,350,710		
BBB	688,138	20,074,713	7,679,524	2,013,502	\$ 476,800	
BB	1,664,303	8,853,842	537,455	25,783,913	27,046,548	
B	7,272,007	93,604	7,289,761	33,325,870	40,029,043	
CCC	35,008,208		1,143,464	16,714,663	2,048,599	
CC	8,605,790		1,974,904	1,419,355		
C				0	0	
D	25,159,960		645,782	13,036,742	619,934	
Not rated		221,536		287,521	3,085,124	
	<u>\$150,718,507</u>	<u>\$45,422,198</u>	<u>\$40,787,572</u>	<u>\$270,648,260</u>	<u>\$73,306,048</u>	<u>\$70,574,291</u>

**Interest Rate Risk**

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. This risk is managed by using the effective duration or option adjusted methodology. It is widely used in the management of fixed income portfolios by quantifying the risk of interest rate changes. This methodology takes into account optionality on bonds and scales the risk of price changes on bonds depending upon the degree of change in rates and the slope of the yield curve. Within the investment policy, operational guidelines specify

the degree of interest rate risk taken within the system's fixed income portfolios, with the exception of some portfolios in which credit risk is the predominant factor and is also controlled by specific guidelines.

It is believed that the reporting of effective duration found in the tables below quantifies to the fullest extent possible the interest rate risk of the system's fixed income assets.

MOSERS invests in mortgage-backed securities, which are reported at fair value in the *Statement of Plan Assets* of the pension trust funds. Such securities

have embedded within them the risk of being called, whereby the issuer has the option to keep the debt outstanding in rising interest rate environments or repay the debt in declining interest rate environments, a factor that advantages the issuer. MOSERS invests in these securities to diversify the portfolio with high quality and liquid investments, which capture a significant yield premium that is intended to compensate for the call risk. This risk is incorporated within the effective duration calculation used in the interest rate risk analysis.

**Effective Duration of Fixed Income Assets by Security Type**

Fixed Income Security Type	Market Value June 30, 2011	Percent of all Fixed Income Assets	Weighted Average Effective Duration (Years)	Interest Rate Risk Requiring Further Disclosure
U.S. treasuries	\$ 787,295,410	29.5%	5.4	See below
US gov't guaranteed mortgages	266,364	0.0	1.7	None
Collateralized mortgage obligations	150,718,506	5.7	0.1	None
Non-U.S. sovereign	45,422,197	1.7	5.2	None
Asset backed securities	40,787,572	1.5	0.0	None
Corporate bonds	270,648,259	10.2	0.9	None
Bank loans	73,306,047	2.7	0.2	None
Bank deposits	250,062,503	9.4	0.0	None
Repurchase agreements	977,443,251	36.7	0.0	None
Pooled investments	70,574,291	2.6	0.0	None
	<u>\$2,666,524,400</u>	<u>100.0%</u>	<u>1.8</u>	

**Effective Duration Analysis of U.S. Treasuries**

	Market Value June 30, 2011	Average Effective Duration of the Security Type	Contribution to Effective Duration
Less than 1 year to maturity			
1- to 10- year maturities	\$466,536,396	2.4	1.4
Long coupon treasuries	316,418,232	9.7	3.9
Long stripped treasuries	4,340,782	16.0	0.1
	<u>\$787,295,410</u>		<u>5.4</u>

**Repurchase Agreements by Collateral Type**

Collateral Type	Market Value June 30, 2011	Market Value of Repurchase Agreement June 30, 2011	Percent Over Collateralized
Treasuries	\$ 418,485,491	\$407,241,405	2.8%
Money market instruments	89,250,000	85,000,000	5.0
Investment grade corporates	119,154,131	115,200,000	3.4
Common stock	396,000,040	370,001,846	7.0
	<u>\$1,022,889,662</u>	<u>\$977,443,251</u>	<u>4.6%</u>

**Repurchase Agreements**

Repurchase agreements (repos) are a secured loan with the collateral held at a custodian bank. Typical collateral for repos include treasury securities, agency securities, mortgage-backed securities, investment grade corporate bonds, commercial paper, and common stock. Repos are typically done for an overnight term, however they can be done for a longer term. MOSERS

enters into repo transactions to earn interest on short-term funds.

**Foreign Currency Risk**

Foreign currency risk is the risk that changes in exchange rates will adversely impact the fair value of an investment. MOSERS' currency risk exposures, or exchange rate risk, primarily reside within MOSERS' international equity investment

holdings. MOSERS' implementation policy is to allow external managers to decide what action to take regarding their respective portfolio's foreign currency exposures using currency forward contracts. MOSERS' exposure to foreign currency risk in U.S. dollars as of June 30, 2011, is highlighted in the table below:

**Currency Exposures by Asset Class**

Currency	Cash & Cash Equivalents	Equities	Fixed Income	Alternatives	Total
Argentina Peso		\$ 2	\$ 91,884		\$ 91,886
Australian Dollar		7,316,355			7,316,355
Brazilian Real	\$ 50,235	28,464,480	7,196,999		35,711,714
Canadian Dollar	68,863	1,064,653	352,211		1,485,727
Chilean Peso		1,094,924			1,094,924
Chinese Renminbi		56,003			56,003
Colombian Peso		547,299	3,190,750		3,738,049
Czech Koruna		2,597,452			2,597,452
Danish Krone	400	5,806,422			5,806,822
Egyptian Pound		2,566,970			2,566,970
Euro	5,162,818	179,922,855	7,753,982	\$66,929,710	259,769,365
Hong Kong Dollar		81,745,870			81,745,870
Hungarian Forint	1,165	3,257,889	762,571		4,021,625
Indian Rupee		12,967,903			12,967,903
Indonesian Rupiah		9,854,977	5,699,097		15,554,074
Israeli Shekel	4	22			26
Japanese Yen	753,114	344,129,430			344,882,544
Malaysian Ringgit		6,914,031	5,962,580		12,876,611
Mexican Peso		13,609,169	6,391,989		20,001,158
Moroccan Dirham		334,109			334,109
Peruvian Nuevo Sol		12			12
Phillippines Peso		977,505	483,385		1,460,890
Polish Zloty		5,301,412	4,048,886		9,350,298
Russian Ruble		732,573			732,573
Singapore Dollar		33,301,566			33,301,566
South African Rand		10,851,076	5,989,202		16,840,278
South Korean Won	85,597	48,214,950	2,090,801		50,391,348
Sri Lanka Rupee		188,120			188,120
Swedish Krona		11,294,760			11,294,760
Swiss Franc	97	97,581,803			97,581,900
Taiwan New Dollar	698,811	41,368,126			42,066,937
Thai Baht		17,747,934	2,891,448		20,639,382
Turkish Lira		9,434,630	3,368,266		12,802,896
Ukraine Hryvana		60			60
United Kingdom Pound Sterling	1,000,488	110,667,145	1,953,178		113,620,811
Venezuela Boliviar	53,623				53,623
Grand Total	\$7,875,215	\$1,089,912,487	\$58,227,229	\$66,929,710	\$1,222,944,641

### *Derivatives*

Derivative instruments are financial contracts whose values depend on the values of one or more underlying assets, reference rates, or financial indexes. They include futures contracts, swap contracts, options contracts, and forward foreign currency exchange. While the board has no formal policy specific to derivatives, the MOSERS investment implementation program, through its external managers, holds investments in futures contracts, swap contracts, and forward foreign currency exchange. MOSERS enters into these certain derivative instruments primarily to enhance the performance and reduce the volatility of its portfolio. It enters swaps and futures contracts to gain or hedge exposure to certain markets and to manage interest rate risk and forward foreign exchange contracts primarily to hedge foreign currency exposure.

The tables on the following page summarize the various contracts in the portfolio as of June 30, 2011. The notional values associated with these derivative instruments are generally not recorded on the financial statements; however, the amounts for the exposure on these instruments are recorded in the *Statement of Net Plan Assets* and the total changes in fair value for the year are included as investment income in the *Statement of Changes in Plan Net Assets*. For the year ending June 30, 2011, the change in fair value in the swap contracts resulted in \$299.1 million of investment income. The change in fair value in the future contracts resulted in \$94.3 million of investment income

and the change in fair value of the foreign exchange contracts resulted in a loss of \$18.3 million of investment income. MOSERS does not anticipate additional significant market risk from the swap arrangements.

MOSERS could be exposed to risk if the counterparties to the contracts are unable to meet the terms of the contracts. MOSERS' investment managers seek to control this risk through counterparty credit evaluations and approvals, counterparty credit limits, and exposure monitoring procedures. MOSERS anticipates that the counterparties will be able to satisfy their obligations under the contracts. Investments in limited partnerships and commingled funds may include derivatives that are not shown in the derivative totals.

### *Securities Lending Program*

The board of trustees' investment policy permits the pension trust funds to participate in a securities lending program. Fixed income, international equity, and domestic equity securities of the pension trust funds are loaned to participating brokers who provide collateral in the form of cash, U.S. Treasury or government agency securities, or letters of credit issued by approved banks. Collateral must be provided in the amount of 102% of market value for domestic loans and 105% of market value for international loans. MOSERS does not have the authority to pledge or sell collateral securities, without borrower default. Securities on loan at fiscal year end for cash collateral and on loan for non-cash collateral are presented in the schedule on page 42.

On June 30, 2011, MOSERS had no credit risk exposure to borrowers because the collateral amounts received exceeded amounts out on loan.

As of June 30, 2011, Deutsche Bank AG, New York Branch, served as the agent for the fixed income, domestic equity and international equity securities lending programs. In this capacity, MOSERS reduces credit risk by allowing Deutsche Bank to lend these securities to a diverse group of dealers on behalf of MOSERS. Indemnification against dealer default is provided by Deutsche Bank AG, a "AA-rated" bank. With each of MOSERS' securities lending programs, a majority of loans are open loans and can be terminated on demand by either MOSERS or the borrower. Net income from the three lending programs is split on an 85/15 basis between MOSERS and Deutsche Bank, respectively.

Daily monitoring of securities that are on loan ensures proper collateralization levels and mitigates counterparty risk. Cash collateral from all three programs is commingled and invested in a separately managed short-term investment fund for MOSERS. This cash collateral fund is managed by Deutsche Bank. On June 30, 2011, the cash collateral fund had a market value of \$643,085,121 and a weighted average maturity of four days. For all of the securities lending operational services, the custodian is paid an annual fee, which is netted out against MOSERS' earnings in the securities lending programs managed by Deutsche Bank.

## Futures Contracts

Futures Contract	2011 Expiration Date	Long/Short	Notional/Fair Value	Exposure
U.S. US Ultra Bond	September	Long	\$ 43,808,750	\$ (81,156)
U.S. Long Treasury Bond	September	Long	45,398,531	(174,250)
U.S. 10-year Treasury Notes	September	Long	212,239,297	(954,641)
U.S. 5-year Treasury Notes	September	Long	29,918,024	(7,859)
U.S. 2-year Treasury Notes	September	Long	204,867,062	(15,375)
S&P 500 Index	September	Long	258,956,175	2,204,720
S&P 500 Index	September	Long	13,746,975	117,040
Gold 100 Oz	August	Long	62,967,320	(318,440)
Total			<u>\$871,902,134</u>	<u>\$ 770,039</u>

## Swap Contracts

MOSERS Receives	Maturity Date	Notional Value	Exposure	Index Counterparty	Counterparty Credit Rating*
S&P 100 Total Return	10/31/2011	\$ 36,143,255	\$ 562,468	Deutsche Bank	Aa3/A+
S&P 500 Financials	10/31/2011	50,471,756	1,451,301	Deutsche Bank	Aa3/A+
MSCI EAFE Total Return	5/31/2012	65,391,121	829,144	Deutsche Bank	Aa3/A+
MSCI EAFE ex-Japan Total Return	5/25/2012	142,446,165	(2,320,152)	Deutsche Bank	Aa3/A+
MSCI EAFE ex-Japan Total Return	6/15/2012	109,994,039	(3,309,259)	Deutsche Bank	Aa3/A+
Three Month LIBOR Quarterly	12/10/2014	10,000,000	447,537	Deutsche Bank	Aa3/A+
Three Month LIBOR Quarterly	6/16/2014	10,000,000	269,048	Deutsche Bank	Aa3/A+
S&P 100 Total Return	10/31/2011	67,851,048	2,148,952	Goldman Sachs	A1/A
S&P 500 Consumer Discretionary Total Return	1/31/2013	(54,522,013)	0	Goldman Sachs	A1/A
MSCI EAFE ex-Japan Total Return	2/29/2012	134,661,957	2,621,972	Goldman Sachs	A1/A
MSCI EAFE ex-Japan Total Return	8/31/2011	41,538,067	808,778	Goldman Sachs	A1/A
S&P 100 Total Return	7/29/2011	111,247,445	1,731,253	JP Morgan Chase	Aa1/AA-
S&P 100 Technology Total Return	10/31/2011	96,771,537	1,690,703	JP Morgan Chase	Aa1/AA-
S&P 100 Technology Total Return	10/31/2011	10,841,580	189,414	JP Morgan Chase	Aa1/AA-
S&P 100 Consumer Staples Total Return	10/31/2011	63,044,372	1,632,812	JP Morgan Chase	Aa1/AA-
S&P 100 Consumer Staples Total Return	10/31/2011	11,245,279	291,246	JP Morgan Chase	Aa1/AA-
S&P 100 Health Care Total Return	10/31/2011	107,302,891	1,585,403	JP Morgan Chase	Aa1/AA-
S&P 100 Health Care Total Return	10/31/2011	7,556,909	111,653	JP Morgan Chase	Aa1/AA-
S&P 100 Energy Total Return	10/31/2011	39,404,949	496,004	JP Morgan Chase	Aa1/AA-
Barclays Capital Aggregate	8/22/2011	101,965,789	578,949	JP Morgan Chase	Aa1/AA-
S&P GSCITR Custom	3/30/2012	128,780,503	7,886,358	Merrill Lynch	A2/A
S&P GSCITR Custom	1/31/2012	62,842,100	1,527,799	Merrill Lynch	A2/A
Total		<u>\$1,354,978,749</u>	<u>\$21,231,383</u>		

\* Ratings obtained from Moody's/Fitch

## Foreign Currency Forward Contracts at June 30, 2011

Currency	Net Notional Long/(Short)	Exposure
Australian Dollar	\$ 132,993	\$ 1,532
Brazilian Real	(532,376)	(15,875)
Canadian Dollar	(397,611)	2,282
Chinese Renminbi	519,952	(316)
Euro	(184,417,181)	(8,237,628)
British Pound Sterling	(2,792,878)	49,436
Japanese Yen	26,451,576	294,860
New Zealand Dollar	(80,034,911)	(512,371)
Russian Ruble	4,700,257	32,168
U.S. Dollar	227,984,265	0
Foreign currency forward contract asset (liability)	<u>\$(8,385,914)</u>	<u>\$(8,385,914)</u>

## Investments as of June 30, 2011

	Pension Trust Funds		Internal Service Funds	
	Investments at Cost Value	Investments at Fair Value	Investments at Cost Value	Investments at Fair Value
Out on loan	\$ 98,971,423	\$ 126,425,585		
Not on securities loan	850,940,977	942,505,985		
Total	949,912,400	1,068,931,570		
International equities				
Out on loan	21,538,397	23,857,121		
Not on securities loan	437,758,423	905,657,102		
Total	459,296,820	929,514,223		
Treasury bonds, notes and bills				
Out on loan	416,856,157	469,130,558		
Not on securities loan	292,508,895	311,658,444		
Total	709,365,052	780,789,002		
Corporate bonds				
Out on loan	10,581,500	10,964,923		
Not on securities loan	159,880,286	158,807,613		
Total	170,461,786	169,772,536		
International corporate bonds	40,708,343	18,079,470		
Preferred stocks	3,217,445	3,284,643		
Government bonds and gov't mortgage backed securities	74,209,989	74,632,638		
Convertible bonds	2,438,350	2,495,537		
Repurchase agreements	13,423,111	13,423,111	\$3,443,331	\$3,443,331
Short-term investment funds	1,368,634,307	1,368,634,307		
Collateralized mortgage obligations	163,181,426	166,582,441		
Real estate investment trusts	0	0		
Limited partnerships	2,871,907,158	3,850,582,255		
Bank loans	72,552,311	73,301,512		
Total investments				
Out on loan	547,947,477	630,378,187		
Not on securities loan	6,351,361,021	7,889,645,058	3,443,331	3,443,331
Total	\$6,899,308,498	\$8,520,023,245	\$3,443,331	\$3,443,331
Reconciliation to investments on <i>Statements of Plan Net Assets</i>				
Total from above		\$8,520,023,245		
Less short-term investments				
Repurchase agreements		(13,423,111)		
Short-term investment funds		(790,042,214)		
Less invested securities lending collateral				
Short-term investment funds		(578,592,093)		
Corporate bonds		(64,493,027)		
Investments on <i>Statement of Plan Net Assets</i>		\$7,073,472,800		

Due to space limitations and printing costs, a detailed listing of the investment holdings and transactions could not be provided in this annual report; however, the detailed reports are available for review as an appendix to this report at the MOSERS office.

### Limited Partnerships

Many of MOSERS' alternative investments are organized in the form of limited partnerships. In these partnerships, the manager is the general partner and the limited partners are the investors. As of June 30, 2011, MOSERS had contracts with over 83 limited partnerships across various types of alternative investments. These partnerships collectively represent 49% of the total fund. A schedule of limited partnerships is presented below.

### Limited Partnerships

Partnership Name	Style	Investments at Fair Value as of June 30, 2011
Actis Emerging Markets III	Emerging markets	\$ 34,027,319
African Development Partners I, LLC	Emerging markets	19,196,524
Alinda Infrastructure Fund I, LP	Corporate buyout	25,767,226
AQR Absolute Return Institutional Fund, LP	Multi-strategy	48,344,678
AQR DELTA Sapphire Fund, LP	Muti-strategy	125,342,370
Axiom Asia Private Capital Fund II, LP	Emerging markets	10,051,297
Bayview Opportunity Domestic LP - high yield	Distressed real estate debt	77,547,539
Bayview Opportunity Domestic LP - real estate	Distressed real estate debt	13,684,860
Blackstone Distressed Securities Fund, LP	Long/short - credit	437,897
Blackstone Hedged Equity Fund, LP	Long/short - fund-of-funds	102,269,288
Blackstone Real Estate Partners IV	Active real estate	50,774,860
Blackstone Real Estate Partners V	Active real estate	102,237,839
Blackstone Real Estate Partners VI	Active real estate	81,155,348
Blackstone Topaz Fund, LP	Multi-strategy - fund-of-funds	305,542,467
Blakeney Onyx, LP	Emerging markets	138,500,041
Brevan Howard, LP	Global macro	77,807,733
Bridgepoint Europe III A, LP	Corporate buyout	25,545,947
Bridgepoint Europe IV B, LP	Corporate buyout	15,225,759
Bridgewater Associates - Diamond Ridge Fund, LLC	Global macro	108,670,864
Campbell Timber Fund II-A, LP	Timberland	40,994,072
CarVal Investors CVI Global Value Fund A, LP - private debt	Distressed real estate debt	52,000,000
CarVal Investors CVI Global Value Fund A, LP - real estate	Distressed real estate debt	52,000,000
Catalyst Fund Limited Partnership III	Canadian distressed debt	18,319,823
Catterton Partners V, LP	Corporate buyout	18,589,004
Catterton Partners VI, LP	Corporate buyout	26,915,468
Claren Road Credit Partners, LP	Long/short - credit	78,117,837
COMAC Global Macro Fund, LP	Global macro	47,734,644
Davidson Kempner Institutional Partners, LP	Event driven	84,727,546
DDJ Capital Management - B IV Capital Partners, LP	Distressed debt	16,466,454
Diamondback Partners, LP	Long/short - equity	88,373,260
DRI Capital - LSRC	Intellectual Property	21,487,706
DRI Capital - LSRC II	Intellectual Property	672,266
Elliott International Limited	Multi-strategy	54,995,589
Eminence Fund, Ltd.	Long/short - equity	77,377,974
Empyrean Capital Fund, LP	Event driven	49,201,183
Eton Park Fund, LP	Multi-strategy	79,122,786
Farallon Capital Institutional Partners, LP	Multi-strategy	53,515,314
Fortress Mortgage Opportunities Fund Series 2	Distressed real estate debt	26,656,392
Garnet Sky Investors Company Ltd.	Timberland	85,634,132
Glenview Institutional Partners, LP	Long/short - equity	42,172,269
Global Forest Partners GTI7 Institutional Investors Company Ltd.	Timberland	81,602,021
HBK Offshore Fund, Ltd.	Multi-strategy	81,424,604
JLL Partners Fund V, LP	Corporate buyout	21,515,295
JLL Partners Fund VI, LP	Corporate buyout	16,936,643

*Continued on page 44*



Limited Partnerships continued from page 43

Partnership Name	Style	Investments at Fair Value as of June 30, 2011
King Street Capital, LP	Credit driven	80,994,426
King Street Capital, Ltd.	Credit driven	1,889,973
Linden Capital Partners II, LP	Corporate buyout	(12,646)
Merit Energy Partners F-II, LP	Energy - oil & gas	8,896,388
MHR Institutional Partners IIA, LP	Distressed debt	50,808,023
MHR Institutional Partners III, LP	Distressed debt	57,350,431
Millennium Technology Value Partners II, LP	Direct secondaries	4,278,413
Millennium Technology Value Partners Co-Investment	Private equity co-investment	5,104,891
Moon Capital Global Equity Offshore Fund, Ltd.	Long/short - equity	786,634
New Mountain Partners III, LP	Corporate buyout	27,470,044
Oaktree European Credit Opportunities Fund, LP	European loans	6,961,481
OCM Opportunities Fund IVB, LP	Distressed debt	11,481
OCM Opportunities Fund VIIb, LP	Distressed debt	103,910,409
OCM Real Estate Opportunities Fund III, LP	Active real estate	32,108,500
OCM/GFI Power Opportunities Fund II, LP	Corporate buyout	7,607,038
OCM Power Opportunities Fund III, LP	Corporate buyout	2,824,498
PAAMCO - Newport Pioneer, LLC	Multi-strategy - fund-of-funds	159,747,095
Parish Capital Buyout Fund I, LP	Corporate buyout - fund-of-funds	15,958,030
Parish Capital Buyout Fund II, LP	Corporate buyout - fund-of-funds	17,399,751
Parish Opportunities Fund II, LP	Private equity co-investment	15,424,227
Perry Partners, LP	Multi-strategy	304,963
Pershing Square, LP	Long/short - equity	43,207,086
Pharo Macro Fund, LTD	Global macro	72,817,930
Resource Management Service - Wildwood Timberlands, LLC	Timberland	129,641,144
Silver Creek Special Opportunities Fund I, LP	Special situations - fund-of-funds	26,295,272
Silver Creek Special Opportunities Fund II, LP	Special situations - fund-of-funds	32,236,614
Silver Lake Partners II, LP	Corporate buyout	20,428,417
Silver Point Capital Fund, LP	Credit driven	5,813,730
TCW Energy Fund XIV, LP	Energy - mezzanine	34,294,580
TCW Energy Fund XV, LP	Energy - mezzanine	2,736,530
TCW Energy Partners, LLC	Energy - diversified	33,826,605
The Veritas Capital Fund III, LP	Corporate buyout	48,410,905
The Veritas Capital Fund IV, LP	Corporate buyout	12,720,625
TPG Airline Credit Opportunities II, LP	Special situations	11,570,547
TPG- Axon Partners (Offshore) Ltd.	Long/short - equity	49,541,189
Viking Global Equities III, Ltd.	Long/short - equity	95,878,204
Visium Balanced Fund, LP	Long/short - equity	49,550,671
Wellington Management - Spindrift Investors	Long/short - equity	1,472,518
Other	Miscellaneous	1,633,500
Total		<u>\$3,850,582,255</u>

## Capital Asset Account

Capital Assets	Land	Building and Building Improvements	Furniture, Fixtures, and Equipment	Software and Licensing	Total Capital Assets
Balances June 30, 2010	\$267,286	\$3,552,883	\$1,825,224		\$5,645,393
Additions		15,372	78,119	\$34,326	127,817
Deletions			(250,146)		(250,146)
Balances June 30, 2011	267,286	3,568,255	1,653,197	34,326	5,523,064
Accumulated depreciation:					
Balances June 30, 2010		984,310	1,470,736		2,455,046
Depreciation expense		108,238	142,835	6,027	257,100
Deletions			(250,146)		(250,146)
Balances June 30, 2011		1,092,548	1,363,425	6,027	2,462,000
Net capital assets June 30, 2011	\$267,286	\$2,475,707	\$289,772	\$28,299	\$3,061,064

### Capital Assets

Office building, furniture, fixtures, and equipment costing \$250 or more when acquired are capitalized at cost. Improvements, which increase the useful life of the property, are also capitalized. Maintenance and repairs are charged to expense as incurred. Depreciation is computed using the straight-line method over the estimated useful life of the related assets according to the following schedule:

- 5 years for furniture, fixtures, and equipment
- 40 years for building
- 5 years for software & licensing

Above is a schedule of the capital asset account balances as of June 30, 2010, and June 30, 2011, and changes to those account balances during the year ended June 30, 2011.

### (3) Contributions and Reserves

The MSEP and the Judicial Plan are pension plans covering substantially all state of Missouri employees, administrative law judges and legal advisors in the Division of Workers'

Compensation, and judges. The state of Missouri is obligated by state law to make required contributions to the plans. The required contributions are expressed as a level percentage of covered payroll and are actuarially determined using an individual entry-age actuarial cost method. The unfunded accrued liabilities are amortized over an open 30-year period. MSEP 2011 employees are required to contribute 4% of their pay. Costs of administering the plans are financed from the contributions to the pension trust funds and investment earnings.

### (4) Other Postemployment Benefits (OPEB)

In addition to the retirement benefits provided through MOSERS, the state of Missouri also funds, either partially or in its entirety, OPEB for eligible retirees as follows:

#### Retiree Life Insurance

Members who retire on or after October 1, 1985, are eligible for \$5,000 of state-sponsored basic life insurance coverage if they retire directly from active employment.

As of June 30, 2011, 19,703 retirees were eligible and participating in the program. This insured defined benefit coverage is financed on a percent of payroll (.115%) and is purchased as a group policy through competitive bids and is currently administered through The Standard insurance company. The cost for year ended June 30, 2011, was \$1,837,482. Premiums are contributed entirely by the state as provided for by Section 104.515, RSMo.

Retirees of the Department of Labor and Industrial Relations (DOLIR), who retired prior to January 1, 1996, are eligible for state-sponsored insured defined benefit insurance coverage in the same amount of coverage they were receiving through the DOLIR. As of June 30, 2011, 334 retirees were eligible and participating in the program. The coverage for this closed group is purchased as a group policy through competitive bids at a current cost of \$2.07 per thousand dollars of coverage, per month, per eligible participant (\$40,344 for the year ended June 30, 2011). Premiums are paid entirely by the DOLIR as provided for by Section 228.225, RSMo.

Retirees of the DOLIR who retired on or after January 1, 1996, are eligible for \$5,000 of state-sponsored life insurance coverage if they retire directly from active employment. They are included in the group described in the preceding paragraph.

### ***Long-Term Disability Insurance***

MOSERS also provides long-term disability coverage for eligible members. Membership generally includes those active members of MOSERS' retirement plans who do not have other disability coverage and are not yet eligible to receive normal (unreduced) retirement benefits. As of June 30, 2011, 36,027 members were eligible and covered under the program. This insured defined benefit coverage is financed on a percentage of covered payroll (.55%) and is purchased as group policy through competitive bids and is currently administered through The Standard insurance company. The cost for the year ended June 30, 2011, was \$7,960,543. Premiums are contributed by the state as provided for by Section 104.515, RSMo.

### ***Postemployment Retiree Health Care***

MOSERS participates in a cost-sharing multiple-employer defined benefit post-employment health care plan administered by the Missouri Consolidated Health Care Plan (MCHCP). The plan provides medical benefits to retirees of participating governmental entities. Retirees who had medical insurance coverage for six months immediately prior to termination or state-sponsored medical coverage since the effective

date of the last enrollment period (or since first eligible), before they are eligible to retire, may continue coverage into retirement. MCHCP issues a publicly available financial report that includes financial statements and required supplementary information for the postemployment health care plan. The report may be obtained by calling (800) 487-0771 or writing to the following address:

MCHCP  
832 Weathered Rock Court  
P.O. Box 104355  
Jefferson City, MO 65110-4355

Plan funding requests are actuarially determined, approved by the MCHCP Board of Trustees, and subject to appropriation by the Missouri General Assembly. MOSERS contributed \$236,191 in FY09, \$277,645 in FY10 and \$240,307 in FY11 in accordance with the state's funding policy toward the annual required contributions for postemployment retiree health care, which equaled MOSERS required contribution each year.

### **(5) Plan Termination**

MOSERS and its related plans are administered in accordance with Missouri statutes. Plans can only be terminated by an amendment to these statutes by the Missouri legislature.

On April 26, 2005, Senate Bill 202 was enacted, which terminated the Administrative Law Judges and Legal Advisors' Plan (ALJLAP) for new hires only. Under this legislation, individuals who assume a position after April 26, 2005, who would have otherwise been covered by the ALJLAP, will instead participate

in the MSEP or the MSEP 2000, depending on when they initially became state employees. For fiscal years 2005 and after, all liabilities and assets of the ALJLAP were transferred and combined with the MSEP. Membership totals for ALJLAP members are combined with the MSEP in all relevant sections of this report.

### **(6) Commitments**

As of June 30, 2011, MOSERS has \$496,494,491 and €34,730,277 unfunded commitments in the alternative investments asset class.

### **(7) Contingencies**

MOSERS is a defendant in two lawsuits and a plaintiff in two lawsuits that, in management's opinion, will not have a material effect on the financial statements.

The Internal Revenue Service (IRS) audited the tax qualified status of MOSERS. In a discussion draft dated August 9, 2007, the IRS raised two qualification issues but no further action has been taken by the IRS on those matters. MOSERS does not anticipate material liability for any taxes or penalties.

*Required Supplementary Information***Schedules of Funding Progress****Pension Trust Funds - Last Six Years****MSEP**

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Annual Covered Payroll (c)	UAAL Percentage of Covered Payroll ((b-a)/c)
6/30/2006	\$6,836,567,188	\$ 8,013,205,414	\$1,176,638,226	85.3%	\$1,777,277,138	66.2%
6/30/2007	7,377,289,283	8,500,428,641	1,123,139,358	86.8	1,846,643,330	60.8
6/30/2008	7,838,495,768	9,128,347,470	1,289,851,702	85.9	1,916,527,398	67.3
6/30/2009	7,876,079,342	9,494,806,715	1,618,727,373	83.0	2,002,402,087	80.8
6/30/2010	7,923,377,393	9,853,155,445	1,929,778,052	80.4	1,945,095,321	99.2
6/30/2011	8,022,481,408	10,123,544,043	2,101,062,635	79.2	1,875,569,816	112.0

**Judicial Plan**

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Percent Funded (a/b)	Annual Covered Payroll (c)	UAAL Percentage of Covered Payroll ((b-a)/c)
6/30/2006	\$51,652,867	\$309,002,752	\$257,349,885	16.7%	\$40,270,535	639.1%
6/30/2007	61,903,516	326,666,373	264,762,857	19.0	40,846,581	648.2
6/30/2008	73,194,379	354,796,453	281,602,074	20.6	44,542,530	632.2
6/30/2009	81,337,881	369,106,841	287,768,960	22.0	45,505,512	632.4
6/30/2010	88,976,738	382,012,773	293,036,035	23.3	46,112,730	635.5
6/30/2011	98,398,628	393,484,589	295,085,961	25.0	45,888,020	643.1

See *Notes to the Schedules of Required Supplementary Information*.

See accompanying *Independent Auditor's Report*.

*Required Supplementary Information***Schedules of Employer Contributions****Pension Trust Funds - Last Six Years****MSEP**

Year Ended June 30	Annual Required Contribution		Percentage Contributed
	Percent	Dollar Amount	
2006	12.59%	\$226,338,183	100%
2007	12.78	239,488,751	100
2008	12.84	249,770,156	100
2009	12.53	252,105,008	100
2010	12.75	251,226,187	100
2011	13.81	263,418,048	100

**ALJLAP\***

Year Ended June 30	Annual Required Contribution		Percentage Contributed
	Percent	Dollar Amount	
2005	22.13%	\$1,124,924	100%
2006*	21.79	895,012	100

\* The ALJLAP was transitioned to the MSEP Plan in FY05. FY06 was the last year for separate ALJLAP contributions. Future contributions are included in the MSEP rate.

**Judicial Plan**

Year Ended June 30	Annual Required Contribution		Percentage Contributed
	Percent	Dollar Amount	
2006	55.76%	\$22,401,569	100%
2007	58.48	23,745,467	100
2008	58.65	26,215,309	100
2009	60.07	27,725,882	100
2010	58.48	27,029,198	100
2011	60.03	27,702,682	100

See *Notes to the Schedules of Required Supplementary Information*.  
See accompanying *Independent Auditor's Report*.

*Required Supplementary Information*

## Notes to the Schedules of Required Supplementary Information

### Pension Trust Funds - Last Six Years

#### Actuarial Methods and Assumptions for Valuations Performed June 30, 2011

The entry-age actuarial cost method of valuation is used in determining liabilities and normal cost. Differences in the past between assumed experience and actual experience (actuarial gains and losses) become part of actuarial accrued liabilities. Unfunded actuarial accrued liabilities are amortized to produce payments (principal and interest), which are expressed as a percent of payroll. An open 30-year amortization period was used for the June 30, 2011 valuations. The actuarial value of assets is based on a method that fully recognizes expected investment returns and averages unanticipated market return over a 5-year period.

However, at their meeting in September 2005, the MOSERS board considered the extreme volatility in the markets. As a result, the board elected to set the actuarial value of assets to market value as of June 30, 2005. Consequently, all remaining unrecognized investment gains or losses that would have otherwise been recognized over a period of years were fully recognized as of June 30, 2005. In the September 2009 meeting, the MOSERS board, in light of the severely negative market conditions, adopted a temporary change to the market corridor limit of the valuation assets from +/- 20% to +/- 30% for the June 30, 2009 valuation. The limit was decreased to +/- 25% for the June 30, 2010 valuation and returned to +/- 20% in FY11. The investment

return rate assumption used is 8.5% per year, compounded annually (net of investment expenses). The price inflation assumption used is 3.2% per year. Projected salary increase assumptions are based on 0% the first year, to reflect the state's pay freeze, and 4% per year thereafter for wage inflation plus an additional .3% to 3.5% per year for the MSEP and 0% to 1.6% per year for the Judicial Plan (depending on age, attributable to seniority, and/or merit increases). The assumption used for annual post-retirement benefit increases is 4% (on a compound basis) for approximately the first 12 years, 3.1% for the 13th year, and 2.56% per year thereafter or 2.56% per year, depending upon the date of hire and benefit election.

**2004** The actuarial valuations as of June 30, 2004, reflected the following changes to the computed contribution rates for fiscal year ending June 30, 2006.

	Amount	Percent of Payroll
<b>MSEP</b>		
Change in assumptions	\$ 8,166,036	.47%
Experience and nonrecurring items	25,714,326	1.48
<b>ALJLAP</b>		
Change in assumptions	466	.01
Experience and nonrecurring items	(16,294)	(.35)
<b>Judicial Plan</b>		
Change in assumptions	(15,951)	(.04)
Experience and nonrecurring items	514,433	1.29

**2005** The actuarial valuations as of June 30, 2005, reflected the following changes to the computed contribution rates for fiscal year ending June 30, 2007.

	<u>Amount</u>	<u>Percent of Payroll</u>
<b>MSEP</b>		
Mark to market asset valuation method adjustment	\$(10,116,963)	(.56)%
Recognition of state pay freeze on across-the-board increases for FY06	(3,793,861)	(.21)
Experience and nonrecurring items including the addition of the assets and liabilities from the ALJLAP	17,162,705	.95
<b>Judicial Plan</b>		
Mark to market asset valuation method adjustment	28,011	.07
Recognition of state pay freeze on across-the-board increases for FY06	(136,055)	(.34)
Change in amortization factor to reflect the state pay freeze for fiscal year ending June 30, 2006	556,224	1.39
Experience and nonrecurring items	640,258	1.60

**2006** The actuarial valuations as of June 30, 2006, reflected the following changes to the computed contribution rates for fiscal year ending June 30, 2008.

	<u>Amount</u>	<u>Percent of Payroll</u>
<b>MSEP</b>		
Change to an open 30-year amortization period	\$(1,244,094)	(0.07)%
Experience and nonrecurring items	2,310,460	.13
<b>Judicial Plan</b>		
Change to an open 30-year amortization period	(265,786)	(0.66)
Experience and nonrecurring items	334,245	.83

**2007** The actuarial valuations as of June 30, 2007, reflected the following changes to the computed contribution rates for fiscal year ending June 30, 2009.

	<u>Amount</u>	<u>Percent of Payroll</u>
<b>MSEP</b>		
Change in benefit assumptions or methods	\$ (369,329)	(0.02)%
Experience and nonrecurring items	(5,355,266)	(0.29)
<b>Judicial Plan</b>		
Change in benefit assumptions or methods	(273,672)	(0.67)
Experience and nonrecurring items	853,694	2.09

**2008** The actuarial valuations as of June 30, 2008, reflected the following changes to the computed contribution rates for fiscal year ending June 30, 2010.

	<u>Amount</u>	<u>Percent of Payroll</u>
<b>MSEP</b>		
Change in benefit assumptions or methods	\$4,791,318	0.25%
Experience and nonrecurring items	(574,958)	(0.03)
<b>Judicial Plan</b>		
Change in benefit assumptions or methods	(547,873)	(1.23)
Experience and nonrecurring items	(160,353)	(0.36)

**2009** The actuarial valuations as of June 30, 2009, reflected the following changes to the computed contribution rates for fiscal year ending June 30, 2011.

	<u>Amount</u>	<u>Percent of Payroll</u>
<b>MSEP</b>		
State of Missouri general pay freeze	\$ (4,405,285)	(0.22)%
Experience and nonrecurring items	55,466,538	2.77
Change in valuation asset corridor from +/-20% to +/-30%	(29,835,791)	(1.49)
<b>Judicial Plan</b>		
State of Missouri general pay freeze	350,392	0.77
Experience and nonrecurring items	496,010	1.09
Change in valuation asset corridor from +/-20% to +/-30%	(141,067)	(0.31)

**2010** The actuarial valuations as of June 30, 2010, reflected the following changes to the computed contribution rates for fiscal year ending June 30, 2012.

	<u>Amount</u>	<u>Percent of Payroll</u>
<b>MSEP</b>		
State of Missouri general pay freeze	\$ (2,528,624)	(0.13)%
Addition of new tier of benefits effective January 1, 2011	(17,311,348)	(0.89)
Experience and nonrecurring items	25,480,749	1.31
Change in methodology of contributions timing between valuation and year of application	(2,528,624)	(0.13)
<b>Judicial Plan</b>		
State of Missouri general pay freeze	(308,955)	(0.67)
Addition of new tier of benefits effective January 1, 2011	(493,406)	(1.07)
Experience and nonrecurring items	438,071	0.95
Change in methodology of contributions timing between valuation and year of application	(894,587)	(1.94)

**2011** The actuarial valuations as of June 30, 2011 reflected the following changes to the computed contribution rates for fiscal year ending June 30, 2013.

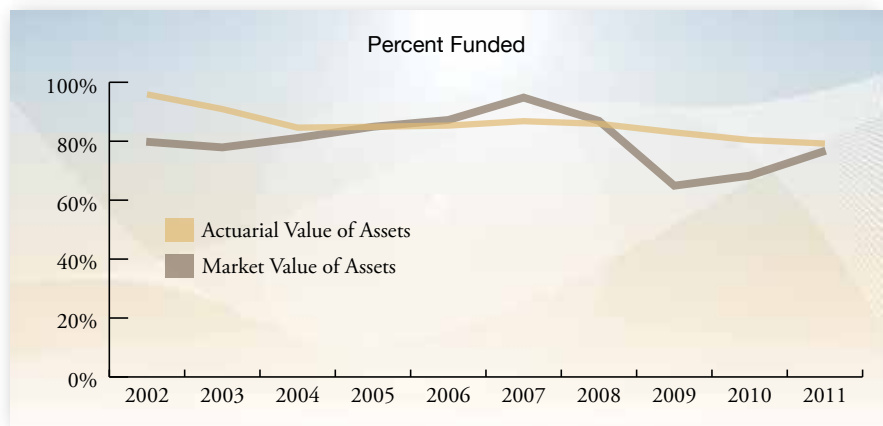
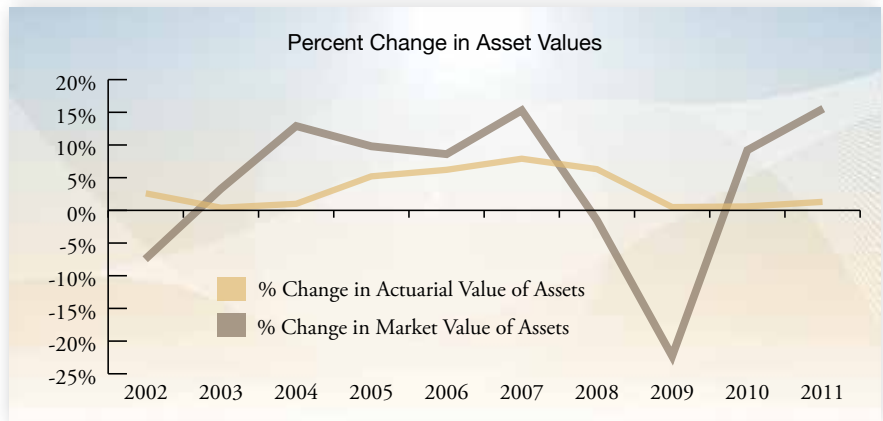
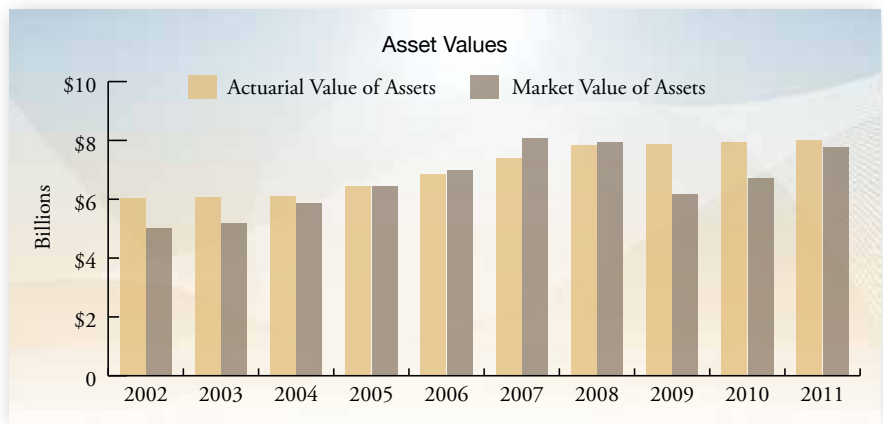
	<u>Amount</u>	<u>Percent of Payroll</u>
<b>MSEP</b>		
State of Missouri general pay freeze	\$ (6,376,937)	(0.34)%
Experience and nonrecurring items	17,630,356	0.94
Change in normal cost due to increased participants in MSEP 2011	(2,250,684)	(0.12)
<b>Judicial Plan</b>		
State of Missouri general pay freeze	(293,683)	(0.64)
Experience and nonrecurring items	289,095	0.63
Change in normal cost due to increased participants in MSEP 2011	(169,786)	(0.37)



### Actuarial Asset Value Smoothing

The financing objective of the vast majority of public retirement plans is to establish contribution rates and collect contributions which remain relatively level as a percent of active member payroll over decades of time. This concept is sometimes referred to as attempting to achieve intergenerational equity, meaning that future generations will not be expected to pay more or less (in inflation adjusted terms) than the present generation contributes to support the plan.

Some critics of smoothing the actuarial value of assets suggest that pension plans are not providing “transparency” in connection with operations. Actual practice suggests otherwise. The *Statements of Plan Net Assets* and *Changes in Plan Net Assets* in this section are prepared on the basis of market values. Beyond that, all information related to asset values and results of investment activity in the *Investment Section* of this report is prepared on the basis of market values. This is required by the accounting and reporting standards established by the Governmental Accounting Standards Board and by the Government Finance Officers Association’s *Guidelines for the Preparation of a Comprehensive Annual Financial Report*. Both organizations have been long standing proponents of transparency in governmental accounting and reporting – public retirement plans commonly subscribe to the dictates of both.



Many public retirement plans have begun to emphasize use of asset classes that, by their nature, tend to be somewhat volatile in market value. This is being done with the objective of increasing long-term investment returns, thus providing increased benefit security for plan participants and lower contribution rates for taxpayers than would otherwise be the case. With market value accounting for contribution rate determination purposes, we could achieve more level contribution rates by employing lower volatility asset classes but the level contribution rate would be much higher than is the case with the higher return expectations we have as the result of taking on asset volatility risk.

For those of us attempting to operate with a long-term time horizon, with contribution rate stability as a key objective, asset smoothing for actuarial purposes is simply a tool. Asset smoothing for actuarial purposes is a practical solution to responsibly achieving intergenerational equity, giving recognition to the fact that market cycles do not coincide with financial reporting periods. The use of the “market related” value established through smoothing simply makes more sense for determining contribution rates than using market value. The bar charts above further illustrate the impact of smoothing volatility in actuarial computations.

*Additional Financial Information*

## Schedules of Investment Expenses

### Pension Trust Funds - Year Ended June 30, 2011

Investing activity	MSEP	Judicial Plan	Total
<u>Investment management and administrative fees</u>			
Actis Emerging Markets III - private equity	\$ 847,754	\$ 10,605	\$ 858,359
African Development Partners I, LLC - private equity	1,027,651	12,856	1,040,507
Alinda Infrastructure Fund I, LP - private equity	427,708	5,351	433,059
AQR Absolute Return Institutional Fund, LP - alpha pool	865,780	10,831	876,611
AQR DELTA Sapphire Fund, LP - alpha pool	1,283,273	16,054	1,299,327
Axiom Asia Private Capital Fund II, LP - private equity	443,066	5,543	448,609
Baillie Gifford EAFE Plus - international developed equity	730,813	9,143	739,956
Bayview Opportunity Domestic LP - high yield	4,203,781	52,590	4,256,371
Bayview Opportunity Domestic LP - real estate	988,257	12,363	1,000,620
BlackRock Financial Management Bank Loans - high yield	346,699	4,337	351,036
BlackRock Financial Management High Yield - high yield	792,713	9,917	802,630
BlackRock Financial Management Mortgage Opportunity - high yield	442,508	5,536	448,044
Blackstone Distressed Securities Fund, LP - alpha pool	1,548	19	1,567
Blackstone Real Estate Partners V - real estate	1,075,849	13,459	1,089,308
Blackstone Real Estate Partners VI - real estate	1,110,953	13,898	1,124,851
Blackstone Hedged Equity Fundy, LP - domestic equity	1,661,107	20,781	1,681,888
Blackstone Topaz Fund, LP - alpha pool	3,456,232	43,238	3,499,470
Blackstone Real Estate Partners IV - real estate	193,388	2,419	195,807
Blakeney Onyx, LP- emerging markets	2,393,102	29,938	2,423,040
Brevan Howard, LP - alpha pool	1,273,891	15,936	1,289,827
Bridgewater Associates Diamond Ridge Fund, LLC - alpha pool	2,834,052	35,454	2,869,506
Bridgepoint Europe III A, LP - private equity	215,191	2,692	217,883
Bridgepoint Europe IV B, LP - private equity	610,502	7,637	618,139
Campbell Timber Fund II-A, LP - timber	486,969	6,092	493,061
Catterton Partners V, LP - private equity	255,472	3,196	258,668
Catterton Partners VI, LP - private equity	451,866	5,653	457,519
CarVal Investors CVI Global Value Fund A, LP - real estate	867,892	10,857	878,749
CarVal Investors CVI Global Value Fund A, LP - private debt	867,892	10,857	878,749
Catalyst Fund Limited Partnership III - distressed debt	2,138,474	26,752	2,165,226
Claren Road Credit Partners, LP - hedge funds	1,463,961	18,314	1,482,275
COMAC Global Macro Fund, LP - hedge funds	713,569	8,927	722,496
Davidson Kempner Institutional Partners, LP - alpha pool	1,399,844	17,512	1,417,356
DDJ Capital Management B IV Capital Partners, LP - private debt	(119,496)	(1,495)	(120,991)
Diamondback Partners, LP - alpha pool	4,354,384	54,481	4,408,865
DRI Capital LSRC - private equity	543,700	6,802	550,502
DRI Capital LSRC II - private equity	74,071	927	74,998
Elliott International, Ltd. - alpha pool	1,284,387	16,068	1,300,455
Eminence Fund, Ltd. - domestic equity	765,907	9,582	775,489
Eton Park Fund, LP - alpha pool	2,092,963	26,183	2,119,146
Farallon Capital Institutional Partners, LP - alpha pool	1,359,800	17,011	1,376,811
Garnet Sky Investors Company, Ltd. - timber	802,985	10,045	813,030
Glenview Institutional Partners, LP - hedge funds	385,779	4,826	390,605
Global Forest Partners GTI7 Institutional Investors Co., Ltd. - timber	563,066	7,044	570,110
Grantham, May and Van Otterloo & Co., LLC - emerging markets	1,239,610	15,508	1,255,118
Harvest Fund Advisors - real estate	479,529	5,999	485,528
HBK Offshore Fund, Ltd. - alpha pool	2,521,055	31,539	2,552,594
JLL Partners V, LP - private equity	1,398,219	17,492	1,415,711
JLL Partners VI, LP - private equity	947,339	11,851	959,190
King Street Capital, Ltd. - alpha pool	2,257,859	28,246	2,286,105
Legg Mason Opportunity Trust - domestic equity	622,442	7,787	630,229
Legg Mason Value Trust - domestic equity	340,107	4,255	344,362
Leuthold Weeden Capital Management - domestic equity	635,837	7,954	643,791
Linden Capital Partners II - private equity	711,910	8,906	720,816
Mastholm Investment Managers - international developed equity	5,208	65	5,273

*Continued on page 54*

*Schedule of Investment Expenses continued from page 53*

	MSEP	Judicial Plan	Total
Merit Energy Partners F-II, LP - real estate	123,017	1,539	124,556
MHR Institutional Partners IIA, LP - private debt	2,822,837	35,314	2,858,151
MHR Institutional Partners III, LP - private debt	1,179,181	14,752	1,193,933
Millennium Technology Partners II, LP - private equity	555,307	6,947	562,254
Morant Wright Investment Management - international developed equity	1,485,561	18,585	1,504,146
MOSERS Inc. - alpha pool	96	1	97
New Mountain Partners III, LP - private equity	965,225	12,075	977,300
Nippon Value Investors - international developed equity	868,605	10,866	879,471
NISA Investment Advisors, LLC - commodities	420,171	5,256	425,427
NISA Investment Advisors, LLC - beta program domestic equity	683,480	8,550	692,030
NISA Investment Advisors, LLC - beta program fixed income	436,509	5,461	441,970
NISA Investment Advisors, LLC - beta program international equity	396,992	4,966	401,958
OCM Real Estate Opportunities Fund III, LP - real estate	1,143,753	14,308	1,158,061
OCM Opportunities Fund IVB, LP - private debt	2,267	28	2,295
OCM/GFI Power Opportunities Fund II, LP - private equity	1,881,100	23,533	1,904,633
OCM/GFI Power Opportunities Fund III, LP - private equity	437,114	5,468	442,582
OCM Opportunities Fund VIIb, LP - private debt	5,660,265	70,809	5,731,074
PAAMCO - Newport Pioneer, LLC - alpha pool	1,498,423	18,745	1,517,168
Parish Capital Buyout Fund I, LP - private equity	235,450	2,945	238,395
Parish Capital Buyout Fund II, LP - private equity	210,168	2,629	212,797
Parish Opportunities Fund II, LP - private equity	128,620	1,609	130,229
Pershing Square, LP - hedge funds	700,773	8,767	709,540
Pharo Macro Fund, Ltd. - alpha pool	951,402	11,902	963,304
Resource Management Service Wildwood Timberlands, LLC - timber	(3,114,025)	(38,958)	(3,152,983)
Silchester International Investors - international developed equity	2,483,127	31,064	2,514,191
Silver Lake Partners II, LP - private equity	2,674,347	33,456	2,707,803
Silver Point Capital Fund, LP - alpha pool	1,860,395	23,274	1,883,669
State Street Global Advisors - emerging markets	35,754	447	36,201
Stone Harbor Investment Partners, LP - emerging markets	25,444	318	25,762
TPG- Axon Partners (Offshore), Ltd. - domestic equity	987,076	12,348	999,424
TPG Airline Credit Opportunities - private equity	647,152	8,096	655,248
TCW Energy Partners, LLC - real estate	974,387	12,190	986,577
TCW Energy Fund XIV, LP - real estate	470,418	5,885	476,303
TCW Energy Fund XV, LP - private equity	513,216	6,420	519,636
The Veritas Capital Fund III, LP - private equity	2,405,595	30,094	2,435,689
Viking Global Equities III, Ltd. - domestic equity	3,508,685	43,894	3,552,579
Total investment management fees	95,396,305	1,193,416	96,589,721
<b>Other investment fees</b>			
Investment consultant fees			
Summit Strategies, Inc.	828,444	10,364	838,808
TimberLink Consulting	69,135	865	70,000
Investment custodial fees			
BNY Mellon	378,205	4,731	382,936
Performance and risk measurement fees			
Abel/Noser Corp.	11,852	148	12,000
BNY Mellon	232,344	2,907	235,251
Measurisk, LLC	82,303	1,030	83,333
RiskMetrics Solutions, Inc.	131,686	1,647	133,333
Internal investment activity expenses	3,404,415	42,590	3,447,005
Total investing activity expenses	100,534,689	1,257,698	101,792,387
<b>Securities lending activity</b>			
Securities lending borrower rebates	540,092	6,757	546,849
Securities lending management fees			
BNY Mellon	123,456	1,544	125,000
Deutsche Bank	144,241	1,805	146,046
Total securities lending activity expenses	807,789	10,106	817,895
Total investment expenses	\$101,342,478	\$1,267,804	\$102,610,282

*Additional Financial Information***Schedules of Internal Investment Activity Expenses**

Pension Trust Funds - Year Ended June 30, 2011

	MSEP	Judicial Plan	Total
<b>Personnel services</b>			
Salaries	\$1,957,427	\$24,489	\$1,981,916
Employee fringe benefits	578,531	7,237	585,768
Total personnel services	<u>2,535,958</u>	<u>31,726</u>	<u>2,567,684</u>
<b>Professional services</b>			
Attorney services	403,134	5,043	408,177
Consulting services	113,791	1,424	115,215
Total professional services	<u>516,925</u>	<u>6,467</u>	<u>523,392</u>
<b>Communications</b>			
Telephone	7,377	92	7,469
Total communications	<u>7,377</u>	<u>92</u>	<u>7,469</u>
<b>Equipment</b>			
Gain on sale of asset	(12,839)	(161)	(13,000)
Total equipment	<u>(12,839)</u>	<u>(161)</u>	<u>(13,000)</u>
<b>Travel and meetings</b>			
Staff travel and meetings	85,158	1,065	86,223
Total travel and meetings	<u>85,158</u>	<u>1,065</u>	<u>86,223</u>
<b>General</b>			
Educational materials	8,209	103	8,312
Office supplies	559	7	566
Subscriptions and dues	260,066	3,253	263,319
Miscellaneous	3,002	38	3,040
Total general	<u>271,836</u>	<u>3,401</u>	<u>275,237</u>
Total administrative expenses	<u>\$3,404,415</u>	<u>\$42,590</u>	<u>\$3,447,005</u>

*Additional Financial Information***Schedules of Administrative Expenses**

Pension Trust Funds - Year Ended June 30, 2011

	MSEP	Judicial Plan	Total
<b>Personnel services</b>			
Salaries	\$3,504,598	\$43,843	\$3,548,441
Employee fringe benefits	1,348,909	16,875	1,365,784
Total personnel services	<u>4,853,507</u>	<u>60,718</u>	<u>4,914,225</u>
<b>Professional services</b>			
Actuarial services	196,191	2,454	198,645
Attorney services	186,060	2,328	188,388
Auditing services	43,456	544	44,000
Banking services	29,002	363	29,365
Consulting services	122,565	1,533	124,098
Total professional services	<u>577,274</u>	<u>7,222</u>	<u>584,496</u>
<b>Communications</b>			
Postage and mailing	172,025	2,152	174,177
Telephone	39,471	494	39,965
Printing	59,904	749	60,653
Video production	3,156	39	3,195
Total communications	<u>274,556</u>	<u>3,434</u>	<u>277,990</u>
<b>Building and grounds</b>			
Depreciation	106,901	1,337	108,238
Utilities	71,277	892	72,169
Maintenance	129,094	1,615	130,709
Total building and grounds	<u>307,272</u>	<u>3,844</u>	<u>311,116</u>
<b>Equipment</b>			
Depreciation	147,023	1,839	148,862
Maintenance	212,081	2,653	214,734
Rental	132,997	1,664	134,661
Gain on sale of equipment	(6,683)	(84)	(6,767)
Total equipment	<u>485,418</u>	<u>6,072</u>	<u>491,490</u>
<b>Travel and meetings</b>			
Board travel and meetings	31,958	400	32,358
Staff travel and meetings	113,752	1,423	115,175
Vehicle maintenance and operation	10,257	128	10,385
Total travel and meetings	<u>155,967</u>	<u>1,951</u>	<u>157,918</u>
<b>General</b>			
Educational materials	21,530	269	21,799
Office supplies	67,316	842	68,158
Subscriptions and dues	186,732	2,336	189,068
Insurance	124,077	1,552	125,629
Advertising	209	3	212
Miscellaneous	723	10	733
Total general	<u>400,587</u>	<u>5,012</u>	<u>405,599</u>
Total administrative expenses	<u>\$7,054,581</u>	<u>\$88,253</u>	<u>\$7,142,834</u>

*Additional Financial Information*

## Schedules of Administrative Expenses

### Internal Service Funds - Year Ended June 30, 2011

	Life & LTD	Deferred Compensation	Total
<b>Personnel services</b>			
Salaries	\$387,970	\$100,561	\$488,531
Employee fringe benefits	136,437	28,665	165,102
Total personnel services	524,407	129,226	653,633
<b>Professional services</b>			
Attorney services	1,922	40,756	42,678
Auditing services	3,032	298	3,330
Banking services	642	764	1,406
Total professional services	5,596	41,818	47,414
<b>Communications</b>			
Postage and mailing	492	0	492
Telephone	3,268	0	3,268
Video production expense	220	0	220
Total communications	3,980	0	3,980
<b>Building and grounds</b>			
Building use charge	10,824	0	10,824
Utilities	4,972	0	4,972
Maintenance	8,998	0	8,998
Total building and grounds	24,794	0	24,794
<b>Equipment</b>			
Equipment use charge	14,363	0	14,363
Maintenance	14,715	0	14,715
Rental	9,278	0	9,278
Total equipment	38,356	0	38,356
<b>Travel and meetings</b>			
Board travel and meetings	2,229	0	2,229
Staff travel and meetings	13,876	6,120	19,996
Vehicle maintenance and operation	716	0	716
Total travel and meetings	16,821	6,120	22,941
<b>General</b>			
Educational materials	2,049	360	2,409
Office supplies	4,735	0	4,735
Subscriptions and dues	4,792	445	5,237
Software subscriptions	0	14,550	14,550
Insurance	8,656	0	8,656
Advertising	15	0	15
Miscellaneous	88	1	89
Total general	20,335	15,356	35,691
Total administrative expenses	\$634,289	\$192,520	\$826,809

*Additional Financial Information***Schedules of Professional/Consultant Fees**

Year Ended June 30, 2011

Professional/Consultant	Nature of Service	Pension Trust Funds			Internal Service Funds		
		MSEP	Judicial Plan	Total	Life & LTD	Deferred Compensation	Total
<b>Operation administrative expenses</b>							
Central Bank	Banking	\$ 27,707	\$ 347	\$ 28,054	\$ 642	\$ 764	\$ 1,406
Charlesworth & Associates	Risk management consulting	7,224	90	7,314	0	0	0
Columbia Integrated Technologies	Information technology consulting	1,295	16	1,311	0	0	0
Gabriel, Roeder, Smith & Co.	Actuarial	196,191	2,454	198,645	0	0	0
Gamble & Schlemeier, Ltd.	Governmental pension consulting	24,974	312	25,286	0	0	0
Huber & Associates, Inc.	Information technology consulting	3,210	40	3,250	0	0	0
McLagan Partners, Inc.	Human resources consulting	2,469	31	2,500	0	0	0
Pension Benefit Information	Pension research services	2,965	37	3,002			0
Qflow Systems, LLC	Information technology consulting	22,123	277	22,400	0	0	0
Thompson Coburn, LLP	Legal counsel	186,060	2,328	188,388	1,922	40,756	42,678
Vision Solutions	Information technology consulting	1,975	25	2,000	0	0	0
VR Election Services	Board election voting services	57,625	721	58,346	0	0	0
Williams Keepers, LLC	Financial audit	43,456	544	44,000	3,032	298	3,330
Operation administrative expenses subtotal		577,274	7,222	584,496	5,596	41,818	47,414
<b>Internal investment administrative expenses</b>							
CT Corporation System	Statutory representation	628	8	636	0	0	0
Investment Training and Consulting Institute, Inc.	Audit services	110,003	1,376	111,379	0	0	0
McLagan Partners, Inc.	Human resources consulting	3,160	40	3,200	0	0	0
Thompson Coburn, LLP	Legal counsel	403,134	5,043	408,177	0	0	0
<b>Internal investment administrative expenses subtotal</b>		516,925	6,467	523,392	0	0	0
<b>Total professional/consultant fees</b>		<b>\$1,094,199</b>	<b>\$13,689</b>	<b>\$1,107,888</b>	<b>\$5,596</b>	<b>\$41,818</b>	<b>\$47,414</b>

Information on investment management and consulting fees can be found in the *Schedule of Investment Expenses* on page 53-54.

*Additional Financial Information***Investment Summary**

Pension Trust Funds - Year Ended June 30, 2011

Type of Investment	June 30, 2010		Purchases and Capital Additions at Cost		June 30, 2011		Percent of Total Fair Value
	Cost Value	Fair Value	Sales and Redemptions at Cost	Cost Value	Fair Value		
<b>Fixed income</b>							
Treasury bonds, notes, and bills	\$ 761,998,628	\$ 838,787,993	\$ 99,115,786	\$ (151,749,362)	\$ 709,365,052	\$ 780,789,002	11%
Government bonds and gov't mortgage-backed securities	37,878,482	37,757,077	49,307,648	(12,976,141)	74,209,989	74,632,638	1%
Corporate bonds	124,687,109	123,436,648	15,637,039	(35,112,281)	105,211,867	105,279,509	1%
Convertible bonds	2,805,216	3,232,719	2,181,646	(2,548,512)	2,438,350	2,495,537	0%
Collateralized mortgage obligations	104,982,613	106,322,010	93,055,285	(34,856,472)	163,181,426	166,582,441	2%
International corporate bonds	37,009,835	12,773,664	12,018,730	(8,320,222)	40,708,343	18,079,470	0%
Bank loans	88,936,025	87,268,972	9,193,231	(25,576,945)	72,552,311	73,301,512	1%
Total fixed income	1,158,297,908	1,209,579,083	280,509,365	(271,139,935)	1,167,667,338	1,221,160,109	16%
<b>Common stock</b>	898,132,521	839,700,818	269,394,629	(217,614,750)	949,912,400	1,068,931,570	16%
<b>Preferred stock</b>	8,874,930	7,962,150	4,037,582	(9,695,067)	3,217,445	3,284,643	0%
<b>International investments</b>							
International equities	531,455,716	818,029,616	62,991,540	(135,150,436)	459,296,820	929,514,223	13%
Foreign currency	4,107,510	4,050,737	55,560,538	(59,668,048)	0	0	0%
Total international investments	535,563,226	822,080,353	118,552,078	(194,818,484)	459,296,820	929,514,223	13%
<b>Venture capital limited partnerships</b>	2,665,806,798	3,319,969,737	754,412,188	(548,311,828)	2,871,907,158	3,850,582,255	55%
<b>Investments (per <i>Statements of Plan Net Assets</i> page 27)</b>	5,266,675,383	6,199,292,141	1,426,905,842	(1,241,580,064)	5,452,001,161	7,073,472,800	100%
<b>Short-term investments</b>							
Short-term investment funds	606,500,028	606,500,028	713,551,964	(530,009,778)	790,042,214	790,042,214	
Repurchase agreements	533,465	533,465	921,826,865	(908,937,219)	13,423,111	13,423,111	
Total short-term investments	607,033,493	607,033,493	1,635,378,829	(1,438,946,997)	803,465,325	803,465,325	
<b>Invested securities lending collateral</b>							
Corporate bonds	77,343,764	67,660,518	0	(12,093,845)	65,249,919	64,493,027	
Short-term investment funds	124,979,654	124,979,654	21,814,563,969	(21,360,951,530)	578,592,093	578,592,093	
Total invested securities lending collateral	202,323,418	192,640,172	21,814,563,969	(21,373,045,375)	643,842,012	643,085,120	
Total investments	\$6,076,032,294	\$6,998,965,806	\$24,876,848,640	\$(24,053,572,436)	\$6,899,308,498	\$8,520,023,245	

Note: Due to space limitations and printing costs, a detailed listing of the investment holdings and transactions could not be provided in this annual report; however, the detailed reports are available for review as an appendix to this report at the MOSERS office.



*Additional Financial Information***Investment Summary**

Internal Service Funds - Year Ended June 30, 2011

Type of Investment	June 30, 2010		Purchases and Capital Additions at Cost	Sales and Redemptions at Cost	June 30, 2011		Percent of Total Fair Value
	Cost Value	Fair Value			Cost Value	Fair Value	
Repurchase agreements	\$3,103,073	\$3,103,073	\$754,356,730	\$(754,016,471)	\$3,443,332	\$3,443,332	100%

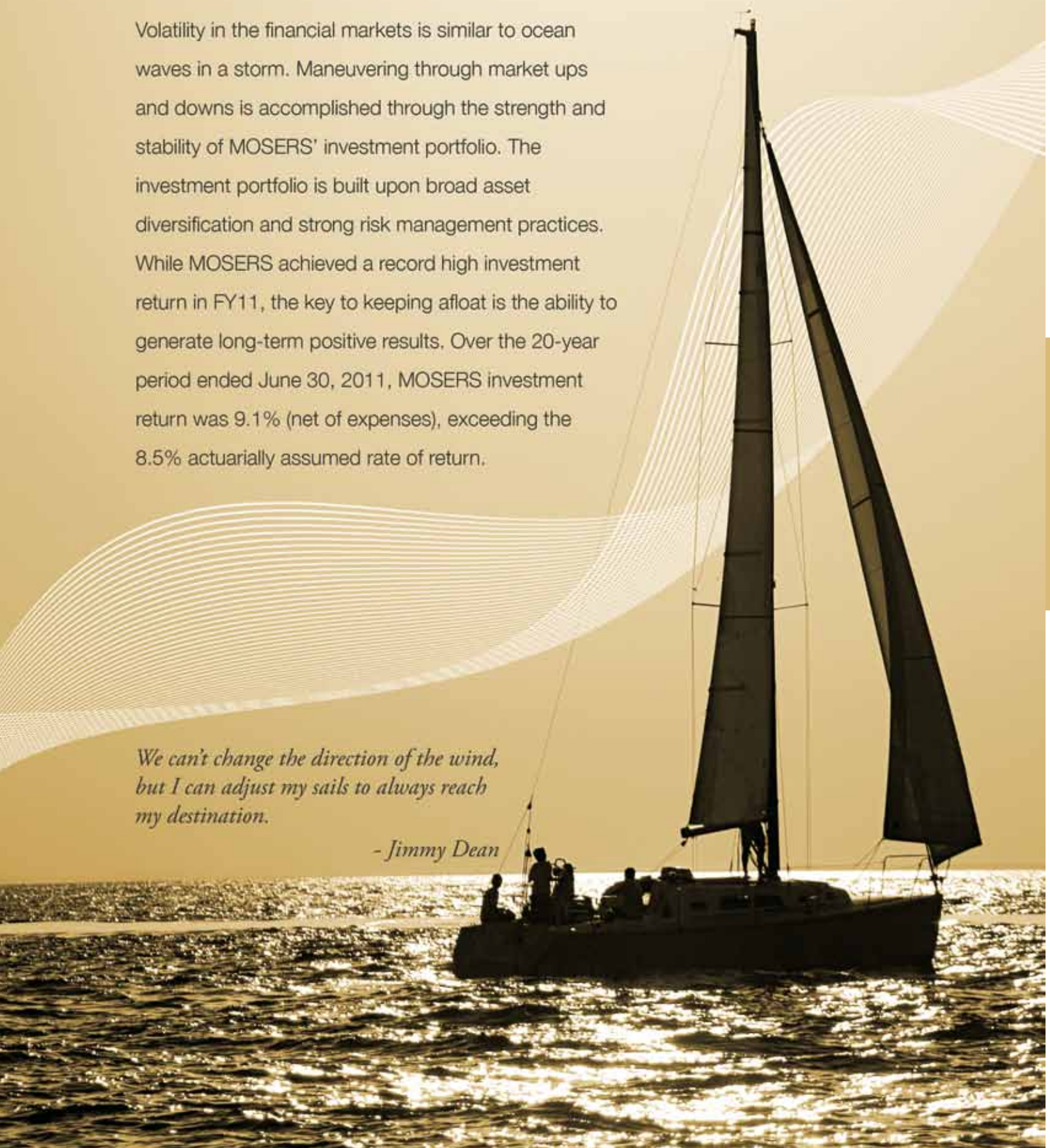
Note: Due to space limitations and printing costs, a detailed listing of the investment holdings and transactions could not be provided in this annual report; however, the detailed reports are available for review as an appendix to this report at the MOSERS office.

# POSITIVE PERFORMANCE

Volatility in the financial markets is similar to ocean waves in a storm. Maneuvering through market ups and downs is accomplished through the strength and stability of MOSERS' investment portfolio. The investment portfolio is built upon broad asset diversification and strong risk management practices. While MOSERS achieved a record high investment return in FY11, the key to keeping afloat is the ability to generate long-term positive results. Over the 20-year period ended June 30, 2011, MOSERS investment return was 9.1% (net of expenses), exceeding the 8.5% actuarially assumed rate of return.

*We can't change the direction of the wind,  
but I can adjust my sails to always reach  
my destination.*

*- Jimmy Dean*



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# Chief Investment Officer's Report



Missouri State Employees' Retirement System

**Mailing Address**

PO Box 209 • Jefferson City, MO 65102-0209

**Building Location**

907 Wildwood Drive • Jefferson City, MO

October 17, 2011

Dear Members:

On behalf of the MOSERS' internal investment staff, I am honored to present the *Investment Section* of the MOSERS' *Comprehensive Annual Financial Report* for the fiscal year ended June 30, 2011.

## Performance and Stability

The MOSERS investment portfolio ended FY11 with total assets of \$7.8 billion. The investment return for the year was 21% net of all fees and expenses, generating profits of \$1.4 billion. While this year's return was made up of strong underlying performance across all asset classes, for the first time in 11 years it trailed the return of our policy benchmark which was 21.7%. As an investment professional continually humbled by how difficult it is to outperform the markets, it came as no surprise that the streak ended. It was also not surprising that we were bested by the benchmark in a year when the portfolio generated the strongest annual absolute returns since the early 1980s. A cornerstone of our investment philosophy is strong risk management. The result of this philosophy is a defensively positioned portfolio that will struggle to keep up when absolute returns are very high like they were in FY11. The trade-off between a slight upside disadvantage and significant downside protection has served our members well over the years and allowed us to produce a long-term track record at, or very near, the top of our peer group. Most importantly that track record has provided the retirement system with financial stability during a decade that will likely go down in history as one of the most difficult ever for the financial markets.

Additional highlights of our investment performance include:

- Over the 15-year period ended June 30, 2011, the portfolio returned 8.3%, exceeding our policy benchmark by 1.3% per year. This "excess" above what would have been earned had the portfolio been invested passively, generated additional profits of \$1.4 billion for the fund - a very positive result for our members and taxpayers.
- Over the 15-year period ended June 30, 2011, MOSERS' total fund return outperformed 95% of the public pension funds in the Rogerscasey universe, a collection of data from other public pension plans with assets greater than \$1 billion. Similarly, strong peer comparisons were produced for the 5- and 10-year periods as well.

Phone: (573) 632-6100 • (800) 827-1063  
 MO Relay: 7-1-1 (Voice) • (800) 735-2966 (TTY)  
 Email: [mosers@mosers.org](mailto:mosers@mosers.org) • Website: [www.mosers.org](http://www.mosers.org)

## 2011 Market Environment

Market performance during FY11 was guided by a seminal moment in U.S. economic history; that being the introduction of a second round of quantitative easing (QE2) by the Federal Reserve. The desired result of a quantitative easing program is to reduce short-term interest rates and increase the supply of money; in turn, creating an incentive to take risk. Under that set of objectives, QE2 was a raging success. From the time Fed Chairman Bernanke floated the idea of QE2 at a meeting in August 2010, all risky assets went on an uninterrupted climb higher with a brief interruption coinciding with the earthquake and tsunami in Japan. By the last quarter of the fiscal year, markets had begun trying to price in the end of the QE2 program and a generally slowing economic environment, such that some of the loftiest gains were given back.

## 2011 Return Attribution

### *Policy Return*

During FY11, our policy portfolio produced a strong return of 21.7%. This result was well above the long-term expected return of the portfolio. While these results are welcome, they were surprising given the strength of absolute performance in FY10 and do give us concern that some portion of the expected future returns of the portfolio were received this year.

### *Strategic Contribution*

Strategic decisions are broadly defined as decisions to alter the portfolio away from the policy allocation in an attempt to generate higher returns, reduce risk, or a combination of the two. FY11 was a tough year for our strategic decisions. In the aggregate, these decisions detracted 1.7% from the fund's total return.

Within the total equity asset class, our strategic decisions detracted 0.7% from performance. The negative result was driven by decisions in the domestic and developed international equity allocations, while the overweight to emerging markets was actually a positive contributor to the strategic return. Within the domestic equity allocation, the under-performance was driven by the decision to overweight large multinational U.S. companies and an allocation to strategies that are designed to hedge some equity market risk. The main driver of the underperformance within the developed international equity allocation was a small overweight to mid- and small-cap Japanese equities and a euro currency hedge.

Within the public debt asset class, our strategic positioning detracted 0.4% from performance. The contribution to this underperformance was split evenly between an underweight to corporate bonds within our core fixed income portfolio and an overweight to mortgages and bank loans in the high yield portfolio.

Strategic positioning within the alternatives asset class cost the total portfolio 0.6%. While there are five sub-classes within alternatives, all of the underperformance is explained by the decisions we made in the real estate portfolio to underweight REITS. Our gold position was a bright spot this year as it added significantly to the returns of the commodity asset class.

### *Manager Contribution*

In addition to the strategic positioning of the portfolio, staff and the consultant are also responsible for hiring and terminating the service providers who manage the various components of our strategies. How these managers perform relative to their strategic benchmarks is an important component of our results and is a reflection on our ability to identify managers who can add value.

In FY11, our manager implementation decisions collectively added 1.0% to the total fund return. A common theme across the total equity and total fixed income components of our portfolio was the strong performance of our alpha pool. This collection of hedge fund managers, combined with a sizeable cash position generated a 7.4% return in excess of our benchmark. Beyond the alpha pool traditional manager selection within public equity, public debt and alternatives collectively detracted 0.9%.

### **Observations & Portfolio Thoughts**

As I write this section of the report, volatility has returned to the market place. While none of us expected an indefinite continuation of the type of stability that allowed us to generate returns of over 21% for the one-year ended June 30, 2011, as human beings we tend to rid ourselves of bad memories fairly quickly. Fiscal year 2009 provided plenty of bad memories but they now seem as if they happened long ago. As markets strengthened, we became more hopeful that the economy would find a way to stand on its own two feet and start to grow again following the record amounts of stimulus it had received. That stimulus increased federal government debt from \$4.9 trillion in July 2007 to \$9.6 trillion by July 2011. Of the \$4.7 trillion dollar increase, some 50-70% was purchased by the Federal Reserve. In other words, our government has been issuing IOUs to itself. Sounds like money printing to me, but then again I'm not an economist. One might wonder what we have received in economic value for taking on \$4.7 trillion in new debt. The answer is real growth of a paltry 0.5% per annum.

In reality, no one knew then, nor do they know now, how the grand experiment that has been entered into by our policy makers and central bankers will turn out. However, the decision to massively stimulate through a zero interest rate policy, debt purchases and other catchy programs (cash for clunkers comes to mind) came fairly easily because the alternative was a seemingly certain calamity and demise of the financial system. While we are not looking directly into the abyss today, it does appear that the Fed's creativity with respect to additional stimulus is waning. There are only so many rabbits that can be pulled from the proverbial hat before the majority of the crowd starts to boo the magician and I think we are about there. I have said this in the past, but it's worth repeating, "extended time, less debt and more sacrifice," is the only long-term solution that will allow for solid real growth to begin anew in the American economy. It took over 25 years for the flip side of this story to develop. Can we honestly expect it to be reversed in merely four years through large scale gimmickry?

As a result of all this, portfolio positioning is, in one word, challenging. It is our expectation that as a result of all the uncertainty, market volatility will remain well above average. One can try to make money through a more tactical approach to asset allocation; however, this is a competition in which at least half of the participants will be losers. In that regard, it doesn't serve the purpose of the average investor well at all.

Those who call themselves long-term investors must realize it is likely to continue to be a very wavy ride. When volatility is combined with the fact that in many instances institutional investors are long-term investors until thunderheads appear and storm waves hit, a recipe for disaster is created. With that said, for those able to stay the course, valuations in equities appear attractive both on a relative and absolute basis and one should expect to earn a risk premium at or above the long-term average. We continue to favor large cap stocks with strong balance sheets and a global franchise in our internally managed portfolio, as these companies continue to trade at valuation levels that appear to be allowing for the purchase of great companies at good prices.

In addition, we are likely to continue to increase our exposure in emerging market countries where balance sheets are considerably less debt laden than those of the U.S. and Euroland. It is these emerging countries where the opportunity for above average growth in the intermediate to longer-term is highest and in our estimation prices are fair. Additional investments in local currency emerging market debt are likely as well. The yield spreads offered, combined with the expectation of currency appreciation relative to the U.S. dollar, continue to look attractive on a risk adjusted basis.

With more U.S. stimulus expected, a weakening dollar is likely. This causes us to continue to feel compelled to own a position in gold. From the demand side, gold continues to be under owned by central banks and institutional investors alike. On the supply side, production costs are rising and the quality of the ore is falling. Gold has once again proven itself as perhaps the best hedge against the risks of paper money devaluation, loss of reserve currency status, and the ongoing possibility that our policy makers at some point may think that inflation is the only solution to our structural debt problems.

### **Conclusion**

Our country faces some of the most daunting economic challenges in its history. The U.S. has dominated the world's economic landscape for such a long time that few remain alive to remember when that wasn't the case. It appears that these sands may be shifting which in turn increases the range of possible outcomes for investors.

The good news is — we have a seasoned group of investment professionals steeped in an investment philosophy built on cornerstones of broad diversification, a contrarian style, strong risk management practices, and a sound governance process. These building blocks have served us well over the years and are likely to continue to serve us well in the future.

In closing, I would like to thank each of the 11 members of the board of trustees, the ultimate fiduciaries of MOSERS, for their willingness to embrace a governance structure that allows the MOSERS internal investment staff the flexibility to seize opportunities which in turn, has generated positive above average results for our members and Missouri taxpayers. The investment staff is committed to meeting the continuous challenges of the financial markets and to ensure that the MOSERS assets are positioned to provide positive long-term financial stability for you, the members.

Until next year,



Rick Dahl  
Chief Investment Officer

## Investment Consultant's Report



September 14, 2011

The Board of Trustees  
Missouri State Employees' Retirement System  
907 Wildwood Drive  
Jefferson City, MO 65109

Dear Board Members,

The investment return for FY11 was POSITIVE 21% net of all fees, which translates in dollars and cents to growth of \$1.4 billion for the year. This is the highest fiscal-year result in the past 15 years, and the second-highest in 25 years. Assuming the portfolio works 250 days per year (weekends off), that's \$6 million each day, every day for the past 12 months – \$3 million by lunchtime, \$30 million for the week, \$125 million a month . . . you get the idea. Positive returns indeed!

In fact, if you simply looked at fiscal-year results going back for the past several years, you'd say we're "swimming" in positive results! In six of the last eight fiscal years, MOSERS' total fund performance has been double-digit positive. The average return of these six positive years' results was 15.9%. Given that, you'd probably think MOSERS, and all investors, are in the midst of one of the greatest wealth creation eras of investing. And yet, any viewing of the evening news, or a look at my own 401(k) would tell you there's more to the story.

The rest of the story has to do with the two years of the past eight that I haven't yet mentioned – FY08 and FY09, specifically. Fiscal year 2008 was bad, with the average public pension plan down 4.2%. MOSERS had its best year versus peers that year, scratching out a positive 1.6% return (net of all expenses). Then came FY09, the collapse of the global economy, and a negative 19.1% net return. Thus, we are reminded of an important reality of investing – two poor years can dampen six years of great results.

The portfolio at MOSERS is designed around this investment reality. By positioning the portfolio to be highly diversified and contrarian, the expectation is the portfolio should do its best to stay close, but probably trail the markets and peers when risky markets are screaming up, like FY10 or FY11, but protect and excel relative to the markets and others when markets are in decline and investors are hurting. And through this cycle, MOSERS has excelled at growing assets when the time is right and protecting assets when markets are in decline.

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For the 5-, 7-, 10-, and 15-year periods ending June 30, 2011, all of which capture at least one if not more market cycles, MOSERS ranks in the 6th, 2nd, 5th, and 5th percentiles, respectively. So it turns out that the key to success as an investor attempting to generate long-term POSITIVE RESULTS lies as much (or more) in protecting assets during rough periods as it does in making money when times are flush.

As I sit writing this letter, the news is full of peripheral European issues and concern for the European banking system, Middle East turmoil, and the Fed taking even greater steps to drop rates and “jump start” the economy. I’m pleased MOSERS posted its best POSITIVE RESULT ever in FY11, but I’m convinced the portfolio’s focus on downside protection will be its most important attribute going forward.

Sincerely,

A handwritten signature in black ink, appearing to read "Stephen P. Holmes". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Stephen P. Holmes, CFA

President

# Investment Policy Summary

## Guiding Principles

Critical to the financial security of present and future benefit recipients is the effectiveness and efficiency of the system's asset management program. The MOSERS Board of Trustees, charged with the responsibility for investing the assets of the system in a manner consistent with fiduciary standards set forth in the prudent person rule, has adopted the following fundamental principles to guide all investment-related decisions:

- Preserve the long-term corpus of the fund.
- Maximize total return within prudent risk parameters.
- Act in the exclusive interest of the members of the system.

The investment policy summary serves as a reference point for management of system assets and outlines MOSERS' investment philosophy and practices.

## Investment Objective

In keeping with the three guiding principles, the board has adopted the following broad investment objectives:

- Develop a real return objective (RRO)<sup>1</sup> that will:
  - Keep contribution rates reasonably level over long periods of time, absent changes in actuarial assumptions.
  - Maintain contribution rates consistent with historical levels ranging from 8% to 12% of covered payroll.



- Establish an asset allocation policy that is expected to meet the RRO over long periods of time, while minimizing volatility.
- Minimize the costs associated with implementation of the asset allocation through the efficient use of internal and external resources.

## Investment Beliefs

MOSERS' internal investment staff and external asset consultant have arrived at investment beliefs, which are the foundation for implementation of the investment portfolio to achieve the board's objectives. These beliefs help to form the basis of every decision made within MOSERS' portfolio. They are the fundamental concepts underlying the MOSERS' investment program. These beliefs are as follows:

- **Diversification is critical because the future is unknown.** MOSERS' investment portfolio has been built upon the premise that very little is known about what the future holds and, as a result, the portfolio is structured to combat a variety of economic outcomes.

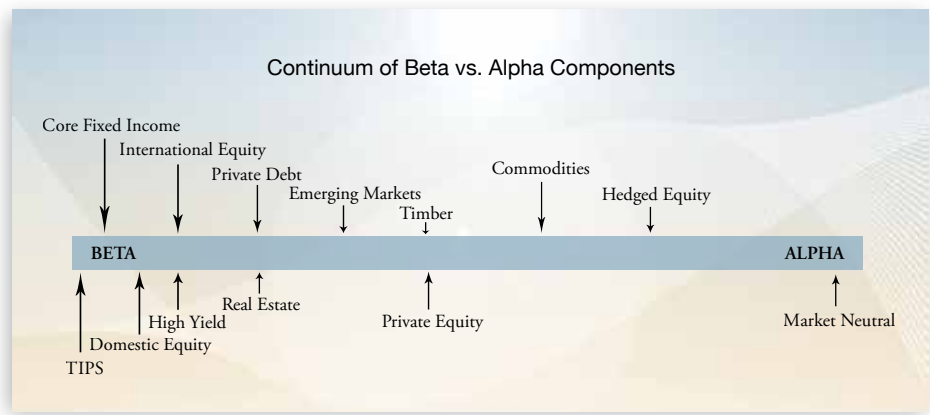
As a result, the portfolio will have significant diversification to provide risk reduction in a variety of markets. The chart above reflects the various economic environments and the types of investments that should be expected to perform well in those environments.

- **Every investment should be examined in the context of the two distinct return components – beta and alpha.** Beta is the return which is expected to be earned by investing passively within a specific asset class. Exposures to beta can be purchased very cheaply and, over long periods of time, it is expected that returns from beta should be positive and coincide with the risk associated with a given asset class. In contrast, alpha is the return generated through a manager's ability to select particular investments that perform better than the asset class as a whole. Alpha is a zero-sum game. For every winner, there is a loser on the other side. Historically, MOSERS' portfolio has been heavily weighted towards investments that provided mainly beta returns.

<sup>1</sup> The RRO is the rate by which the total return exceeds the inflation rate as measured by the CPI, U.S. City Average for all Urban Consumers (CPI-U). MOSERS' real return is the excess return over the CPI utilizing the formula:  $\text{Real} = (1 + \text{Nominal}) \div (1 + \text{CPI})$ . As of June 30, 2011, the RRO was 5.3%.

MOSERS made a decision in 2002, after a formal asset/liability study, to place a greater emphasis on generating alpha returns within the portfolio. At that time, it was expected that returns strictly from beta would not generate the returns necessary to fund the liabilities of the system. That decision was confirmed in the most recent formal asset/liability study completed in July 2007. As reflected in the chart above, several alpha-generating strategies are in place within the portfolio today.

- **Asset classes will be in and out of favor at different times and they all tend to be cyclical, thus flexibility is key.** This belief acknowledges that economies are cyclical; thus, it is only logical that certain investments will fair better than others depending upon the current economic environment. In order to make a “good” investment, the price one pays for an investment must be considered. No investment offers the birthright of a high return. In order to capitalize on potential opportunities that may arise due to asset classes being “cheap” or “expensive” relative to their historical norms, the board has granted the CIO the ability to make strategic sub-asset class allocation decisions subject to predefined ranges.
- **Management of system assets is not about risk or return.** It’s about risk-adjusted returns with a long-term focus on the liabilities. While it is easy to focus all attention on the returns a portfolio is able to generate, the risks relative



to the liabilities of the system must be taken into consideration. Despite MOSERS’ infinite time horizon, it must not be overlooked that there are benefits to be paid in the short run. In addition, the “cost of volatility” within the portfolio must not be underestimated as volatility has a dramatic impact on the contribution rate and thus the state’s ability to fund the plan going forward.

## Roles and Responsibilities

### *Board of Trustees*

The board of trustees bears the ultimate fiduciary responsibility for the investment of system assets. Members of the board must adhere to state law and prudent standards of diligence with respect to their duties as investment fiduciaries. Accordingly, they are required to discharge their duties in the interest of plan participants. They must also “act with the same care, skill, prudence, and diligence under prevailing circumstances that a prudent person, acting in a similar capacity and familiar with those matters, would use in the conduct of a similar enterprise with similar aims.”<sup>2</sup>

Specifically related to investments, the board is charged with the duties of establishing and maintaining broad policies and objectives for the investment program along with the recommendations of staff and the external asset consultant.

### *Executive Director*

The executive director is appointed by and serves at the pleasure of the board. The board has given the executive director broad authority for planning, organizing, and administering the operations and investments of the system under broad policy guidance from the board. Specifically with regard to investments, the executive director is broadly responsible for the oversight of the investment program. The executive director must ensure the system assets are invested in accordance with the board’s policies and that internal controls are in place to safeguard system assets. The executive director must also certify that all manager hiring and termination decisions were made in accordance with the board’s governance policy. In addition, the executive director certifies strategic allocation decisions made by the CIO and external asset consultant.

<sup>2</sup> Section 105.688, RSMo - Investment Fiduciaries, Duties.

### ***Chief Investment Officer and Internal Staff***

The CIO serves at the pleasure of the executive director, yet has a direct line of communication with the board on investment-related issues. The CIO has primary responsibility for the overall direction of the investment program. The CIO works with the external asset consultant and executive director in advising the board on policies related to the investment program. The CIO has primary responsibility to make hiring and termination decisions related to money managers with the approval of the external asset consultant. The CIO is also charged with the responsibility of making strategic allocation decisions with the approval of the external asset consultant. Other responsibilities of the CIO include monitoring the investment of system assets, oversight of external money managers and the internally managed portfolios, and keeping the board apprised of situations which merit their attention. The internal investment staff is accountable to the CIO.

### ***External Asset Consultants***

Summit Strategies Group of St. Louis, Missouri serves as the system's external asset consultant and at the pleasure of the board. The primary duties of the external asset consultant are to:

- Advise the board on policies related to the investment program.
- Provide a third-party perspective and level of oversight to the system's investment program.

The external asset consultant must approve all manager hiring and termination decisions and strategic

allocation decisions made by the CIO. The external asset consultant provides advice and input to the CIO and internal investment staff on investment-related issues and money manager searches.

Blackstone Alternative Asset Management, serves as the system's external hedge fund consultant at the pleasure of the board. The primary duties of the external hedge fund consultant are to:

- Advise the board on policies related to the hedge fund program.
- Provide a third-party perspective and level of oversight to the system's hedge fund investment program.

The external hedge fund consultant must approve all hedge fund manager hiring and termination decisions. The external hedge fund consultant provides advice and input to the CIO and internal investment staff on hedge fund program issues and manager searches.

### ***Chief Auditor***

The chief auditor reports directly to the executive director and, if in the opinion of the chief auditor circumstances warrant, may report directly to the board. The chief auditor is independent of the system's investment operations and, among other things, is responsible for providing objective audit and review services for the investment operations. It is the chief auditor's objective to promote adequate and effective internal controls at a reasonable cost, which results in suggested improvements that will lead to economies and efficiencies in the system's investment operations.

### ***Master Custodian***

Bank of New York Mellon serves as the master custodian of the system's assets except in cases where investments are held in partnerships, commingled accounts, or unique asset classes where it is impossible for them to do so. The master custodian is responsible for maintaining the official book of records, providing performance reports, and serving as an additional layer of risk control in the safekeeping of system assets.

### ***Asset Allocation***

Determining the system's asset allocation is regarded as one of the most important decisions in the investment management process. The board, with advice from staff and the asset consultant, has developed a policy asset allocation that is designed to achieve the long-term required return objectives of the system, given certain risk constraints. The current asset allocation reflects the need for a diversified portfolio, which will perform well in a variety of economic conditions and will help reduce the portfolio's overall volatility. In determining the optimum mix of assets, the board considers five factors:

- The expected rate of return for each asset class.
- The expected risk of each asset class.
- The correlation between the rates of return of the asset classes.
- The investment objectives and risk constraints of the fund.
- The impact of the portfolio's volatility on the contribution rate.

While the board maintains a set policy allocation mix, they have

## MOSERS Asset Allocation

Asset Class	Policy Weight	Allocation Range	Policy Benchmark
<b>Public Equity</b>	<b>45.0%</b>		<b>MSCI ACWI</b>
Domestic	Benchmark weight*	+/- absolute 10%	
Int'l developed	Benchmark weight*	+/- absolute 10%	
Emerging markets	Benchmark weight*	+/- absolute 5%	
<b>Public Debt</b>	<b>30.0%</b>		<b>Blended Return</b>
Core fixed income	10.0%	5.0% - 15.0%	Barclays Aggregate
TIPS	10.0%	5.0% - 15.0%	Barclays TIPS
High yield	5.0%	0.0% - 10.0%	Barclays High Yield
Market neutral	5.0%	0.0% - 10.0%	T-Bills + 4%
<b>Alternatives</b>	<b>25.0%</b>		<b>Blended Return</b>
<i>Real assets</i>	15.0%	10.0% - 20.0%	Blended Return**
Commodities	3.0%		GSCI
Timber	6.0%		NCREIF Timberland
REITs/private RE	6.0%		Wilshire REITs
<i>Private investments</i>	10.0%	5.0% - 15.0%	S&P 500 + 3%
Private equity	7.5%		
Private debt	2.5%		

\* The public equity sub-asset class target allocations are not static weights. The weights float based upon capitalization of the MSCI ACWI benchmark.

\*\* The policy benchmark is based upon the blending of GSCI, NCREIF Timberland, and Wilshire REITs at their policy benchmark weights.

taken steps to provide flexibility by granting authority to the CIO, with the approval of the external asset consultant and certification of the executive director, to make strategic allocation decisions based upon expectations for each sub-asset class. This flexibility has allowed the system to take advantage of changing market conditions. The board has placed ranges on the sub-asset class allocations in order to maintain appropriate risk controls. The table above illustrates the policy asset mix and ranges formally adopted by the board.

### Rebalancing

It is the responsibility of staff to ensure that the asset allocation adheres to the system's rebalancing policy. Staff has engaged NISA Investment Advisors, LLC of St. Louis, Missouri, to assist in the

oversight and implementation of the rebalancing policy. MOSERS utilizes a combination of cash market and exchange traded futures transactions to maintain the total fund's allocation at the broad policy level. Month-end reviews are conducted to bring the portfolio back within allowable ranges of the broad policy targets.

### Risk Controls

MOSERS' investment program faces numerous risks; however, the primary risk to MOSERS is that the assets will not support the liabilities over long periods of time. In order to control this risk and numerous other risks that face the system, the board has taken the following steps, on an ongoing basis, to help protect the system:

- Actuarial valuations are performed each year to ensure the system

is on track to meet the funding objectives of the plan. In addition, every five years an external audit of the actuary is conducted to ensure that the assumptions being made and calculation methods being utilized are resulting in properly computed liabilities.

- Asset/liability studies are conducted at least once every five years. The purpose of these studies is to ensure that the current portfolio design is structured to meet the system's liabilities. During these studies, investment expectations are also reexamined in more detail.
- A governance policy, which incorporates investment limitations, is in place to ensure that board policies are clearly identified. Within these documents, the desired outcomes are identified, responsibilities for individuals are identified in relation to particular areas of the portfolio's management, and details are provided as to how outcomes will be measured. Reporting requirements are clearly identified to ensure appropriate checks and balances are in place. In addition, annual performance audits are conducted to ensure the performance measurement tools and methodologies being utilized are proper.

### Performance Objectives and Monitoring Process

Generating returns net of expenses equaling the RRO of 5.3% plus inflation remains the primary performance objective for the total fund over the long term. The reason for the long-term focus on this objective is to preclude the temptation to overreact

to events in the marketplace that have no relevance in the management of the relationship between the system's assets and liabilities. The resulting dilemma is the conflicting need to evaluate investment policy implementation decisions over shorter time frames while maintaining the longer-term focus necessary to manage and measure the fund's performance relative to the RRO. To address this problem, the board evaluates performance relative to policy and strategy benchmarks. This helps to evaluate the board's broad policy decisions and the staff and external consultant's implementation decisions. Policy benchmarks measure broad investment opportunities of each sub-asset class in which MOSERS has chosen to invest. The strategy benchmarks represent decisions made by the CIO to strategically deviate from the policy asset allocation for each sub-asset class. The return of the strategy benchmarks are determined based upon the actual weight of the asset class multiplied by the appropriate benchmark.

The policy and strategy benchmarks are used in the following manner to evaluate board and staff decisions:

- **Board Decisions:** The value added through board policy decisions is measured by the difference between the total fund policy benchmark return and the RRO. This difference captures the value added by the board through their policy asset allocation decisions relative to the return necessary to fund the system's liabilities. A policy benchmark return greater than the RRO reflects value added through board decisions. A policy

benchmark return less than the RRO reflects losses or shortfalls in performance in funding the liabilities. These policy decisions are measured over long periods of time.

- **CIO and External Consultants' Decisions:** There are two components to decisions made by the CIO and external consultants, which are monitored by the board on an ongoing basis. They are 1) strategic sub-asset class allocation decisions, and 2) implementation decisions.

Strategy decisions are sub-asset class allocation choices made by the CIO with the approval of the external asset consultant and the certification of the executive director to deviate from the policy benchmark weight. The value added through these decisions to overweight or underweight these sub-asset classes is measured by the difference between the strategy benchmark return and the policy benchmark return. This difference captures the value added by the CIO through sub-asset class strategic decisions relative to the board's broad policy allocation decisions.

A strategy benchmark return greater than the policy benchmark return reflects value added through the sub-asset class allocation decisions. A strategy benchmark return less than the policy benchmark return reflects losses to the fund's performance based upon strategy decisions. Strategy decisions should be measured over all periods of time with majority weight placed on outcomes that have occurred over a market cycle.

Implementation decisions are money manager selection choices made by

the CIO with the approval of the appropriate external consultant and the certification of the executive director that the decision was made in accordance within the board's adopted governance policy. The value added through these decisions is measured by the difference between the actual portfolio return and the strategy benchmark return. This difference captures the value added through these external manager selection decisions. An actual portfolio return greater than the strategy benchmark return reflects value added through these external manager selection decisions. An actual portfolio return less than the strategy benchmark return reflects losses to the fund's performance based upon implementation decisions. Implementation decisions should be measured over all periods of time with a majority weight placed on outcomes that have occurred over a market cycle.

The board receives performance information on a quarterly basis to help ensure adequate monitoring of the fund's overall performance objectives.

### Asset Classes

At the broad asset class level, policy and strategy benchmarks have been established to measure board, strategic, and implementation decisions. At the manager level, performance is measured against appropriate benchmarks for each particular investment mandate. Investment guidelines have been established for each manager outlining specific expectations for each portfolio. Many managers are employed with performance-based fee structures, which help to align the manager's interest with the total fund objectives.

## Total Fund Review

As of June 30, 2011, the MOSERS investment portfolio had a market value of \$7.8 billion. The graph to the right illustrates the growth of MOSERS' portfolio since the system's inception.



### Investment Performance

MOSERS' investments generated a return of 21.0% (net of fees) for FY11. The total fund return underperformed its 1-year policy benchmark of 21.7%. Performance across asset classes varied during the year with emerging market equities generating some of the highest returns within the portfolio overall. The global public equity portfolio return was 28.4%, the public debt portfolio return was 9.6%, and the alternatives portfolio return was 21.3%. The table to the right illustrates each sub-asset classes' contribution to the total return. This fiscal year alone, the MOSERS investment portfolio generated \$1.4 billion to the fund.

### Investment Performance vs. the Required Rate of Return

The total fund investment return is compared to a required rate of return. The required rate of return is established by the board to determine how well the fund is performing over the long term in order to meet future plan obligations after accounting for inflation. This funding objective is equal to the RRO (5.3%) plus inflation. The best known measure of inflation is the Consumer Price Index (CPI).<sup>3</sup>

### Sub-Asset Class Returns for Fiscal Year Ended June 30, 2011

Asset Class	Fiscal Year Return	Contribution to Total Return
<b>Total public equity</b>	<b>28.4%</b>	<b>12.9%</b>
Domestic equity	29.6	5.9
International developed equity	28.9	5.2
Emerging markets	25.0	1.8
<b>Total public debt</b>	<b>9.6%</b>	<b>2.5%</b>
Core fixed income	10.7	0.8
TIPS	7.7	0.7
High yield bonds	12.6	0.7
Market neutral	7.8	0.3
<b>Total alternatives investments</b>	<b>21.3%</b>	<b>5.6%</b>
Real assets	20.6	3.3
Commodities	30.0	1.0
Real estate	31.3	2.1
Timber	4.2	0.2
Private investments	22.4	2.3
Private equity	20.3	1.2
Private debt	25.2	1.1
<b>Total fund</b>	<b>21.0%</b>	

Given the unpredictability of the investment markets, the portfolio should not be expected to meet the required rate of return year and year out. A review of long periods of time is best to evaluate whether or not the total return has kept pace with the system's funding objectives.

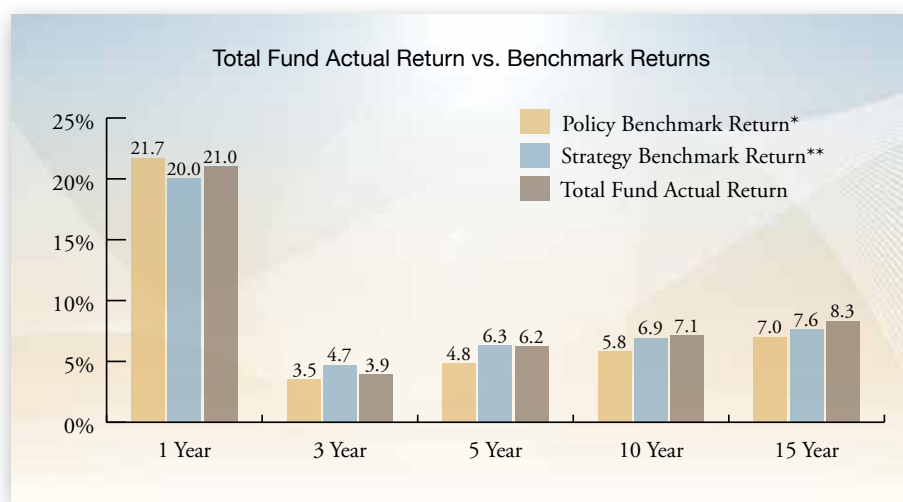
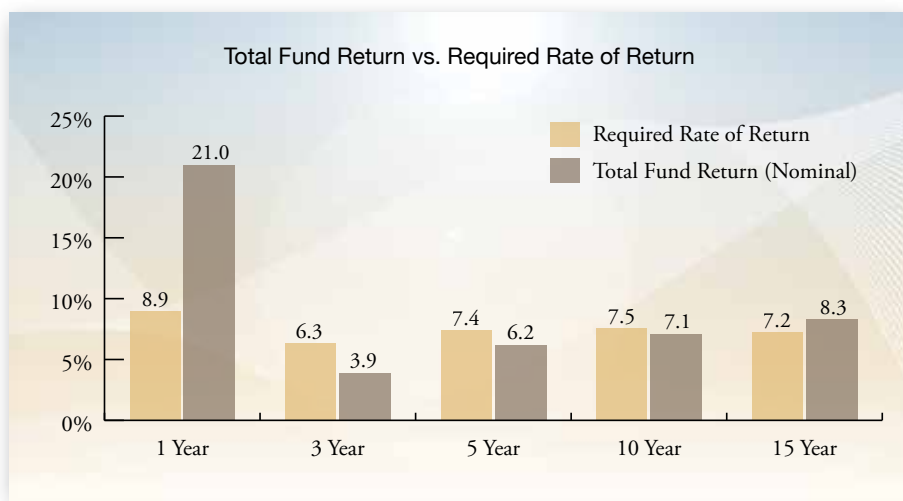
<sup>3</sup> CPI Source: United States Department of Labor, Bureau of Labor Statistics (not seasonally adjusted).

The bar chart to the right reflects that MOSERS' investment returns have exceeded the required rate of return by .1% over the 15-year period ended June 30, 2011.<sup>4</sup>

### Investment Performance vs. Benchmark Comparisons

In addition to measuring performance relative to the required rate of return, the board also compares fund returns to the following two market benchmarks: the policy benchmark and the strategy benchmark.

The policy benchmark provides an indication of the returns that have been achieved (excluding transaction costs) by a portfolio invested passively in the broad market with percentage weights allocated to each asset class in MOSERS' policy asset allocation. Comparison of the total return to the policy benchmark is a reflection of the extent to which the asset allocation (beta) kept pace with the system's funding objectives. While the 1-year actual performance was 0.7% below its policy benchmark, the actual 3-, 5-, 10-, and 15-year returns generated returns in excess of the policy benchmarks. The strategy benchmark is more narrowly defined and focuses on sub-asset class allocation decisions made by the CIO. By comparing the policy benchmark to the strategy benchmark, the board is able to determine the value added through strategic decisions (active management) made by the CIO. Value is created when the strategy benchmark returns exceed the policy benchmark returns.



\* As of 6/30/11, the policy benchmark was comprised of the following components: 45% total public equity policy benchmark, 30% total public debt policy benchmark, and 25% total alternatives investments policy benchmark.

\*\* As of 6/30/11, the strategy benchmark was comprised of the following components: 46% total public equity strategy benchmark, 28.2% total public debt strategy benchmark, and 25.8% total alternative investments strategy benchmark.

Returns for the total fund versus these benchmarks are displayed in the bottom bar chart.

Similarly, by comparing the actual return to the strategy benchmark, the board will, over the long term, be able to judge the success or failure of the staff and the consultant in implementing the CIO's strategic decisions. The primary implementation decision

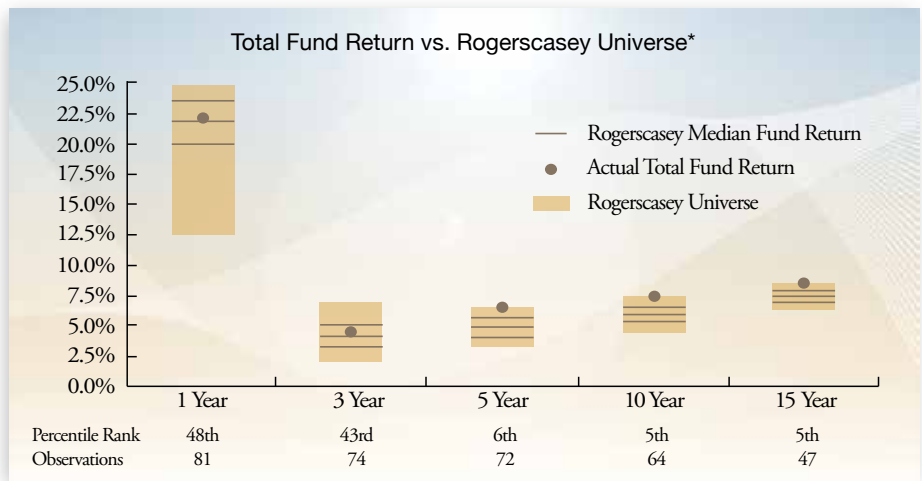
is in determining which managers the fund should employ. Value is added from manager selection when the total fund return exceeds the strategy benchmark return.

<sup>4</sup> Performance returns are calculated using a time-weighted rate of return on market values.



## Investment Performance vs. Peer Universe

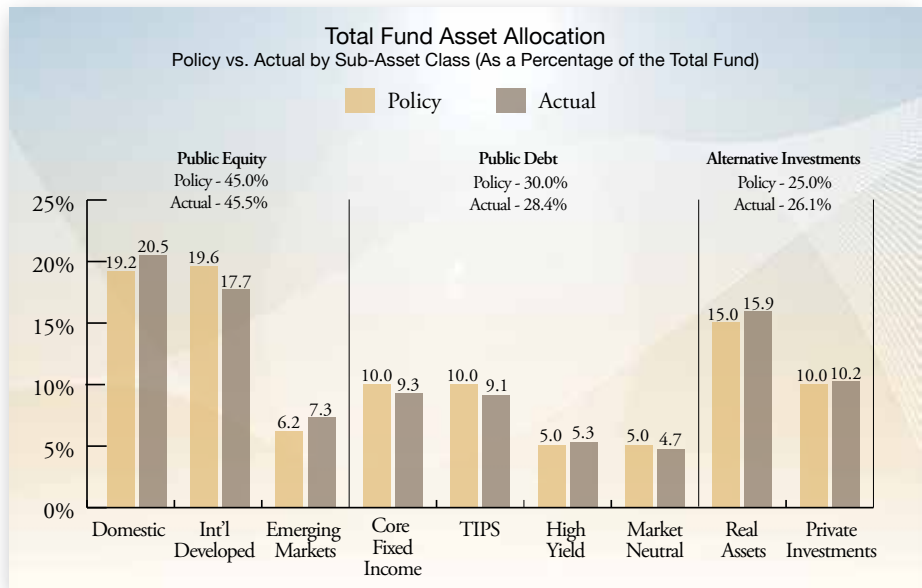
To a lesser extent, the board compares total fund performance to the returns generated by a peer group of public pension funds and compiled by Rogerscasey, a diverse global investment solutions firm with clients worldwide. Long-term performance is the best indicator of success. For the past 15-year period ended June 30, 2011, MOSERS' total fund return outperformed 95% of the public pension funds in the Rogerscasey universe of public pension plans with assets in excess of \$1 billion. MOSERS' total fund performance within the Rogerscasey universe is provided in the graph above.



\* Rogerscasey is a global investment solutions firm with clients worldwide. The Rogerscasey universe data reflects performance data of funds with assets in excess of \$1 billion.

## Total Fund Asset Allocation Overview

As of June 30, 2011, the board's broad policy allocation mix was 45% public equity, 30% public debt, and 25% alternative investments. The policy target as of June 30, 2011, for each sub-asset class, along with the actual strategic allocation to each type of investment is shown in the bar graph to the right.



A formal asset/liability study is conducted every five years to examine the portfolio's ability to generate the required rate of the return given return expectations from the various asset classes represented in the portfolio and to lower the total portfolio volatility. The most recent study conducted in July 2007, concluded that the MOSERS portfolio could be further diversified by thinking more globally and could entertain more illiquid assets in an effort to

enhance risk-adjusted performance, ultimately leading to an acceptable contribution level and reduced contribution volatility. Therefore, in 2007, the board approved a public equity benchmark change to a more global benchmark, MSCI ACWI, and a 5% public equity allocation reduction with a corresponding 5% increase to alternative investments.

The board maintained the flexibility granted to the CIO to make strategic decisions related to the allocation subject to predefined sub-asset class

ranges. A strategic decision should be thought of as any decision that might cause MOSERS' actual portfolio to differ from the policy asset allocation. This has allowed MOSERS to capitalize on investment opportunities at the margin by overweighting asset classes that are viewed as "cheap" relative to their historical norm and underweighting asset classes that are "expensive" relative to their historical norm. Since being granted this authority in 2002, the ability to make strategic asset allocation decisions has added .95% annually, or approximately \$679 million to the portfolio.

The asset allocation is built upon the belief that diversification is critical. The table below reflects the asset classes and their correlation to each other.

### Total Fund - Correlation Table - 5 Years

	Public Equity	Core Fixed Income	TIPS	High Yield	Market Neutral	Real Assets	Private Investments
Public equity	1.00						
Core fixed income	0.48	1.00					
TIPS	0.31	0.74	1.00				
High yield	0.63	0.37	0.38	1.00			
Market neutral	0.66	0.60	0.36	0.71	1.00		
Real assets	0.56	0.49	0.35	0.26	0.59	1.00	
Private investments	0.73	0.47	0.31	0.51	0.62	0.69	1.00

### Statistics

The table below displays the statistical performance data (net of fees) of the total fund as of June 30, 2011. The excess return (value added) is reflected in dollars as shown below.

### Total Fund - Statistical Performance

Portfolio Characteristics	1 Year	3 Year	5 Year	10 Year	15 Year
Annualized return	21.0%	3.9%	6.2%	7.1%	8.3%
Annualized standard deviation	7.45%	12.34%	10.09%	9.58%	10.01%
Sharpe ratio	2.81	0.28	0.41	0.52	0.52
Excess return*	(0.66)%	0.36%	1.38%	1.31%	1.26%
Beta*	0.77	0.71	0.70	0.80	0.84
Annualized alpha*	3.98%	1.11%	2.56%	2.33%	2.22%
Correlation*	0.98	0.96	0.95	0.95	0.96
Value added in dollars	(\$47M)	\$92M	\$556M	\$1.07B	1.42B

\* As compared to total fund policy benchmark.

## Investment Manager Fees

### For the Year Ended June 30, 2011

	Total Fees	Manager Fees	Paid/Accrued Performance Fees
<b>Public equity managers</b>			
Baillie Gifford EAFE Plus	\$ 739,956	\$ 739,956	
Blackstone Hedged Equity Fund, LP	1,681,888	1,681,888	
Blakeney Onyx, LP	2,423,040	2,423,040	
Eminence Fund, Ltd.	775,490	886,997	\$(111,507)
Glenview Institutional Partners, LP	390,605	347,537	43,068
Grantham, Mayo, and Van Otterloo & Company	1,255,118	1,255,118	
Legg Mason Opportunity Trust	630,229	630,229	
Legg Mason Value Trust	344,362	344,362	
Leuthold Weeden Capital Management	643,791	643,791	
Mastholm Asset Management	5,273	5,273	
Morant Wright Investment Management	1,504,146	1,504,146	
Nippon Value Investors	879,471	879,471	
Pershing Square, LP	709,540	214,672	494,868
Silchester International Investors	2,514,191	2,514,191	
SSGA Emerging Markets	36,201	36,201	
TPG - Axon Partners, Ltd.	999,424	625,133	374,291
Viking Global Equities III, Ltd.	3,552,579	1,027,752	2,524,827
Total public equity managers	19,085,304	15,759,7587	3,325,547
<b>Public debt managers</b>			
Bayview Opportunity Domestic, LP	4,256,371	1,485,067	2,771,304
BlackRock Financial Management Mortgage Opportunities	448,044	448,044	
BlackRock Financial Management Bank Loans	351,036	351,036	
BlackRock Financial Management High Yield	802,630	802,630	
Stone Harbor Investment Partners	25,762	25,762	
Total public debt managers	5,883,843	3,112,539	2,771,304
<b>Alternative investment managers</b>			
Actis Emerging Markets III	858,359	858,359	
African Development Partners I, LLC	1,040,507	1,040,507	
Alinda Infrastructure Fund I, LP	433,059	433,059	
Axiom Asia Private Capital Fund II, LP	448,609	400,000	48,609
Bayview Opportunity Domestic, LP	1,000,620	340,216	660,404
Blackstone Real Estate Partners IV	195,807	777,384	(581,577)
Blackstone Real Estate Partners V	1,089,308	1,089,308	
Blackstone Real Estate Partners VI	1,124,851	1,124,851	
Bridgepoint Europe III A, LP	217,883	217,883	
Bridgepoint Europe IV B, LP	618,139	618,139	
Campbell Timber Fund II A, LP	493,061	493,061	
CarVal Investors CVI Global Value Fund A, LP - real estate	878,749	878,749	
CarVal Investors CVI Global Value Fund A, LP - private debt	878,749	878,749	
Catalyst Fund Limited Partnership III	2,165,226	778,564	1,386,662
Catterton Partners V, LP	258,668	258,668	
Catterton Partners VI, LP	457,519	457,519	
DDJ Capital Management - B IV Capital Partners, LP	(120,991)		(120,991)
DRI Capital - LSRC	550,502	441,038	109,464
DRI Capital - LSRC II	74,998	74,998	
Garnet Sky Investors Company, Ltd.	813,030	585,213	227,817
Global Forest Partners GTI7 Institutional Investors Company, Ltd.	570,110	570,110	
Harvest Fund Advisors, LLC	485,528	485,528	
JLL Partners Fund V, LP	1,415,711	215,634	1,200,077

	Total Fees	Manager Fees	Paid/Accrued Performance Fees
JLL Partners Fund VI, LP	959,190	845,299	113,891
Linden Capital Partners II, LP	720,816	720,816	0
Merit Energy Partners F II, LP	124,556	124,556	0
MHR Institutional Partners IIA, LP	2,858,151	390,504	2,467,647
MHR Institutional Partners III, LP	1,193,933	1,193,933	0
Millennium Technology Value Partners II	562,254	562,254	0
New Mountain Partners III, LP	977,300	895,241	82,059
NISA Investment Advisors	425,427	222,492	202,935
OCM/GFI Power Opportunities Fund II, LP	1,904,633	61,847	1,842,786
OCM Opportunities Fund IVB, LP	2,295	0	2,295
OCM Opportunities Fund VIIB, LP	5,731,074	1,482,570	4,248,504
OCM Power Opportunities III, LP	442,582	442,582	0
OCM Real Estate Opportunities Fund III, LP	1,158,061	134,381	1,023,680
Parish Capital Buyout Fund I, LP	238,395	238,395	0
Parish Capital Buyout Fund II, LP	212,797	212,797	0
Parish Opportunities Fund II, LP	130,229	130,229	0
Resource Management Service - Wildwood Timberlands, LLC	(3,152,983)	736,245	(3,889,228)
Silver Lake Partners II, LP	2,707,803	631,518	2,076,285
TCW Energy Partners, LLC	986,576	(556,402)	1,542,978
TCW Energy Fund XIV, LP	476,303	476,303	0
TCW Energy Fund XV, LP	519,636	519,636	0
TPG Airline Credit Opportunities, LP	655,248	449,945	205,303
The Veritas Capital Fund III, LP	2,435,689	288,623	2,147,066
Total alternative investment managers	38,217,967	23,221,301	14,996,666
<b>Alpha pool managers</b>			
AQR Absolute Return Institutional Fund, LP	876,611	876,611	0
AQR DELTA Sapphire Fund, LP	1,299,327	1,299,327	0
Blackstone Distressed Securities Fund, LP	1,567	1,567	0
Blackstone Topaz Fund, LP	3,499,470	2,711,144	788,326
Brevan Howard, LP	1,289,827	869,998	419,829
Bridgewater Associates - Diamond Ridge Fund, LLC	2,869,506	2,869,506	0
Claren Road Credit Partners, LP	1,482,275	1,121,627	360,648
COMAC Global Macro Fund, LP	722,496	722,496	0
Davidson Kempner Institutional Partners, LP	1,417,356	596,566	820,790
Diamondback Partners, LP	4,408,866	2,171,858	2,237,008
Elliott International, Ltd.	1,300,455	400,957	899,498
Eton Park Fund, LP	2,119,146	1,288,727	830,419
Farallon Capital Institutional Partners, LP	1,376,811	573,202	803,609
HBK Offshore Fund, Ltd.	2,552,594	879,344	1,673,250
King Street Capital, LP	2,006,887	970,094	1,036,793
King Street Capital, Ltd	279,218	168,506	110,712
PAAMCO - Newport Pioneer, LLC	1,517,169	973,986	543,183
Pharo Macro Fund, Ltd.	963,304	744,734	218,570
Silver Point Capital Fund, LP	1,883,669	720,305	1,163,364
Total alpha pool managers	31,866,554	19,960,555	11,905,999
<b>Other managers</b>			
NISA Investment Advisors	1,535,958	1,535,958	
MOSERS Inc.	97	97	
Total other managers	1,536,055	1,536,055	0
Grand totals	\$96,589,723	\$63,590,207	\$32,999,516

## Schedule of Investment Portfolios by Asset Class

As of June 30, 2011

	Fair Value	Percentage of Investments at Fair Value
<b>Public global equity</b>		
Domestic equity	\$1,610,237,102	20.5%
International developed equity	1,388,914,947	17.7
Emerging markets equity	568,703,684	7.3
Total public global equity	<u>3,567,855,733</u>	<u>45.5</u>
<b>Public debt</b>		
Core fixed income	726,797,380	9.3
High yield bonds	413,029,450	5.3
TIPS	714,700,270	9.1
Market neutral	370,287,128	4.7
Total public debt	<u>2,224,814,228</u>	<u>28.4</u>
<b>Alternative investments</b>		
Real assets	1,249,823,540	15.9
Private investments	796,496,547	10.2
Total alternative investments	<u>2,046,320,087</u>	<u>26.1</u>
<b>Cash and other miscellaneous investments</b>	<u>7,517,522</u>	<u>0.0</u>
<b>Grand total</b>	<u><u>\$7,846,507,570</u></u>	<u><u>100.0%</u></u>
<b>Reconciliation to <i>Statement of Plan Net Assets</i></b>		
Total portfolio value	7,846,507,570	
STIF	(790,042,214)	
Uninvested cash	(16,095,271)	
Interest and dividend receivable	9,028,545	
Variation margin	(770,039)	
AR securities sold	(15,524,989)	
AP securities purchased	16,171,667	
Incentive fees payable	14,739,074	
Securities lending liability	8,273,526	
Foreign currency payable	863,785	
Miscellaneous	321,146	
Investments per <i>Statement of Plan Net Assets</i> (page 27)	<u><u>\$7,073,472,800</u></u>	

## Schedule of Investment Results

1-, 3-, 5-, 10- and 15-Year Periods

	1 Year	3 Year	5 Year	10 Year	15 Year
<b>Total fund*</b>					
MOSERS	21.0%	3.9%	6.2%	7.1%	8.3%
Composite total fund benchmark	21.7%	3.5%	4.8%	5.8%	7.0%
<b>Public equity</b>					
MOSERS	28.4%	3.4%	5.4%	6.6%	8.3%
Public equity composite benchmark	30.1%	0.9%	2.7%	4.4%	6.5%
<b>Public debt</b>					
MOSERS	9.6%	6.0%	6.6%	7.3%	7.6%
Public debt composite benchmark	7.1%	6.9%	7.2%	7.4%	7.7%
<b>Alternatives</b>					
MOSERS	21.3%	1.5%	6.2%	N/A	N/A
Alternatives composite benchmark	24.7%	2.3%	4.3%	N/A	N/A

\* *Time-weighted rates of return on market values adjusted for cash flows.*

- **Total Fund** - As of 6/30/11, the total fund policy benchmark was comprised of the following components: 45% total public equity policy benchmark, 30% total public debt policy benchmark, and 25% total alternative investments policy benchmark. The individual asset class benchmarks as listed below are used to generate the total fund policy benchmark.
  - **Public Equity** - As of 6/30/11, the policy benchmark was based on the capitalization of the MSCI ACWI benchmark, which at that date was 43.6% MSCI World Ex US Net, 42.9% MSCI US Net, and 13.5% MSCI Emerging Markets Net. Similar benchmarks were used in previous years.
  - **Public Debt** - As of 6/30/11, the public debt policy benchmark was comprised of 33.3% Barclays Aggregate, 33.3% Barclays U.S. TIPS, 16.7% Barclays High Yield, and 16.7% T-Bills + 4%. Similar benchmarks were used in previous years.
  - **Alternative Investments** - As of 6/30/11, the alternative investments policy benchmark was comprised of the following components: 40% S&P 500 + 3%, 24% Wilshire REIT, 24% NCREIF Timber, and 12% Goldman Sachs Commodity. This program did not begin until July 2002. Similar benchmarks were used in previous years.

## Public Equity

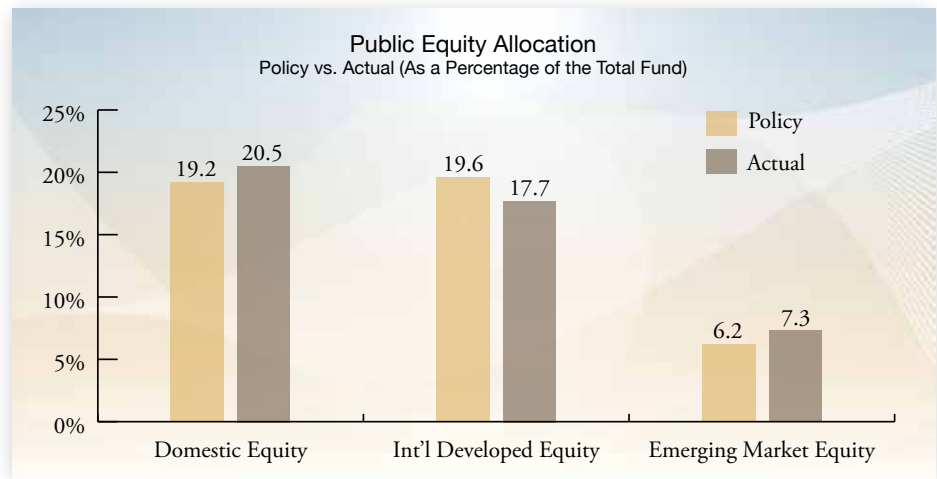
### Asset Class Summary

As of June 30, 2011, the public equity portfolio had a market value of \$3.6 billion, representing 45.5% of the total fund. Performance for the fiscal year was 28.4%, net of fees and expenses.

### Highlights

There were some strategic changes in the make-up of the public equity portion of the portfolio; three new managers were hired, one manager was removed and some allocations were altered. Here are the highlights:

- A developed international manager was terminated due to unsatisfactory investment returns. The assets were split among existing managers.
- Two additional hedged equity managers were hired during the year adding to the low beta profile of the portfolio..
- The overweight to emerging markets was increased during the year. A manager was hired to provide passive exposure to the sub-asset class.
- An overweight to large multi-national U.S. companies concentrated in technology, health care, consumer staples and energy sectors was maintained.
- Within emerging equity, significant exposure to frontier markets was maintained in an effort to capture the best growth opportunities with attractive valuations.



- Within international developed, an overweight to Japanese equities has been in place for several years that adds meaningful diversification to the portfolio and contributes to the low beta profile. Also, throughout the year a short euro currency position was maintained.

### Portfolio Structure

The public equity portfolio has a target allocation of 45% of the total fund. This portfolio is considered global equity and therefore benchmarked against the MSCI All Country World Net Index (ACWI). As of June 30, 2011, the portfolio includes domestic equity, international developed equity, and emerging markets equity. The policy allocations to each component are not static weights. The weights float based upon capitalization of the MSCI ACWI benchmark. As part of the implementation plan, hedged equity managers are utilized as a risk reducing tool. The bar chart above illustrates the actual allocation relative to the board's policy benchmark. Differences reflect the CIO's strategic decisions to overweight or underweight as of June 30, 2011.

### Market Overview

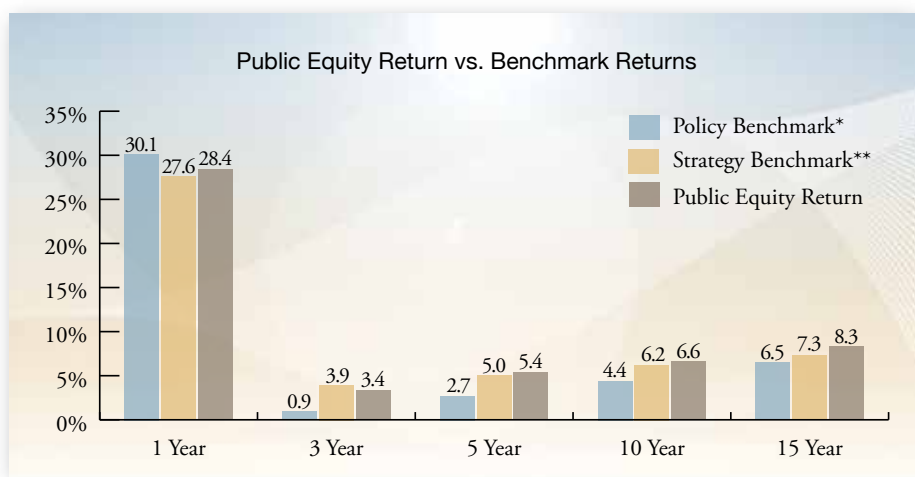
The MSCI ACWI returned 30.1% for the fiscal year. The strong performance was led by the U.S. market. The equity returns peaked at over 35% in April. Both May and June had negative monthly returns. The equity markets were strong as corporations continued to post positive performance and experts were predicting continued recovery in the global economy. The central banks continued to keep interest rates low and provide liquidity for the markets. As the fiscal year ended, ongoing concerns with European debt levels weighed on the markets. The housing market continued to be a drag on the economy as housing prices continued to fall across most of the country and distressed properties produce a headwind for the market. The U.S. and developed international markets outperformed emerging markets by nearly 4% for the year. The emerging markets now appear to be in better financial position than many of the developed markets. Rising debt levels and poor demographics hurt the developed markets while the emerging markets have lower debt levels and more positive demographics.

Currency uncertainty is the big issue facing equity markets. The U.S. unemployment rate remains high and consumers have yet to return to spending levels seen prior to the recession. Country level macro issues are in conflict with strong corporate balance sheets and near record profits. European debt problems and political concerns regarding the Euro do not appear to offer simple solutions. How these issues are dealt with will have a big impact on the markets in the coming months.

## Performance

The public equity portfolio returned 28.4% for the fiscal year, falling short of the policy benchmark return of 30.1%, and exceeding the strategy benchmark return of 27.6%, as illustrated in the bar chart above.

The underperformance of the equity portfolio, as compared to the policy benchmark, was driven by the developed international and emerging markets portfolios, while the domestic portfolio was closer to the benchmark. As we have noted in the past, it is not surprising that our equity portfolio lagged the market in a year when absolute returns are strong. The portfolio intentionally has a beta lower than the benchmark. Our hedged equity managers are a big factor in this lower beta for the domestic market. A value style manager in developed international equity runs a lower beta and tends to underperform in strong markets. The hedged equity managers with their lower beta were the biggest contributors to the policy benchmark underperformance. Two domestic equity managers also had



\* As of 6/30/11, the public equity policy benchmark was based on the capitalization of the MSCI ACWI benchmark, which at that date was 43.6% MSCI World Ex US Net, 42.9% MSCI US Net, and 13.5% MSCI Emerging Markets Net.

\*\* As of 6/30/11 the public equity strategy benchmark was comprised of the following components: 45% domestic consisting of S&P 500, S&P 100, MSCI U.S. Net, and hedge equity strategy benchmark; 39% international developed consisting of MSCI World Ex U.S. Net, MSCI EAFE, MSCI EAFE Ex Japan and TOPIXUSD Index; 16% emerging markets consisting of MSCI EMF Net.

poor years. In emerging markets, the exposure to frontier markets was a drag to performance this year.

The actual public equity return exceeded the strategy benchmark return by 0.8%, reflecting value added from implementing decisions made by staff. In the public equity portfolio, this outperformance can be attributed to the strong performance of our portable alpha program. Traditional manager selection decisions were broadly negative within the public equity portfolio but the portable alpha program generated significant value added for the portfolio. In FY11, performance of the various sectors in the U.S. market varied greatly. Energy, consumer discretionary and industrials led the way with 52%, 40% and 38% returns, respectively. Financials and materials were the only two sectors with returns below 20% for the year. Financials returned 13% and materials returned just 9% in the strong up year for the market. Small capitalization

stocks (Russell 2000) outperformed large cap (Russell 1000) 37% vs. 32%. Growth stocks were favored over value, 36% vs. 29%. MOSERS' public equity portfolio results were hurt by both size and style factors.

In the developed international markets, Austria, Norway and Germany were the leaders on the positive side, returning 51%, 47% and 42%, respectively. Greece was the only country market with a negative return due to their ongoing debt troubles. Israel and Japan were the other big detractors in the index. Israel returned 5% and Japan 11%. All of these returns are U.S. dollar based.

In emerging markets, MOSERS' exposure to frontier markets was a drag on performance as these markets did not participate as strongly in the market rally. In emerging markets, the country returns varied widely. Poland, Russia and Korea had the highest returns of 54%, 42% and 42%, respectively.



Egypt was the only emerging country with a negative return, (14%).

Political unrest in the region drove investors from the market. Turkey and Morocco also were hurt by political issues, still providing returns of 8% and 12%. India generated a 7% return and China a 10% return.

### Top Ten Holdings

The top ten publicly traded separate account holdings within the public equity portfolio as of June 30, 2011, are shown in the chart to the right.

### Brokerage Activity

The middle table to the right illustrates the brokerage activity that occurred within the public equity portfolio throughout the fiscal year.

### Soft Dollar Expenditures

In the fiscal year ended June 30, 2011, MOSERS' public equity managers declared \$117,696 of the commissions generated were utilized to acquire a variety of services and research information. These expenditures, referred to as soft dollars (expendable excess commissions), are permitted under current Securities Exchange Commission (SEC) guidelines and represent less than 11.8% of MOSERS' agency commissions.

### Public Equity - Top Ten Publicly Traded Separate Account Holdings

Ten Largest Holdings as of June 30, 2011*	Market Value	Percent of Total MOSERS Public Equity Portfolio
Sanofi-Aventis	\$23,189,175	0.65%
GlaxoSmithkline PLC	22,467,853	0.63
Royal Dutch Shell A Shares	20,317,032	0.57
Roche Holding AG	18,117,013	0.51
Novartis AG	17,152,748	0.48
Total SA	15,864,744	0.44
Wolters Kluwer N.V.	15,076,792	0.42
Kao Corporation	15,009,631	0.42
Credit Suisse Group	14,837,174	0.42
Singapore Telecommunications	13,527,517	0.38

\* For a complete list of holdings contact the Manager of Investment Policy & Communications

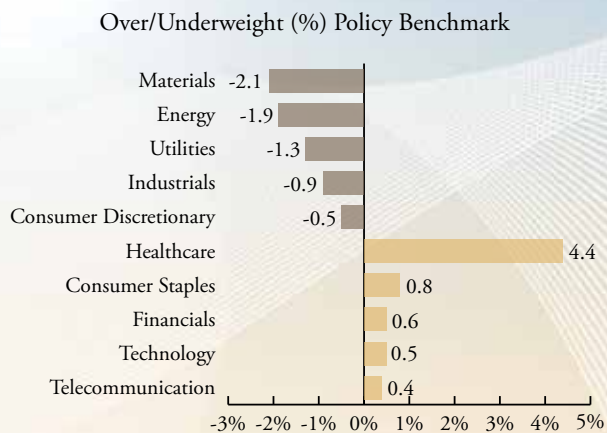
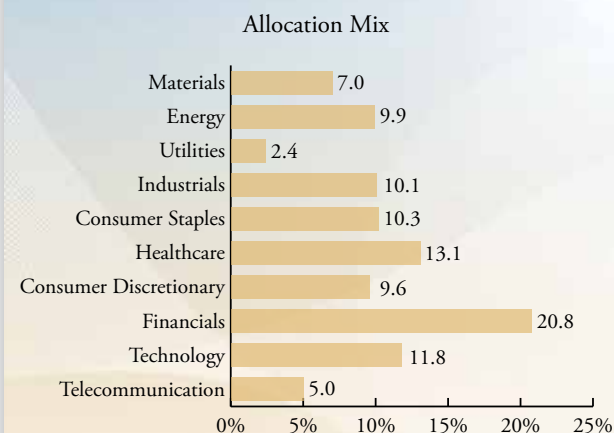
### Public Equity - Brokerage Activity

Brokerage Firm	Shares Traded	Dollar Volume of Trades	Commissions	
			Dollar Amount	Value Per Share
Weeden & Company	10,337,368	\$ 250,381,033	\$206,992	\$0.02
Citigroup Global	6,981,816	66,417,847	58,627	0.01
State Street	6,384,680	70,565,567	36,083	0.01
J.P. Morgan	4,604,620	136,434,399	80,888	0.02
Credit Suisse	3,692,335	47,106,287	45,320	0.01
Merrill Lynch	3,646,066	68,892,858	70,034	0.02
BNY Convergenx	3,038,816	66,759,285	56,696	0.02
Morgan Stanley	2,329,530	44,158,707	23,572	0.01
Nomura Securities	2,303,989	7,633,697	13,920	0.01
Pershing	2,082,355	29,906,022	35,164	0.02
RBC Capital Markets Corp.	1,695,899	42,420,342	8,777	0.01
Goldman Sachs & Co.	1,420,097	44,161,283	30,709	0.02
Fidelity Cap Markets	1,344,897	36,331,017	26,870	0.02
Calyon Securities	1,333,959	19,112,170	12,779	0.01
Bernstein Sanford C & Co.	1,159,015	49,062,465	28,874	0.02
Barclays Capital	1,115,590	44,783,466	12,853	0.01
Deutsche Bank	1,027,910	41,054,760	15,431	0.02
Cowen and Co.	1,027,624	31,259,144	21,434	0.02
UBS	1,020,769	17,215,945	17,434	0.02
Lehman Brothers, Inc.	936,300	3,907,745	7,649	0.01
Others (includes 78, each contributing less than 1%)	8,182,658	169,560,969	186,859	0.02
<b>Total</b>	<b>65,666,293</b>	<b>\$1,287,125,008</b>	<b>\$996,965</b>	<b>\$0.02</b>

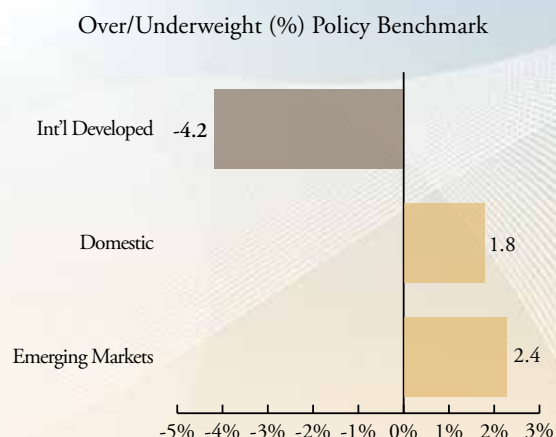
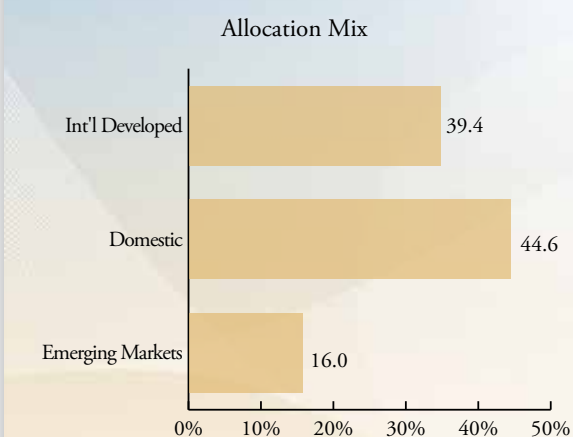
### Public Equity - Soft Dollar Expenditures

Types of Services Acquired	Commissions Used	Percentage of Total
Consulting/benchmarks	\$ 4,592	3.9%
Exchange fees	846	0.7
Market research	69,872	59.4
Pricing services	169	0.1
Research services	24,454	20.8
Trading/analytic services	17,763	15.1
<b>Total</b>	<b>\$117,696</b>	<b>100.0%</b>

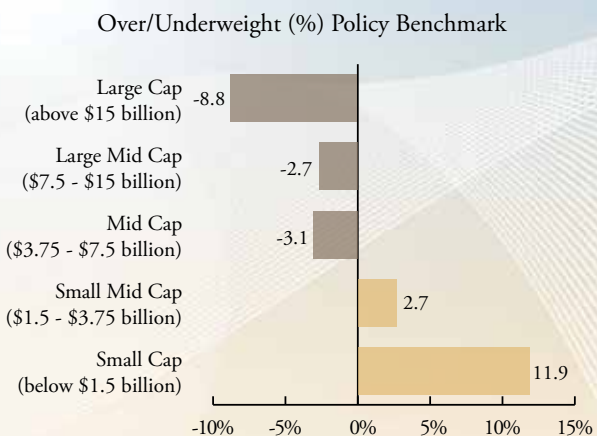
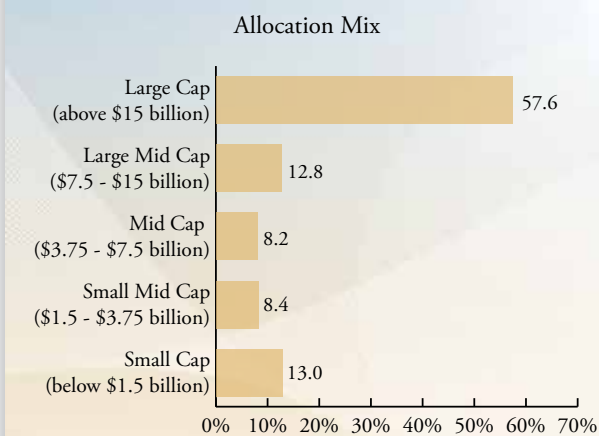
### Public Equity by Sector



### Public Equity by Region



### Public Equity by Market Cap



## DOMESTIC EQUITY

### Market Value

The domestic equity allocation was \$1.6 billion, or 20.5% of the total fund as of June 30, 2011.

### Summary of Portfolio

MOSERS' domestic equity portfolio maintains a significant allocation to publicly traded shares of corporations based in the U.S. Domestic equity exposure is achieved through broadly diversified portfolios representing a variety of styles; sectors, market capitalizations, and an allocation to the Beta/Alpha Program (see pages 101-102 for further details). This portfolio is expected to contribute significantly to the fund's achievement of a long-term real return in excess of the 5.3% objective set by the board. It is expected that this portfolio will perform well in periods of falling inflation and rising growth and offer income potential through dividend payments. MOSERS' allocation to domestic equity of 20.5% was overweight to the policy MSCI ACWI weightings to domestic equity of 19.2% at June 30, 2011. This portfolio was positioned to overweight large multinational U.S. companies. The overweight to these companies was concentrated in the information technology, health care, consumer staples and energy sectors.

### Statistical Performance

The table above displays the statistical performance data (net of fees) of the domestic equity portfolio, as of June 30, 2011.

### Domestic Equity - Statistical Performance

Portfolio Characteristics	1 Year	3 Year	5 Year	10 Year
Annualized return	29.6%	2.5%	3.8%	4.0%
Annualized standard deviation	12.34%	18.61%	15.68%	15.60%
Sharpe ratio	2.39	0.12	0.12	0.13
Excess return*	(1.09)%	(0.17)%	1.31%	1.00%
Beta*	0.88	0.85	0.85	0.95
Annualized alpha*	2.26%	0.04%	1.51%	1.13%
Correlation*	0.99	0.97	0.97	0.97

\* As compared to the domestic equity policy

### Domestic Equity - Investment Advisors

Investment Advisors	Style	Portfolio Market Value
Beta/Alpha Program	Active	\$ 789,586,466
Blackstone Hedged Equity	Hedged equity	102,269,288
DG Capital	Active all-cap growth	154,535,090
Eminence Capital	Hedged equity	77,377,974
Glenview Capital	Hedged equity	42,172,269
Legg Mason Opportunity Trust	Active all-cap growth	72,156,974
Leuthold Weeden	Active all-cap growth	183,512,561
Pershing Square	Hedged equity	43,207,086
TPG-Axon	Hedged equity	49,541,189
Viking Global Investors	Hedged equity	95,878,204
		<u>\$1,610,237,101</u>

### Investment Advisors

As of June 30, 2011, MOSERS had contracts with nine external investment advisors who manage assets that comprise 51.2% of the domestic equity portfolio. The remaining 48.8% of the portfolio is in the Beta/Alpha Program described on pages 101-102.

In FY11, there were two managers hired and none terminated in the domestic equity portfolio. Management expenses for these managers can be found on pages 76-77 under the total fund overview section of this report.

## INTERNATIONAL DEVELOPED EQUITY

### Market Value

As of June 30, 2011, the international developed equity allocation was \$1.4 billion or 17.7% of the total fund.

### Summary of Portfolio

The international developed equity portfolio consists of publicly traded shares of corporations based in non-U.S., developed countries. Equity exposure is achieved through broadly diversified portfolios representing a variety of styles; sectors, market capitalizations, and an allocation to the Beta/Alpha Program (see pages 101-102 for further details). This portfolio is expected to contribute significantly to the fund's achievement of a long-term real return in excess of the 5.3% objective set by the board. It is expected that this portfolio will perform well in periods of falling inflation and rising growth and offer income potential through dividend payments. As of June 30, 2011, MOSERS' allocation of 17.7% was underweight to the policy MSCI ACWI weighting of 19.6% for international developed countries.

### Statistical Performance

The table above displays the statistical performance data (net of fees) of the international developed equity portfolio as of June 30, 2011.

### International Developed Equity - Statistical Performance

Portfolio Characteristics	1 Year	3 Year	5 Year	10 Year
Annualized return	28.9%	6.7%	7.2%	9.2%
Annualized standard deviation	14.85%	19.89%	16.51%	14.97%
Sharpe ratio	1.94	0.32	0.32	0.48
Excess return*	(1.46)%	8.24%	5.17%	3.28%
Beta*	0.84	0.74	0.74	0.79
Annualized alpha*	2.87%	7.07%	5.09%	4.05%
Correlation*	0.99	0.97	0.97	0.97

\* As compared to the international developed equity policy

### International Developed Equity - Investment Advisors

Investment Advisors	Style	Portfolio Market Value
Baillie Gifford, Ltd.	Active growth int'l developed	\$ 129,417,680
Beta/Alpha Program Int'l Equity	Active	441,661,592
Morant Wright Management, Ltd.	Active Japan	92,484,426
Nippon Value Investors	Active Japan	90,633,365
Silchester International Investors	Active value int'l developed	620,316,732
Miscellaneous Int'l Developed	Active	635,293
		<u>\$1,375,149,088</u>

### Investment Advisors

As of June 30, 2011, MOSERS had contracts with four external investment advisors who manage assets that comprise 67.2% of the international developed equity portfolio. The remaining 32.8% of the portfolio is in the Beta/Alpha Program described on pages 101-102.

In FY11, there were no managers hired and one terminated in this portfolio. Management expenses for these managers can be found on pages 76-77 under the total fund overview section of this report.

## EMERGING MARKET

### Market Value

As of June 30, 2011, the emerging market equity portfolio was \$568 million, or 7.3% of the total fund.

### Summary of Portfolio

The emerging market equity allows for participation in publicly traded shares of corporations based in the emerging economies across the globe. This equity exposure is achieved through broadly diversified portfolios representing a variety of styles; sectors, market capitalizations, and an allocation to the Beta/Alpha Program (see pages 101-102 for further details). The emerging markets equity portfolio is expected to contribute significantly to the fund's achievement of a long-term real return in excess of the 5.3% objective set by the board. As of June 30, 2011, MOSERS' allocation of 7.3% was overweight to the policy MSCI ACWI weighting of 6.2% for emerging market countries. This portfolio provides diversification associated with holding non-dollar assets and offers some of the best fundamental valuations available from equity markets around the globe.

### Statistical Performance

The table above displays the statistical performance data (net of fees) of the emerging markets equity portfolio as of June 30, 2011.

### Emerging Market - Statistical Performance

Portfolio Characteristics	1 Year	3 Year	5 Year	10 Year
Annualized return	25.0%	3.7%	13.7%	18.3%
Annualized standard deviation	15.23%	28.98%	23.94%	21.30%
Sharpe ratio	1.63	0.12	0.49	0.76
Excess return*	(2.78)%	(0.51)%	2.18%	1.87%
Beta*	0.88	0.91	0.84	0.86
Annualized alpha*	0.63%	(0.49)%	3.36%	3.57%
Correlation*	0.99	0.98	0.96	0.97

\* As compared to the emerging market policy

### Emerging Market - Investment Advisors

Investment Advisors	Style	Portfolio Market Value
Beta/Alpha Program	Index	\$169,509,484
Blakeney Management	Active value frontier markets	138,500,040
GMO, LLC	Active growth	179,701,561
State Street Global Advisors	Index	80,534,038
Miscellaneous emerging markets	Index	458,561
		<u>\$568,703,684</u>

### Investment Advisors

As of June 30, 2011, MOSERS had contracts with three external investment advisors who manage assets that comprise 70.1% of the emerging market equity portfolio. The remaining 29.9% of the portfolio is in the Beta/Alpha Program described on pages 101-102.

In FY11, there was one manager hired and none terminated in the emerging markets portfolio. Management expenses for these managers can be found on pages 76-77 under the total fund overview section of this report.

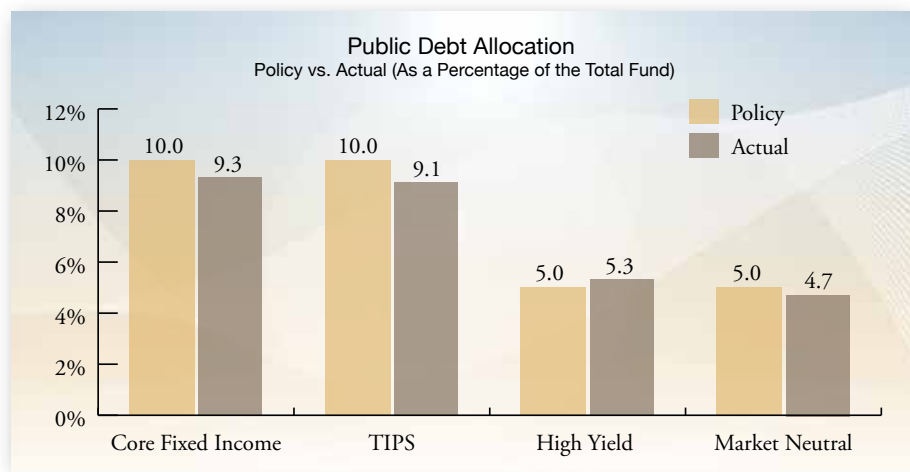
## Public Debt Asset Class Summary

*As of the fiscal year ending June 30, 2011, the public debt allocation had a market value of \$2.2 billion, representing 28.4% of the total fund. Performance for the fiscal year was 9.6%, net of fees and expenses.*

### Highlights

There were some modest tactical changes made to the public debt portfolio during the fiscal year. Here are a few of the highlights:

- The substantial overweight to treasuries initiated in 2007 was maintained, with the offsetting underweight coming primarily from investment grade corporate securities and government guaranteed mortgages.
- The addition of emerging market debt managers was implemented in both the core and high yield portfolios, adding significantly to portfolio yield and non-dollar currency exposure.
- The overweight to high yield was reduced throughout the year as credit spreads narrowed. The high yield allocation diminished from 6.9% to a 5.3% weight, which is almost a neutral position compared to the policy weight of 5%.
- Within high yield, significant exposure continued to be maintained in security classes carrying attributes of high yield that are not represented within the benchmark, namely bank loans and mortgage securities/whole loans. These non-index



securities are generally believed to carry more protection in downside scenarios and, in some cases, offer inflation protection in the form of floating rate coupons.

### Portfolio Structure

The public debt portfolio has a target allocation of 30% of the total fund. This portfolio is comprised of four sub-asset classes which include core fixed income, high yield bonds, Treasury Inflation Protected Securities (TIPS) and market neutral. The bar chart above illustrates the actual sub-asset allocations relative to the board's policy allocation for each of these sub-asset classes. Differences as of fiscal year end reflect the CIO's strategic decisions to overweight or underweight sub-asset classes.

### Market Overview

A recovery in the financial markets and economic activity that began in the first half of calendar year 2009 continued throughout most of FY11 with some signs of fading in the last two months of the fiscal year due, in part, to the end of stimulus programs, both perceived and actual. As of the end of FY11, the federal

funds target rate was zero to 0.25% and the Federal Reserve Board (Fed) stated that the economic recovery was continuing at a moderate pace, though somewhat more slowly than expected.

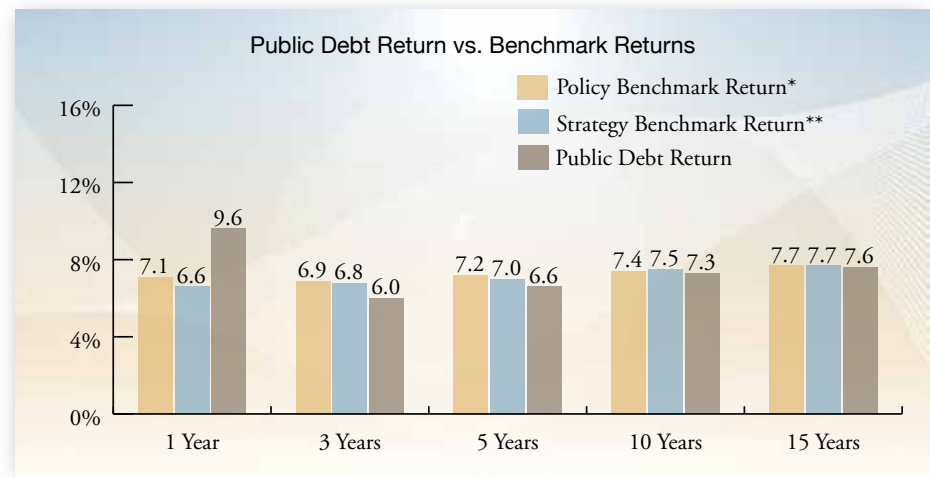
The Fed completed its second round of quantitative easing at the end of FY11, but will continue to reinvest principal payments from its security holdings so as to preclude an abrupt discontinuance of its massive purchasing program and not be viewed as tightening monetary policy. The Fed has maintained its zero interest rate policy since December 2008.

Long treasury rates continued to exhibit a higher level of volatility that began in 2008. Rates started FY11 at 3.89% and ended at 4.37%, with yields ranging from 3.51% to 4.77% during the period. Short-term rates remained low as the Fed maintained the federal funds rate constant, and market participants continued to show a strong interest in the short-end seeking liquidity and safety. The yield curve steepened significantly during the fiscal year, continuing to be historically steep.

On the economic front, the declines in all areas of the housing market that began in 2007 started to modestly improve in 2009 and have softened again in FY11.

The housing market was helped by low mortgage rates and home buyer tax credits in FY10. A delayed pace of foreclosures and a large “shadow” inventory continue to overhang the housing market and have put additional pressure on housing prices. GDP was growing at an approximate 3.8% year-over-year rate at the start of the fiscal year and has weakened to a 1.3% rate by the end of FY11. Year-over-year CPI began FY11 at 1.1% and increased to 3.6% by the fiscal year end largely due to the food and energy components of the index. The U.S. and other world governments continue to withdraw fiscal and monetary stimulus and, as a result, by the end of FY11, many of the economic indicators had stopped improving or reversed their positive trends.

The broad debt market as represented by the Barclays Capital Aggregate Index experienced a return of 3.9% during the fiscal year. The three major components of the Aggregate Index, in order of their size contributions to the index, are the securitized segment (largely mortgage-backed securities), treasuries and corporates. Fiscal year returns for these broad market components were 2.2%, 4.4% and 6.3%, respectively. Apart from the Aggregate Index are three other important segments of the bond market, TIPS, high yield and external emerging markets debt (as distinguished from local



\* As of 6/30/11, the public debt policy benchmark was comprised of the following components: 32.8% core bond consisting of various components of debt indices and actual portfolio returns; 31.7% Barclays U.S. TIPS; 18.8% high yield consisting of various components of debt indices and actual portfolio returns; and 16.7% T-Bills + 4%.

\*\* As of 6/30/11, the public debt strategy benchmark was comprised of the following components: 22.7% core bond consisting of actual return of beta fixed income; 34.3% Barclays U.S. TIPS; 29.2% high yield consisting of Barclays High Yield, CSFB Leverage Loan Index, and actual return of Bayview; and 13.8% T-Bills + 4%.

currency denominated or internal debt). Fiscal year returns for these bond market segments were 7.7%, 15.6% and 11.4%, respectively. Yield premiums for credit risk diminished considerably commensurate with general economic improvement. The degree of credit improvement is best measured by investment grade corporate spreads, which narrowed by 44 basis points over the fiscal year and high yield spreads having narrowed by 173 basis points.

Overall, the general theme for FY11 was financial markets continuing to recover from the turmoil experienced in 2008. World government intervention through monetary and fiscal stimulus helped improve the global economy, but the overhang of large debt burdens in several developed countries (with European sovereigns being of particular focus in 2011) continues to cause financial stress in the global financial markets and economies. Global growth has

been muted, as over-indebted countries implement austerity programs and governments have de-escalated the monetary and fiscal stimulus that was implemented during the crisis. The Fed is positioned to keep interest rates at current levels for an extended period of time with a goal to carefully monitor economic and market activity for changes in the event of a need to modify the quantitative easing policy either in the direction of a further ease (economy showing signs of contraction) or tightening and, ultimately, complete removal of easing measures (economy normalizes and inflation becomes a threat).

## Performance

The public debt portfolio returned 9.6% for the fiscal year, significantly outperforming the policy benchmark return of 7.1% and the strategy benchmark return of 6.6%. The bar chart at the top of the page illustrates performance over longer periods of time.

During the fiscal year, the outperformance relative to the policy benchmark was attributable to the implementations primarily within core fixed income and secondarily to a much lesser degree within market neutral. The portfolio is currently positioned with less interest rate risk than is the policy benchmark, a factor that may enable better long-term performance relative to the benchmark as interest rates are at historical lows and likely will rise in the event of a more sustained economic recovery, although imminent recovery may not be attainable over the next several quarters due, in large part, to the headwinds of the European debt crisis and its collateral impact upon the global banking system.

### Top Ten Holdings

The top ten publicly traded separate account holdings within the public debt portfolio as of fiscal year end are illustrated in the table above.

### Brokerage Activity

During the fiscal year, MOSERS generated public debt brokerage activity, as shown in the table to the right.

### Public Debt - Top Ten Publicly Traded Separate Account Holdings

Ten Largest Holdings as of June 30, 2011*	Market Value	Percent of Total MOSERS Public Debt Portfolio
U.S. Treasury Inflation Index Note - 2.000%, 2014	\$138,549,029	6.2%
U.S. Treasury Inflation Index Bond - 2.375%, 2025	102,034,011	4.6
U.S. Treasury Inflation Index Note - 2.625%, 2017	92,939,201	4.2
U.S. Treasury Inflation Index Note - 2.375%, 2017	57,683,882	2.6
U.S. Treasury Inflation Index Bond - 2.375%, 2027	53,909,779	2.4
U.S. Treasury Inflation Index Bond - 2.000%, 2026	49,111,336	2.2
U.S. Treasury Inflation Index Note - 0.500%, 2015	46,379,717	2.1
U.S. Treasury Inflation Index Note - 0.125%, 2016	45,880,170	2.1
U.S. Treasury Bond - 3.875%, 2040	28,026,539	1.3
U.S. Treasury Inflation Index Bond - 1.750%, 2028	26,654,108	1.2

\* For a complete list of holdings contact the Manager of Investment Policy & Communications

### Public Debt - Brokerage Activity

Broker/Dealer Firm	Par Amount Traded	Market Value Traded	Percent of Total Trading Volume by Market Value
Barclays	\$206,449,571	\$224,090,260	29.1%
Citigroup	108,384,140	133,418,201	17.3
Credit Suisse	85,382,323	92,983,847	12.1
JP Morgan	67,716,934	71,417,768	9.3
Deutsche Bank	50,566,466	57,350,342	7.4
Merrill Lynch	51,576,625	53,773,238	7.0
UBS	21,589,199	27,586,636	3.6
Morgan Stanley	23,128,902	24,231,515	3.1
Goldman Sachs	22,225,311	23,119,141	3.0
RBS	7,489,300	8,656,449	1.1
Santander	7,881,871	8,329,010	1.1
Wells Fargo	7,782,375	8,323,053	1.1
Other (Includes 32, each contributing less than 1%)	48,256,397	37,038,000	4.8
<b>Totals</b>	<b>\$708,429,414</b>	<b>\$770,317,460</b>	<b>100.0%</b>



## CORE FIXED INCOME

### Market Value

The core fixed income allocation was \$726.8 million as of fiscal year end, or 9.3% of the total fund and below its policy target of 10%.

### Summary of Portfolio

The core fixed income sub-asset class gives the total fund exposure to high quality fixed income instruments which, in turn, provides stable cash flows and excellent liquidity to the portfolio. Types of fixed income securities that may be held within this portfolio include U.S. Treasuries, mortgage-backed securities, asset-backed securities, agency securities, investment-grade corporate securities and international investment grade securities. Core fixed income is also the one portfolio within the public debt asset class that can efficiently be implemented synthetically due to the wide availability of treasury futures and swaps and their acceptance as mainstream instruments of portfolio management. Synthetic implementation of core exposure has been widely used since the addition of the Beta/Alpha Program in FY05. Beta/alpha within the core fixed income portfolio is expected to be an efficient means of achieving superior risk adjusted returns over an entire economic cycle. Please refer to the section on beta/alpha on pages 101-102 for a more complete description of the program and its rationale. The core fixed income asset portfolio provides meaningful diversification to the fund

### Core Fixed Income - Statistical Performance

Portfolio Characteristics	1 Year	3 Year	5 Year	10 Year
Annualized return	10.6%	8.3%	8.2%	6.6%
Annualized standard deviation	3.58%	6.73%	5.47%	4.83%
Sharpe ratio	2.94	1.18	1.11	0.91
Excess return*	6.75%	1.86%	1.65%	0.80%
Beta*	1.02	1.31	1.19	1.09
Annualized alpha*	6.26%	(0.11)%	0.45%	0.30%
Correlation*	0.77	0.81	0.78	0.85

\* As compared to the core fixed income policy benchmark.

### Core Fixed Income - Investment Advisors

Investment Advisor	Style	Portfolio Market Value
Beta/Alpha Program	Active	\$673,773,981
Stone Harbor Investment Partners, LP	Emerging Markets Debt	53,023,399
Total		<u>\$726,797,380</u>

in a variety of different economic scenarios. Core fixed income performs well, but would typically lag equities, in periods of good economic growth and falling inflation. One should also expect adequate performance from this portfolio in periods of falling growth and stable inflation.

### Statistical Performance

The table above displays statistical performance data (net of fees) for the core fixed income portfolio as of fiscal year end.

### Investment Advisors

As of June 30, 2011, MOSERS had one contract with an external investment advisor for the management of a separate fixed income portfolio of investment grade emerging markets debt. The core fixed income portfolio also participates

in the Beta/Alpha Program. In the program, beta and alpha are completely separated such that the beta exposure is gained through synthetic replication of the core components and the alpha is gained through the alpha pool managers.

The bottom table displays the investment advisor that was under contract with MOSERS for FY11 for the management of core fixed income portfolios. Information regarding management fees paid to this manager may be found on pages 76-77 of this report.

## HIGH YIELD BONDS

### Market Value

The high yield bonds allocation was \$413.0 million as of fiscal year end, or 5.3% of the total fund.

### Summary of Portfolio

The high yield bonds portfolio invests in debt securities whose credit ratings are below investment grade quality. Relative to the core fixed income portfolio, this sub-asset class provides superior coupon cash flow, as well as some diversification benefit due to a reduced sensitivity to changes in interest rates. MOSERS views this allocation as one that is likely to be variable and very much dependent upon the particular stage of the economic cycle being experienced at the time of the allocation decision. As of fiscal year end, MOSERS was slightly over the 5% policy target allocation to high yield bonds.

### Statistical Performance

The table at the top of the page displays the statistical performance data (net of fees) for the high yield bond portfolio as of fiscal year end.

### Investment Advisors

As of fiscal year end, MOSERS had contracts with six external investment advisors for the management of the high yield bonds portfolio. Information related to these advisors is included in the bottom table to the right. For information on management fees paid, consult the table on pages 76-77 of this report.

### High Yield Bonds - Statistical Performance

Portfolio Characteristics	1 Year	3 Year	5 Year	Since Inception (Oct. 2001)
Annualized return	12.6%	6.9%	4.6%	7.8%
Annualized standard deviation	3.10%	13.37%	11.12%	8.77%
Sharpe ratio	4.02	0.49	0.23	0.64
Excess return*	(3.04)%	(5.74)%	(4.59)%	(1.92)%
Beta*	0.50	0.69	0.68	0.68
Annualized alpha*	4.64%	(1.66)%	(1.50)%	1.20%
Correlation*	0.84	0.88	0.84	0.85

\* As compared to the high yield bond policy benchmark.

### High Yield Bonds - Investment Advisors

Investment Advisors	Style	Portfolio Market Value
Ashmore Investment Management, Ltd.	Emerging markets debt	\$ 51,514,223
Bayview Asset Management, LLC	Opportunistic mortgages	77,547,539
BlackRock Financial Management, Inc.	Active high yield bonds, loans and nonagency MBS	253,266,909
Fortress Investment Group, LLC	Opportunistic mortgages	26,656,392
NISA Investment Advisors, LLC	EURO currency hedge	20,127
OCM Capital Management, LLC	Opportunistic European loans	4,024,261
Total		<u>\$413,029,451</u>

## TREASURY INFLATION PROTECTED SECURITIES (TIPS)

### Market Value

The TIPS allocation was \$714.7 million or 9.1% of the total fund as of fiscal year end.

### Summary of Portfolio

TIPS are fixed income securities issued and guaranteed by the U.S. government. The yield on these securities is specifically tied to inflation, as measured by the U.S. consumer price index, plus a predetermined yield above and beyond inflation (real yield). The TIPS allocation provides an excellent match relative to the system's liabilities in terms of its ability to provide inflation protection. As of June 30, 2011, MOSERS' allocation was below the 10% policy target allocation to TIPS.

### Statistical Performance

The table above displays the statistical performance data (net of fees) for the TIPS portfolio as of fiscal year end.

### Investment Advisors

As of fiscal year end, the TIPS portfolio was 100% internally managed. The bottom table summarizes the details.

### TIPS - Statistical Performance

Portfolio Characteristics	1 Year	3 Year	5 Year	10 Year
Annualized return	7.7%	5.5%	7.1%	8.0%
Annualized standard deviation	4.70%	8.61%	7.45%	8.71%
Sharpe ratio	1.62	0.59	0.67	0.67
Excess return*	0.00%	0.22%	0.22%	0.21%
Beta*	1.01	1.01	1.01	1.01
Annualized alpha*	(0.09)%	0.18%	0.17%	0.12%
Correlation*	1.00	1.00	1.00	1.00

\* As compared to the TIPS policy benchmark.

### TIPS - Investment Advisors

Investment Advisors	Style	Portfolio Market Value
Internal staff	Passive	\$714,700,270

## MARKET NEUTRAL

### Market Value

As of fiscal year end, the market neutral allocation was \$370.3 million, or 4.7% of the total fund.

### Summary of Portfolio

The market neutral portfolio consists of a variety of managers who utilize skill-based investment strategies, which allow them to take advantage of periodic inefficiencies that may exist within the market. The expectation for this sub-asset class is to produce consistent absolute returns in various economic environments. More directly, it is expected that this portfolio will generate returns of 4% in excess of returns on 90-day Treasury bills with similar volatility to what is expected from the core fixed income portfolio. Market neutral investments also provide diversification and downside protection to the portfolio. MOSERS utilizes its Beta/Alpha Program described on pages 101-102 to gain exposure to this sub-asset class. This allows MOSERS to invest in an extremely diversified pool comprised of a variety of different types of strategies that provide additional risk protection and alpha that has minimal exposure to both the stock and the bond markets. As of fiscal year end, MOSERS was slightly under the 5% policy target allocation to market neutral.

### Market Neutral - Statistical Performance

Portfolio Characteristics	1 Year	3 Year	5 Year	Since Inception (Dec. 2002)
Annualized return	7.8%	2.2%	4.0%	5.0%
Annualized standard deviation	2.43%	5.82%	4.93%	4.02%
Sharpe ratio	3.14	0.31	0.37	0.70
Excess return*	3.61%	(2.12)%	(1.91)%	(0.96)%
Beta as compared to S&P 500	0.12	0.17	0.16	0.14
Beta as compared to Barclays Aggregate	(0.11)	0.33	0.11	0.08

\* As compared to the market neutral policy benchmark (T-bills + 4%).

### Market Neutral - Investment Advisors

Investment Advisors	Style	Portfolio Market Value
Alpha program	Market neutral	\$370,287,128

### Statistical Performance

The top table displays the statistical performance data (net of fees) for the market neutral portfolio as of fiscal year end.

### Investment Advisors

MOSERS' market neutral exposure is captured through the managers comprising the alpha program, which is detailed on pages 101-102. The bottom table summarizes MOSERS' market neutral investment within this pool as of fiscal year end. Information on manager fees paid can be found on pages 76-77 of this report.

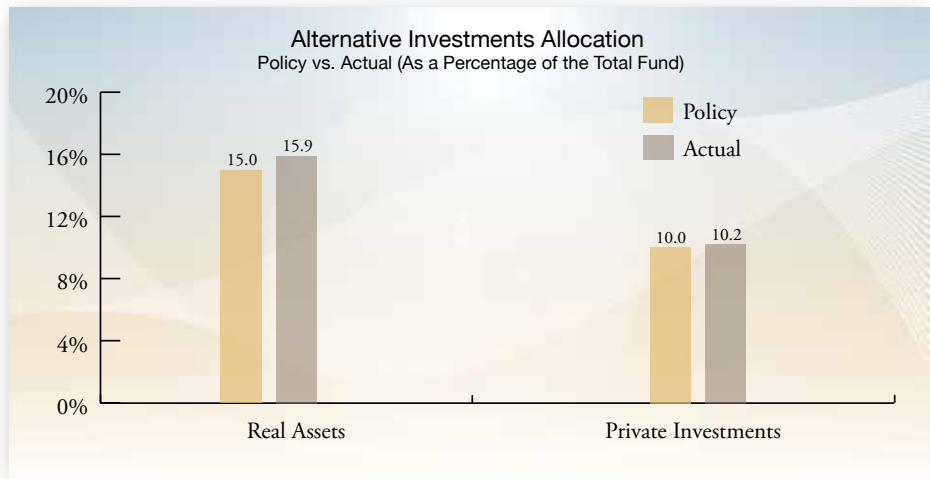
## Alternative Investments Asset Class Summary

As of June 30, 2011, the alternative investments portfolio had a market value of \$2.0 billion, representing 26.1% of the total fund. For the fiscal year, the asset class returned 21.3%, net of fees and expenses.

### Highlights

During FY11, there were a number of developments within the alternative investment portfolio. Below are a few highlights from this diverse portfolio:

- The broad set of markets into which the alternative investments portfolio invests had, for the most part, a very strong year as markets globally continued to recover. The recovery and future growth estimates have varied by country and region as investors continue to deal with a number of macro-economic issues.
- The alternative investments portfolio is divided into sub-asset classes: private investments and real assets. Both portfolio components returned in excess of 20% for the fiscal year. These returns are very good on an absolute return basis and are far in excess of their expected average annual returns.
- MOSERS committed capital to a number of existing managers as well as to a few new relationships. These commitments were made to strategies where additional exposure was desired or to strategies that were under-represented in the total fund's portfolio. These strategies are expected to achieve compelling returns while providing additional diversification to the alternative investments portfolio.



### Alternative Investments Correlations - 5 Year Period

Sub-Asset Class	Real Estate	Commodities	Timber	Private Equity	Private Debt
Real estate	1.00				
Commodities	0.24	1.00			
Timber	(0.01)	(0.09)	1.00		
Private equity	0.64	0.31	0.20	1.00	
Private debt	0.43	0.60	0.00	0.54	1.00

- Within the real assets, an overweight to master limited partnerships was maintained throughout the fiscal year and within commodities, an overweight to gold added to the return of the real assets sub-class.

### Portfolio Structure

The alternative investments portfolio is, by asset allocation policy, targeted to represent 25% of the total fund. This allocation is divided into two sub-asset classes: real assets and private investments. The real assets portfolio has a policy target allocation of 15%, which is further divided into three segments: commodities, timber and real estate. The private investments sub-asset class has a target allocation of 10% of total fund assets. This portfolio invests in two areas: private equity and private debt.

At June 30, 2011, the alternative investments portfolio accounted for 26.1% of the total fund, a bit above the target allocation. Both sub-asset classes were above their targeted amount with private investments at 10.2%, and real assets at 15.9%. The bar chart above illustrates the actual allocations relative to the board's policy allocation. The alternative investments portfolio is made up of a broad group of assets each with their own return and risk characteristics. This portfolio provides additional diversification at the total fund level. The table above shows the five investment components and their correlation to each other.

### Market Overview

The alternative investments portfolio contains assets across a broad range. Investments in this portfolio vary

significantly in terms of return expectations, risk profiles, liquidity, method of implementation, etc. The paragraphs that follow provide a brief description of each of the markets and some data on how they performed during the fiscal year.

Commodities are made up of a number of real, tangible assets that are either part of the food supply, consumed in the production of goods or used in the manufacture of end-products. Indexes that track the performance of the commodity markets typically contain items from a variety of areas such as energy, industrial metals, precious metals, agriculture and livestock. While each commodity has a specific use, each has its own supply/demand characteristics. A common index used to track commodities is the S&P GSCI (Standard & Poor's, Goldman Sachs Commodity Index). This index contains 24 individual commodities within the areas previously listed. This particular index uses world production to assign weights, and therefore has a high allocation to the energy sector and its six underlying components. Over the fiscal year, the S&P GSCI returned 26.1%, on a total return basis. Energy, which makes up almost 70% of the index, was one of the lower performing sectors behind the agricultural, industrial metals and precious metals sectors.

The real estate market encompasses a large and diverse group of assets. Real estate is differentiated by geography, property type, stage of development, and whether it is traded on an exchange or held privately.

The institutional real estate market is made up of a variety of property types: office, industrial, retail, multi-family and hotel. For benchmark purposes, MOSERS uses the Dow Jones REIT (Real Estate Investment Trust) Index to measure the performance of its real estate portfolio. This particular index measures performance of the publicly traded REIT securities in the U.S. For the fiscal year ended June 30, 2011, the index returned 34.9%. The previous fiscal year was also very favorable as the index returned 55.7%. However, when viewed over a longer timeframe, like the five years ended June 2011, the index returned 1.7%, annualized. Without the positive performance over the two most recent years, the longer term returns for this investment would have been substantially negative.

Timber, the remaining component of the real assets sub-asset class, has some characteristics that differentiate it from other assets. Besides its long term nature and illiquidity, timber is an investment where it can really pay to wait. As an example, when markets are weak and harvesting is undesirable the tree can be left on the stump where it continues to grow. This optionality can be a benefit during periods of market weakness. To measure performance, MOSERS uses the NCREIF Timberland Index. This index tracks the return of private timberlands in the south, northwest and northeast regions of the U.S. Over the most recent fiscal year the index returned 0.5%.

Both the equity and debt segments of the private investments portfolio had a good year returning 20.3% and 25.2%, respectively. Benchmarking

this sub-asset class has always been a challenge. In order for a benchmark to be relevant several criteria need to be met. The benchmark should be identifiable, it should be investable, it should be possible to calculate the benchmark frequently, it should be specified in advance and it should be consistent with the manager's investment style. In private markets these criteria are not met with any degree of consistency. In order to cope with this benchmark issue, private market investors typically use a variety of less than perfect alternatives.

One methodology used by the industry is to add a risk premium to an index of publicly traded securities. The rationale is that an investor in the private markets should expect to receive a return above that offered by the public markets. This incremental return is needed to compensate for the added risk and illiquidity associated with private investments. Using this method, the private investments benchmark returned 33.7% for the fiscal year recently ended. This benchmark return was calculated by combining a 3.0% premium with the return of the S&P (Standard & Poor's) 500 Index over the same time period.

The alternative investments portfolio is comprised of several strategies within each sub-asset class. The performance of this portfolio and some of the underlying strategies will be discussed in the next section.

### Performance

The alternative investments portfolio returned 21.3%, which trailed the policy benchmark return of 24.7%,

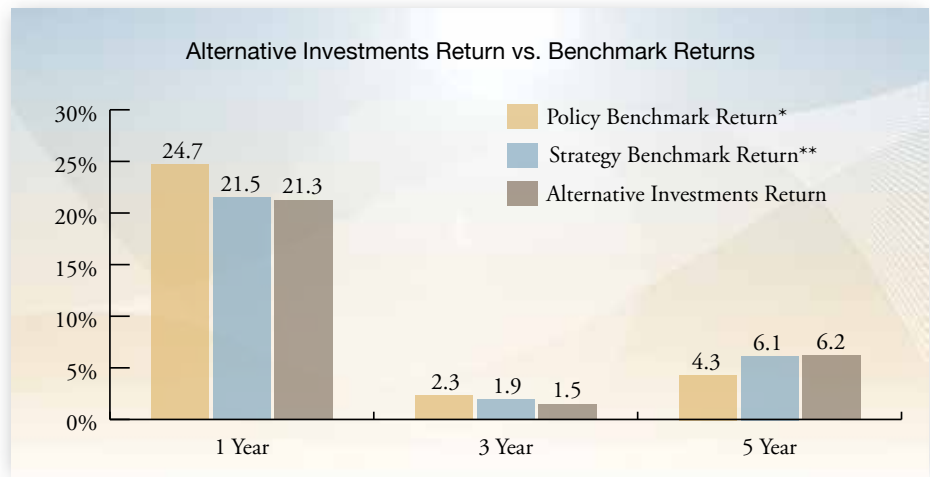
and was just below the strategy benchmark return of 21.5% for the fiscal year ending June 30, 2011.

The performance at the alternative investments portfolio level is the combined performance of the real assets (real estate, timber and commodities) and private investments (private equity and private debt) portfolios. In FY11, the real assets portfolio returned 20.6%, while the private investments portfolio returned 22.4%. The 1-year returns of the five components were quite pleasing with four of the five above the 20.0% level. These returns all fall within the expected range of outcomes for assets of this type.

The portfolio has outperformed both its policy and strategy benchmarks for the 5-year period ended June 30, 2011, as illustrated in the bar chart to the right.

The policy benchmark for the alternative investments portfolio is a weighted average based on the allocation mix and the policy benchmark of each component. In order to determine the amount of value-added, the actual return is compared with the policy benchmark. During FY11, the alternative investments portfolio underperformed the policy benchmark by 3.4%. The vast majority of the shortfall can be attributed to the private investments portfolio, which returned 22.4%. While this return is very good, it did not keep pace with the 33.7% return of the S&P 500 Index plus 3% benchmark.

The alternative investments portfolio return trailed the strategy benchmark by 0.2% during FY11. As described



\* As of 6/30/11, the alternative investments policy benchmark was comprised of the following components: 24% Wilshire REIT, 24% NCREIF Timberland, 40% S&P500 + 3%, and 12% GSCI.

\*\* As of 6/30/11, the alternative investments strategy benchmark was comprised of the following components: 26.9% real estate consisting of NCREIF, STIF Return, S&P MLP TR Index, actual return of Bayview; 9.1% commodities consisting of S&P GSCI TR and S&P GSCI Gold Excess Return; 24.6% NCREIF Timberland 39.4%; and S&P 500 + 3%.

### Alternative Investments Top Ten Publicly Traded Separate Account Holdings

Ten Largest Holdings as of June 30, 2011*	Market Value	Percent of Total MOSERS Alternative Investments Portfolio
U.S. Treasury Bonds - 3.875%, 2040	\$28,026,539	1.4%
Enterprise Products Partners LP	21,929,118	1.1
NCUA Guaranteed Notes - R4 1a, 2020	13,991,924	0.7
NCUA Guaranteed Notes - R1 1a, 2020	13,340,787	0.7
NCUA Guaranteed Notes - 10-R2 2a, 2020	13,100,810	0.6
U.S. Treasury Bond - 5.000%, 2037	12,775,925	0.6
NCUA Guaranteed Notes - R3 1a, 2020	12,556,795	0.6
Plains All American Pipeline LP	12,194,816	0.6
U.S. Treasury Bond - 5.375%, 2031	12,084,350	0.6
NCUA Guaranteed Notes - 11-R5 1a, 2020	11,921,354	0.6

\* For a complete list of holdings contact the Manager of Investment Policy & Communications

in the total fund review section, the strategy benchmark attributes performance to decisions made by staff. These decisions allow staff to either deviate, within parameters, from the policy asset allocation or to make specific investment manager selections.

The strategy benchmark utilizes a set of indexes that are appropriate given the characteristics of the underlying investments. In FY11, the three

components that make up the real assets portfolio all outperformed their respective strategy benchmarks. The two components within the private investments portfolio lagged their strategy benchmark of the S&P 500 Index plus 3%. As was the case with the policy benchmark, the private investments were unable to beat this benchmark given that the public markets, as measured by the S&P 500 Index, returned over 30%.

## Top Ten Holdings

The top ten publicly traded separate account holdings within the alternative investments portfolio as of fiscal year end are illustrated in the table to the left (page 96).

## Brokerage Activity

The table to the right illustrates the brokerage activity occurring within the alternative investments portfolio during the fiscal year. The activity resulted from trading activity in the real assets publicly traded MLP accounts.

## Soft Dollar Expenditures

There were no commissions directed for soft dollar credits during the fiscal year ended June 30, 2011.

## Alternative Investments - Brokerage Activity

Brokerage Firm	Shares Traded	Dollar Volume of Trades	Commissions	
			Dollar Amount	Value Per Share
Baird, Robert W & Co., Inc.	122,523	\$ 3,529,098	\$ 3,676	0.03
Barclays Capital, Inc.	625,012	21,024,824	18,750	0.03
Citigroup Global Markets, Inc.	76,990	1,738,328	2,310	0.03
Credit Suisse	7,653	326,439	230	0.03
Hudson Securities, Inc.	283,713	7,176,241	8,511	0.03
Instinet Corp.	1,056,989	57,977,980	15,070	0.01
J.P. Morgan Securities, Inc.	16,164	788,303	485	0.03
Jonestrading				
Institutional Services, LLC	144,959	3,456,387	4,349	0.03
Madison Williams & Co.	710,395	23,459,827	21,312	0.03
Merlin Securities, LLC	3,397,187	113,512,156	35,252	0.01
Merrill Lynch				
Pierce Fenner Smith, Inc.	51,371	1,726,570	1,541	0.03
Morgan Stanley & Co., Inc.	103,517	2,880,577	3,105	0.03
Pershing, LLC	30,245	1,938,493	907	0.03
Raymond James				
& Associates, Inc.	180,506	5,530,500	5,415	0.03
UBS Securities, LLC	271,642	7,046,811	8,149	0.03
USCA Securities, LLC	47,287	1,641,432	1,419	0.03
Wells Fargo Securities, LLC	48,171	815,710	1,445	0.03
Wunderlich Securities, Inc.	57,900	1,198,633	1,737	0.03
Total	7,232,224	\$255,768,309	\$133,663	0.02

## REAL ASSETS

### Market Value

At the end of FY11, the value of the real assets sub-asset class was \$1.2 billion, representing 15.9% of the total fund.

### Summary of Portfolio

The policy allocation target for real assets is 15% of the total fund. The actual allocation can move within a range of 10% to 20%. As previously discussed, the portfolio is made up of three separate and distinct components with the following market values and percentages of the total fund: commodities, \$250.1 million or 3.2%; timber, \$410.9 million or 5.2%; and real estate, \$588.8 million or 7.5%. Relative to their individual policy target allocations, real estate

and commodities are overweight while timber is underweight. The largest overweight was held in the real estate portfolio, which more than made up for the small underweight in the timber component.

MOSERS obtains its exposure to commodities through an account managed by an external investment advisor. The manager implements the strategy through the use of exchange-traded futures contracts and/or swap agreements. Together the futures/swaps and the underlying cash make up a portfolio that is benchmarked against the S&P GSCI. Occasionally, the manager or MOSERS will attempt to add incremental return as market opportunities are identified.

The timber portfolio is made up of timberlands located in the southeast and northwest regions of the U.S., as well as in Australia, New Zealand and South America. The portfolio is diversified by age, geography and species. The strategy is implemented through three Timber Investment Management Organizations (TIMOs). The timber component is expected to provide economic diversification by providing growth and protection against rising inflation. As previously mentioned, timber has characteristics that are beneficial during periods of economic stress. For instance, timber continues to grow regardless of economic conditions. Also, when sawlog prices are weak the TIMO can manage the harvest to maximize the value of the properties.



MOSERS' real estate portfolio is comprised of investments in private real estate partnerships as well as select strategies that have characteristics that are similar to those of real estate. A diversified group of private real estate holdings is the predominant asset within the portfolio. These holdings should, over long periods of time, provide returns that are higher than those provided by publicly-traded REIT securities. The excess return is expected to be derived from the opportunistic strategies which the manager pursues, the value enhancements the manager can provide through their specialized skill and the illiquidity premium associated with owning private assets. The portfolio also holds income producing assets that have the potential to experience moderate capital appreciation. These assets include Master Limited Partnerships (MLPs), oil and gas assets and private debt investments.

### Statistical Performance

The table above displays the statistical performance data (net of fees) of the real assets portfolio as of June 30, 2011.

### Investment Advisors

MOSERS' exposure to real assets is captured through portfolios managed by 11 external investment firms and staff. There were no new managers added during the fiscal year however, additional capital was entrusted to one of the long-standing managers that specializes in private energy. The bottom table shows the investment advisors in place as of the end of June 2011.

### Real Assets - Statistical Performance

Portfolio Characteristics	1 Year	3 Year	5 Year	Since Inception (July 2002)
Annualized return	20.6%	1.3%	7.7%	10.4%
Annualized standard deviation	5.84%	9.40%	8.26%	8.64%
Sharpe ratio	3.50	0.10	0.68	0.96
Excess return*	1.72%	1.82%	4.37%	1.95%
Beta*	0.43	0.27	0.27	0.40
Annualized alpha*	11.38%	1.33%	6.56%	6.70%
Correlation*	0.59	0.58	0.53	0.64

\* As compared to the real assets policy benchmark.

### Real Assets - Investment Advisors

Investment Advisors	Style	Portfolio Market Value
Bayview Asset Management	Residential mortgages	\$ 13,684,860
Blackstone Real Estate Advisors	Active real estate	234,168,047
The Campbell Group	Northwestern U.S. timber	40,994,072
CarVal Investors	Distressed investments	52,000,000
EIG Global Energy Partners	Mezzanine debt, diversified energy	70,857,715
Global Forest Partners	International timber	166,723,782
Harvest Fund Advisors	Active MLPs	95,762,689
Internal Staff	Active duration U.S. Treasuries	73,576,723
Internal Staff	Passive MLPs	89,085,150
Merit Energy	Oil & gas	8,896,388
NISA Investment Advisors	Commodities	250,045,519
Oaktree Capital Management	Active real estate	24,387,451
Resource Management Service	Southeastern U.S. timber	129,641,144
Total		<u>\$1,249,823,540</u>

## PRIVATE INVESTMENTS

### Market Value

The private investments portfolio had a value of \$796.5 million, representing 10.2% of the total fund at the end of the fiscal year.

### Summary of Portfolio

As of June 30, 2011, the private investments allocation was very close to its 10% policy target and almost at the center of the designated range of 5% to 15%. During FY11, the private investments portfolio received distributions from underlying portfolio companies/investments of \$34.4 million in excess of capital contributed. While this outcome is unlikely to occur each and every year, net distributions over long periods of time demonstrate the maturity of a private investments program. By component, private investments included: the private equity portfolio, valued at \$501.7 million or 6.4% of the total fund and the private debt portfolio, valued at \$294.8 million or 3.8% of the total fund.

The private investments portfolio has been built over the past several years. Investments have been made in a broad group of strategies that combine to form a portfolio that is diversified across a number of mandates, vintage years and geographies. The objective of this portfolio segment is to achieve high returns by taking advantage of opportunistic strategies and the illiquidity premium associated with these investments. This portfolio is expected to produce returns in excess of the public equity markets which are measured by the S&P 500 Index

### Private Investments - Statistical Performance

Portfolio Characteristics	1 Year	3 Year	5 Year	Since Inception (Sept. 2002)
Annualized return	22.4%	2.0%	3.7%	12.4%
Annualized standard deviation	4.15%	13.15%	10.84%	12.00%
Sharpe ratio	5.37	0.12	0.15	0.85
Excess return*	(11.27)%	(4.43)%	(1.89)%	(0.22)%
Beta*	0.18	0.47	0.47	0.60
Annualized alpha*	15.09%	(1.05)%	1.01%	4.64%
Correlation*	0.58	0.73	0.74	0.72

\* As compared to the private investments policy benchmark.

plus 3%. Performance is best viewed over a full-market cycle to capture the long-term nature of this asset class.

During FY11, six commitments were made within the private investments portfolio. Three of the investments were made with firms that currently manage private equity assets on behalf of MOSERS. These firms will invest in companies that operate in the defense, technology, power, energy efficiency and financial services sectors. The three new commitments were made to groups that offer differentiated strategies. One private debt commitment was made to a manager that focuses on investing in distressed and undervalued situations in Canada. The next new relationship was formed with a team that invests in private corporations in Brazil. The final new commitment was made to a group that specializes in a variety of aviation and aviation-related opportunities. These new strategies are attractive not only because they are expected to perform well, but they will also provide exposure to markets where MOSERS had no or limited exposure, therefore providing additional diversification to the total fund.

The commitments previously described are part of an overall private investments program that provides exposure to a variety of strategies across a wide range of geographies. This portion of the portfolio provides return and economic diversification to the overall investment portfolio during periods of rising growth and during periods when inflation, both actual and expected, is changing.

### Statistical Performance

The table above displays the statistical performance data (net of fees) of the private investments portfolio as of June 30, 2011.

## Investment Advisors

At the end of the fiscal year, the private investments sub-asset class was invested in a number of strategies including U.S. corporate buyout, European corporate buyout, emerging market private equity, distressed investments, distressed debt, royalties and special situations. These strategies are managed by 23 external investment firms. MOSERS will continue to search for managers and strategies that will allow the private investments sub-asset class to maintain an allocation in-line with the 10% target. The advisors managing investments in this sub-asset class are listed in the table to the right.

### Private Investments - Investment Advisors

Investment Advisors	Style	Portfolio Market Value
Actis Capital	Emerging markets	\$ 34,027,319
Alinda Capital Partners	Corporate buyout	25,767,226
Axiom Asia Private Capital	Emerging markets	10,051,297
Bridgepoint Capital Partners	Corporate buyout; foreign	44,634,556
CarVal Investors	Distressed investments	52,000,000
Catalyst Capital Group	Distressed debt	18,319,823
Catterton Partners	Corporate buyout	45,504,472
DDJ Capital Management	Distressed debt	16,466,454
Development Partners Int'l	Emerging markets	19,196,526
DRI Capital	Royalties	22,159,972
JLL Partners	Corporate buyout	38,451,938
Linden Capital	Corporate buyout	(12,646)
MHR Fund Management	Distressed debt	101,142,725
Millennium Technology Ventures	Direct secondary	9,383,304
New Mountain Capital	Corporate buyout	27,470,044
NISA Investment Advisors*	Equity futures	14,185,979
Oaktree Capital Management	Distressed debt/corporate buyout	109,696,132
OCM/GFI Power Opportunities	Corporate buyout	7,607,038
Parish Capital Partners	Corp. buyout; fund-of-funds	48,782,008
Silver Creek Management	Special situations	58,531,886
Silver Lake Partners	Corporate buyout	20,428,417
TPG Credit Management	Special situations	11,570,547
Veritas Capital Partners	Corporate buyout	61,131,530
Total		<u>\$796,496,547</u>

\* Temporary placeholder for future capital drawdowns to private equity managers.

## Beta/Alpha Program

The Beta/Alpha Program began as a result of MOSERS' investment belief that returns from these two components should be managed separately.

The beta portion of the program is managed by NISA Investment Advisors. NISA uses futures, total return swaps, and/or EFTs to gain market exposure to various predefined asset classes.

The alpha program is a group of active managers with little or no systematic beta exposure. The objective of the alpha component is to provide a net of fees alpha return of 4% with similar to slightly higher volatility. This return can then be applied to various asset classes.

The combination of the two components produces an efficient total return and also provides MOSERS a great deal of flexibility in the management of the fund.

## BETA PROGRAM

### Market Value

The total notional exposure was \$1.96 billion as of June 30, 2011. The beta component contained total return swaps and futures as of June 30, 2011. MOSERS is utilizing the beta component within the domestic equity, international equity, commodities and core fixed income sub-asset classes.

### Summary of Program

The beta component was added to the total fund in FY05. The beta manager seeks market exposure in the most cost efficient manner. The beta manager seeks to produce a market return gross of the financing cost to gain beta exposure. The manager's goal is to provide market exposure.

### Statistics

The impact of the exposures is contained in the portfolios where the beta resides. Further information regarding swaps and futures can be found in the *Notes to the Financial Statements* on page 31.

### Investment Advisors

NISA Investment Advisors is the only manager in the beta program. The table below summarizes our investments within the beta pool as of June 30, 2011. Management fee information may be found on pages 76-77 of this report.

#### Beta Program - Investment Advisors

Investment Advisors	Style	Total Notional Value
NISA Investment Advisors	Synthetic beta exposure	\$1,959,320,403

## ALPHA PROGRAM

### Market Value

The alpha program allocation was \$2.35 billion or 30.0% of the total fund as of June 30, 2011.

### Summary of Portfolio

The alpha program portfolio was added to the total fund in FY05. Alpha program managers utilize skill-based investment strategies, which allow them to take advantage of periodic inefficiencies that may exist within the market. Alpha program managers seek to produce consistent returns in various economic environments. The ultimate goal within the alpha program is to provide consistent alpha with little correlation to other areas of the fund.

MOSERS utilizes several different strategies within the alpha program including relative value, arbitrage, and event driven. This portfolio targets the return of cash plus 4% net of fees over long periods of time.

### Statistics

The table to the right displays the statistical performance data of the alpha program portfolio (net of fees related to the beta program) as of June 30, 2011.

### Investment Advisors

The alpha program was started in FY05. Blackstone Alternative Asset Management, an existing fund-of-funds manager, was transferred into the alpha program. The following managers were hired and added to the pool in FY05: AQR Capital Management, Barclays Global Investors, Bridgewater Associates, and Pacific Alternative Asset Management Company (PAAMCO). Aetos Capital was also hired in FY05 as an additional manager in the alpha program. Aetos constructed a customized portfolio of core hedge funds that would later become the basis for MOSERS' direct hedge fund investment program.

On January 1, 2009, MOSERS' internal staff assumed responsibility for the oversight of the hedge funds in the customized fund-of-funds portfolio. MOSERS' direct hedge fund program continued to expand in FY11 with the hiring of four new managers. The table above summarizes the investments with hedge fund managers as of June 30, 2011. Management fee information may be found on pages 76-77 of this report.

### Alpha Program - Statistical Performance

Portfolio Characteristics	1 Year	3 Year	5 Year	Since Inception (Oct. 2004)
Annualized return	7.4%	1.6%	2.5%	3.2%
Annualized standard deviation	2.41%	5.93%	4.97%	4.44%
Sharpe ratio*	3.01	0.21	0.07	0.16
Beta as compared to S&P 500	0.12	0.18	0.16	0.16
Beta as compared to Barclays Aggregate	(0.11)	0.36	0.13	0.05

\* Sharpe ratio equals the annualized alpha program returns less the risk-free rate divided by the annualized standard deviation. Fees related to the beta program also reflect the risk-free rate; therefore, fees are not considered in this calculation.

### Alpha Program - Investment Advisors

Investment Advisors	Style	Portfolio Market Value
AQR Absolute Return Fund	Global macro	\$ 48,344,678
AQR Delta	Multi-strategy	125,342,370
Blackstone Alternative Asset Management	Fund-of-funds	305,542,466
Blackstone Distressed Securities Advisors	Long/short credit	437,897
Brevan Howard Capital Management	Global macro	77,807,733
Bridgewater Associates	Global macro	108,674,227
Claren Road Asset Management	Long/short credit	78,117,837
COMAC Capital	Global macro	47,734,644
Davidson Kempner Capital Management	Event driven	84,727,546
Diamondback Capital Management	Long/short equity	88,373,260
Elliott International Capital Advisors	Multi-strategy	54,995,589
Empyrean Capital Partners	Event driven	49,201,183
Eton Park Capital Management	Multi-strategy	79,122,786
Farallon Capital Management	Multi-strategy	53,515,314
HBK Investments	Multi-strategy	81,424,604
King Street Capital Management	Credit driven	82,884,400
Moon Capital Management	Long/short equity	786,634
Pacific Alternative Asset Management Co.	Fund-of-funds	159,748,448
Perry Capital	Multi-strategy	304,963
Pharo Global Advisors	Global macro	72,817,930
Silver Point Capital	Credit driven	5,813,730
Wellington Hedge Management	Long/short equity	1,472,518
Visium Asset Management	Long/short equity	49,550,671
Alpha program cash	Short-term cash	694,287,954
Total		<u>\$2,351,029,382</u>

## Securities Lending Summary

During the fiscal year ending June 30, 2011, MOSERS earned net income of \$1,534,523 through its securities lending programs. MOSERS lends its domestic equities, international equities, and domestic fixed income to a borrower that manages an agent lending program.

In an agent lending program, a large custodial bank or investment banking institution, acts on behalf of the beneficial owner to lend its securities. This type of lending program is essentially a “one-stop shopping” process in which all operational aspects of the program are

centered exclusively with one entity. The agent lender is responsible for making the loans to various broker-dealers, investing the cash collateral associated with the loaned securities, marking the loans and collateral to market on a daily basis, and, in most cases, indemnifying the lender against the default of a broker-dealer to whom they have loaned securities on behalf of the beneficial owner.

In FY11, Deutsche Bank managed these programs in an agent capacity.

### Domestic Equity

MOSERS generated total net income from the domestic equity securities lending program of \$619,648 in FY11. The income from this program was

\$244,753 less than the prior fiscal year stemming from a decrease in the margin basis points.

The table below contains the domestic equity securities lending program statistics for the past ten years.

### International Equity

MOSERS generated total net income from the international equity securities lending program of \$333,000 in FY11. The income earned increased from the prior fiscal year by \$223,054 due to an increase in the average on loan balance, margin basis points and utilization rate.

International equity securities lending program statistics for the past ten years is shown in the bottom table.

### Securities Lending - Domestic Equity

Year	Average Lendable	Average on Loan	Average Utilization	Return Added to Lendable Domestic Equities (Basis Points)	Net Income
FY11	\$ 376,047,357	\$111,263,248	29.6%	16.5	\$ 619,648
FY10	321,114,801	83,944,408	26.1	26.9	864,401
FY09	307,082,718	114,261,769	37.2	52.0	1,596,245
FY08	440,025,347	195,971,154	44.5	36.6	1,611,536
FY07	711,856,029	281,338,681	39.5	14.0	994,416
FY06	856,712,658	377,314,359	44.0	14.2	1,218,245
FY05	775,821,287	247,175,198	31.9	8.4	648,218
FY04	1,552,186,713	176,626,818	11.4	7.2	1,114,144
FY03	1,420,413,446	234,776,497	16.5	10.6	1,504,152
FY02	2,347,223,937	254,035,429	10.8	8.6	2,027,903

### Securities Lending - International Equity

Year	Average Lendable	Average on Loan	Average Utilization	Return Added to Lendable International Equities (Basis Points)	Net Income
FY11	\$320,082,404	\$88,623,017	27.7%	10.4	\$ 333,000
FY10	277,251,343	19,736,528	7.1	4.0	109,946
FY09	342,215,198	32,267,851	9.4	14.9	510,622
FY08	467,893,205	56,944,925	12.2	15.5	726,565
FY07	485,230,034	41,033,858	8.5	8.1	395,017
FY06	483,512,648	48,077,237	9.9	12.9	605,315
FY05	360,790,809	39,881,555	11.1	13.2	476,226
FY04	462,783,570	53,655,836	11.6	9.7	446,880
FY03	544,976,709	36,820,686	6.8	13.7	744,985
FY02	728,081,371	70,020,289	9.6	15.5	1,130,928

## Domestic Fixed Income

MOSERS generated total net income from the domestic fixed income securities lending program of \$581,875 in FY11. The income from this program increased by \$351,844 from the prior fiscal year primarily due to an increase in the average on loan balance, utilization rate and margin basis points.

The table below presents the statistics for the domestic fixed income securities lending program for the past ten years.

<b>Securities Lending - Domestic Fixed Income</b>					
<b>Year</b>	<b>Average Lendable</b>	<b>Average on Loan</b>	<b>Average Utilization</b>	<b>Return Added to Lendable Fixed Income (Basis Points)</b>	<b>Net Income</b>
FY11	\$ 805,579,308	\$ 505,690,676	62.8%	7.2	\$ 581,875
FY10	836,242,270	190,547,907	22.8	2.8	230,031
FY09	859,512,525	517,356,516	60.2	43.3	3,722,523
FY08	1,082,813,165	894,372,380	82.6	56.4	6,104,526
FY07	950,069,746	695,743,093	73.2	15.5	1,469,860
FY06	1,183,366,350	776,959,063	65.7	15.7	1,853,181
FY05	1,091,262,589	776,038,981	71.1	19.5	2,126,695
FY04	1,231,730,491	1,043,891,521	84.7	20.1	2,475,630
FY03	969,156,824	757,537,477	78.2	17.6	1,707,400
FY02	899,565,271	720,912,307	80.1	19.5	1,750,764

# POSITIVE GOALS

MOSERS provides a monthly lifetime benefit beginning at retirement. To achieve this financial objective, we must accumulate assets during a member's working years which, when combined with income on investments, will be sufficient to pay benefits throughout retirement. In order for you to maintain your desired standard of living during retirement, you will also need personal savings and investments to supplement your benefit from MOSERS. Commitment to your financial future is a positive goal worth sharing.

*Visualize this thing that you want, see it, feel it, believe in it.  
Make your mental blue print, and begin to build.*

*- Robert Collier*



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## **ACTUARIAL SECTION**



# Actuary's Certification Letter



Gabriel Roeder Smith & Company  
Consultants & Actuaries

One Towne Square  
Suite 800  
Southfield, MI 48076-3723

248.799.9000 phone  
248.799.9020 fax  
www.gabrielroeder.com

September 17, 2011

The Board of Trustees  
Missouri State Employees' Retirement System  
907 Wildwood Drive  
Jefferson City, Missouri 65109

Dear Board Members:

The basic financial objective of the Missouri State Employees' Retirement System (MOSERS) is to establish and receive contributions which:

- (1) when expressed in terms of percents of active member payroll will remain approximately level from generation to generation of Missouri citizens, and which
- (2) when combined with present assets and future investment return will be sufficient to meet the present and future financial obligations of MOSERS.

In order to measure progress toward this fundamental objective, MOSERS and the Judges Retirement Plan (Judges) annual actuarial valuations are performed. The purposes of the valuations are to (i) measure present financial position, (ii) establish contribution rates that provide for the normal cost and level percent of payroll amortization of unfunded actuarial accrued liabilities over a reasonable period, and (iii) to determine the actuarial information for Governmental Accounting Standards Board (GASB) Statement No. 25. The latest completed actuarial valuations were based upon data and assumptions as of June 30, 2011, presented to the board in separate reports. These valuations indicate that the contribution rates for the fiscal year ending June 30, 2013, adopted by the board of trustees for the benefits scheduled to be in effect on and after July 1, 2011, meet the basic financial objective. These contribution rates are 14.45% of payroll for 51,660 general state employees, and 56.92% of payroll for 399 judges.

The actuarial valuations are based upon financial and participant data which is prepared by retirement system staff, assumptions regarding future rates of investment return, salary increases, and inflation, and assumptions regarding rates of retirement, turnover, death, and disability among MOSERS' members and their beneficiaries. The data is reviewed by us for internal and year-to-year consistency as well as general reasonableness prior to its use in the actuarial valuations. It is also summarized and tabulated for the purpose of analyzing trends.

We are not responsible for the accuracy or completeness of the data. The demographic assumptions for members hired before January 1, 2011, were adopted by the board of trustees in March 2008, based upon recommendations made in an experience study covering the period from 2003 to 2007. The demographic assumptions for members hired on or after January 1, 2011, were based upon fiscal notes filed in July 2010. The economic assumptions were adopted by the board of trustees in September 2001, and amended and reaffirmed in March 2008, and subsequently reviewed in July 2010. The assumptions and methods used in this valuation, in our opinion, meet the parameters established by Governmental Accounting Standards Board Statement No. 25.

The benefit structure is outlined in this section of the annual report. We provided the information used in the supporting schedules in the actuarial section and the *Schedules of Funding Progress* in the *Financial Section*, as well as the employer contribution rates shown in the *Schedule of Employer Contributions* in the *Financial Section*.

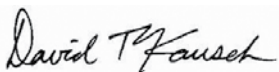
Based upon the valuation results, it is our opinion that the Missouri State Employees' Retirement Plans and the Judges Retirement Plan continue to operate in accordance with actuarial principles of level percent of payroll financing. To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of the plans as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board and with applicable statutes.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

This report should not be relied on for any purpose other than the purposes described. Determinations of the financial results associated with the benefits described in this report in a manner other than the intended purpose may produce significantly different results.

The undersigned actuaries are independent of the Plan sponsor and members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Respectfully submitted,



David T. Kausch, F.S.A., E.A., M.A.A.A  
Senior Consultant & Actuary



Brad Lee Armstrong, A.S.A., E.A., M.A.A.A  
Senior Consultant & Actuary

## Summary of Funded Status MSEP and Judicial Plan

The tables below show a summary of the results found in the actuarial valuations for 2010 and 2011.

### Funded Status of Retirement Plans

June 30, 2010	MSEP	Judicial Plan	Total
Total participants	105,419	909	106,328
Actuarial accrued liabilities	\$9,853,155	\$382,013	\$10,235,168
Actuarial value of assets	\$7,923,377	\$88,977	\$8,012,354
Unfunded actuarial accrued liabilities	\$1,929,778	\$293,036	\$2,222,814
Percent funded	80.4%	23.3%	78.3%
June 30, 2011	MSEP	Judicial Plan	Total
Total participants	106,000	930	106,930
Actuarial accrued liabilities	\$10,123,544	\$393,485	\$10,517,029
Actuarial value of assets	\$8,022,481	\$98,399	\$8,120,880
Unfunded actuarial accrued liabilities	\$2,101,063	\$295,086	\$2,396,149
Percent funded	79.2%	25.0%	77.2%

### Change in Status of Retirement Plans

FY10 to FY11	MSEP	Judicial Plan	Total
Increase in total participants	581	21	602
Increase in actuarial accrued liabilities	\$270,389	\$11,472	\$281,861
Increase in actuarial value of assets	\$99,104	\$9,422	\$108,526
Increase in unfunded actuarial accrued liabilities	\$171,285	\$2,050	\$173,335
Increase (Decrease) in percent funded	(1.2)%	1.7%	(1.1)%

In September each year, the MOSERS board of trustees votes to certify the contribution rate for the following fiscal year beginning July 1. As established by statute, the board follows a financing pattern which computes and requires contribution amounts which, expressed as a percent of active member payroll, will remain approximately level from year-to-year and from one generation of citizens to the next generation.

Beginning July 1, 2011, the rate will be 13.97% for MSEP and 57.30% for the Judicial plan. While this is a slight increase from the prior year, it is not expected to result in a corresponding increase in real dollars due to the fact that the state's payroll declined last year. The state of Missouri has consistently funded 100% of MOSERS' annually required contribution (ARC).

### Contribution Rates (Percent of Covered Payroll)

	MSEP	Judicial Plan
FY10	12.75	58.48
FY11	13.81	60.03

## Summary of Actuarial Assumptions

### Economic Assumptions

The investment return rate used in the valuations was 8.5% per year, compounded annually (net after investment expenses). This assumption is used to account for the fact that equal amounts of money payable at different points in time in the future do not have the same value presently.

Pay increase assumptions for individual active members are shown in the table below and on page 109. Part of the assumption for each age is for merit and/or seniority increase, and the other 4% recognizes wage inflation. This assumption is used to project a member's current salary to the salaries upon which benefits will be based. The active member payroll is assumed to increase 4% annually, which is the portion of the individual pay increase assumptions

attributable to wage inflation. For the 2011 valuation only, payroll is assumed to grow 0% the first year, then 4% annually thereafter to reflect the statewide temporary pay freeze.

The number of active members in the MSEP is assumed to remain constant although certain new hires on or after July 1, 2002, will participate in the College and University Retirement Plan (CURP). For judges, the number of active members is assumed to continue at the present number. Active and retired member data is reported as of May 31. It is assumed for valuation purposes that there is no turnover among members and no new entrants during the month of June. New entrants after December 31, 2010, assumed demographic patterns are based on the demographics of active members hired within the last five years.

The annual cost-of-living adjustment (COLA) is assumed to be 4%, on a compounded basis, when a minimum COLA of 4% is in effect. When no minimum COLA is in effect, price inflation is assumed to be 3.2% and the annual COLA is assumed to be 2.56% (80% of 3.2%), on a compounded basis.

### Noneconomic Assumptions

The mortality table for post-retirement mortality used in evaluating allowances to be paid was the 1971 Group Annuity Mortality Table, projected to the year 2000, with a two year age setback for men and a six year age setback for women. Disabled mortality tables are the healthy mortality tables set forward ten years. Related values are shown on page 110.

### Summary of Actuarial Assumptions

#### MSEP - Separations From Active Employment Before Service Retirement and Individual Pay Increase Assumptions - June 30, 2011

Sample Ages	Years of Service	Percent of Active Members Separating Within the Next Year				Pay Increase Assumptions for an Individual Employee				
		Withdrawal		Death*		Disability		Merit and Seniority**	Base (Economy)	Increase Next Year
Men	Women	Men	Women	Men	Women					
	0	23.8%	26.9%							
	1	18.9	20.5							
	2	15.3	15.4							
	3	12.8	12.5							
	4	11.8	10.9							
20	+5	11.8	10.9	.04%	.03%	.16%	.30%	3.5%	4.0%	7.5%
25		11.8	10.9	.05	.04	.16	.30	2.9	4.0	6.9
30		10.0	10.0	.06	.04	.16	.30	2.2	4.0	6.2
35		7.5	7.6	.08	.05	.21	.30	1.6	4.0	5.6
40		5.6	5.6	.11	.07	.26	.32	1.2	4.0	5.2
45		4.2	4.4	.17	.09	.34	.38	0.9	4.0	4.9
50		3.4	3.9	.31	.14	.49	.57	0.7	4.0	4.7
55		3.0	3.3	.54	.24	1.07	.89	0.5	4.0	4.5
60		2.6	3.0	.83	.44	1.50	1.50	0.4	4.0	4.4
65		2.5	3.0	1.31	.71	1.60	1.70	0.3	4.0	4.3

\* 2% of the deaths in active service are assumed to be duty-related

\*\* Does not apply to members of the General Assembly

This assumption is used to measure the probabilities of each benefit payment being made after retirement.

The probabilities of age and service retirement are shown on pages 110-111. For the MSEP, it was assumed that each member will be granted one half year of service credit for unused leave upon retirement and military service purchases.

The probabilities of withdrawal from service, disability, and death-in-service are shown for sample ages below. The entry age normal actuarial cost method of valuation was used in determining liabilities and normal cost. The normal cost was based on the weighted average of the MSEP 2000 active member normal cost and the MSEP 2011 active member normal cost for the projected payroll composition of the active member population expected to be present during the fiscal year ended June 30, 2013. Differences in the past between assumed experience and actuarial experience (“actuarial gains and losses”) become part of actuarial accrued liabilities.

Unfunded actuarial accrued liabilities are amortized to produce payments, (principal & interest) which are level percents of payroll contributions.

The amortization of the unfunded actuarial accrued liability is based on a 30-year amortization period, level percent of payroll amortization. The amortization is based on the projected unfunded actuarial accrued liability at the beginning of the fiscal year. This method was first used in the June 30, 2010 valuation.

Employer contribution dollars were assumed to be paid in equal installments throughout the employer’s fiscal year.

Valuation assets recognize assumed investment return fully each year. Differences between actual and assumed investment return are phased in over a closed five-year period. Valuation assets are not permitted to deviate from the market value by more than 20% for the June 30, 2011 valuation. It is assumed that among active members 80% are married at

retirement, 70% of those dying in active service are married, and men are three years older than their spouses.

The liabilities for active members hired on or after July 1, 2000 and before January 1, 2011 (April 26, 2005 for administrative law judges) were based on MSEP 2000 benefits. The liabilities for active members hired before July 1, 2000 for elected officials, the General Assembly, and uniformed water patrol were based on MSEP benefits. All others were based on MSEP 2011 benefits. The BackDROP was only explicitly valued for those assumed to receive MSEP 2000 benefits for members hired prior to January 1, 2011.

The data about persons now covered and about present assets were furnished by the system’s administrative staff. Although examined for general reasonableness, the data was not audited by the actuary.

The actuarial valuation computations were made by or under the supervision of a Member of the American Academy of Actuaries (M.A.A.A.).

### *Summary of Actuarial Assumptions*

#### **Judicial Plan - Separations From Active Employment Before Service Retirement and Individual Pay Increase Assumptions - June 30, 2011**

Sample Ages	Percent of Active Members Separating Within the Next Year						Pay Increase Assumptions for an Individual Employee		
	Withdrawal		Death		Disability		Merit and Seniority	Base (Economy)	Increase Next Year
	Men	Women	Men	Women	Men	Women			
25	4.5%	4.5%	.05%	.04%	.01%	.01%	1.6%	4.0%	5.6%
30	4.0	3.7	.06	.04	.02	.01	1.2	4.0	5.2
35	2.8	2.6	.08	.05	.03	.02	0.9	4.0	4.9
40	2.0	2.1	.11	.07	.04	.03	0.4	4.0	4.4
45	1.5	1.9	.17	.09	.05	.04	0.3	4.0	4.3
50	1.5	1.7	.31	.14	.08	.07	0.2	4.0	4.2
55	1.5	1.2	.54	.24	.13	.12	0.2	4.0	4.2
60	1.2	0.6	.83	.44	.20	.19	0.0	4.0	4.0
65	0.9	0.4	1.31	.71	.20	.19	0.0	4.0	4.0

*Summary of Actuarial Assumptions*

**All Plans - Single Life Retirement Values - June 30, 2011**

Sample Attained Ages	Present Value of \$1/Month the First Year (with 50% Joint & Survivor) Increasing 4.0%/2.56% Yearly				Present Value of \$1/Month the First Year Increasing 2.56% Yearly				Future Life Expectancy (Years)			
	Service		Disability		Service		Disability		Service		Disability	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
40	\$212.00	\$213.63	\$199.71	\$201.13	\$181.06	\$186.39	\$162.92	\$171.00	39.41	43.25	30.06	33.73
45	204.46	206.44	189.78	190.96	172.85	179.57	151.37	160.74	34.67	38.46	25.67	29.17
50	195.12	197.32	177.89	178.76	162.92	171.00	137.98	148.85	30.06	33.73	21.50	24.82
55	183.85	186.16	163.79	164.21	151.37	160.74	122.55	135.04	25.67	29.17	17.57	20.70
60	170.40	178.76	147.78	147.15	137.98	148.85	105.68	119.26	21.50	24.82	13.99	16.82
65	154.52	157.00	130.73	128.15	122.55	135.04	88.88	102.25	17.57	20.70	10.91	13.32
70	136.51	138.80	112.73	108.63	105.68	119.26	72.36	85.58	13.99	16.82	8.29	10.36
75	117.44	119.04	94.96	89.08	88.88	102.25	57.73	69.20	10.91	13.32	6.23	7.83
80	97.96	99.30	78.49	71.52	72.36	85.58	45.83	55.16	8.29	10.36	4.70	5.89
85	79.72	80.24	63.33	56.81	57.73	69.20	35.81	43.70	6.23	7.83	3.51	4.44

*Summary of Actuarial Assumptions*

**MSEP (Normal Retirement Pattern) - Percent of Eligible Active Members Retiring Next Year - June 30, 2011**

Retirement Age	For Members Hired Prior to January 1, 2011						For Members Hired On or After January 1, 2011	
	MSEP (closed plan)			MSEP 2000			MSEP 2011	
	Year of Eligibility			Year of Eligibility			Retirement Age	Year of Eligibility
1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year			
48	20%			27%				
49	20	10%		27	14%			
50	20	10	8%	27	14	18%		
51	20	10	8	27	14	18		
52	20	10	8	27	14	18		
53	20	10	8	27	14	18		
54	20	10	8	27	14	18		
55	25	10	12	27	14	25	55	45%
56	20	10	12	27	14	25	56	45
57	20	10	12	22	14	20	57	35
58	20	10	30	22	14	20	58	35
59	20	10	30	22	14	20	59	30
60	25	10	30	25	14	25	60	35
61	20	10	30	20	14	20	61	25
62	30	15	50	20	22	35	62	40
63	20	12	40	15	20	30	63	30
64	20	12	40	20	20	20	64	20
65	30	15	50	25	20	30	65	30
66	20	12	40	20	20	25	66	25
67	20	12	40	20	20	20	67	20
68	20	12	40	20	20	20	68	20
69	20	12	40	20	20	20	69	20
70	20	12	40	20	20	20	70	20
71	20	12	40	20	20	20	71	20
72	20	12	40	20	20	20	72	20
73	20	12	40	20	20	20	73	20
74	20	12	40	20	20	20	74	20
75	100	100	100	50	50	50	75	50
76	100	100	100	50	50	50	76	50
77	100	100	100	75	75	75	77	75
78	100	100	100	100	100	100	78	100

*Summary of Actuarial Assumptions***MSEP (Early Retirement Pattern) - Percent of Eligible Active Members Retiring Next Year - June 30, 2011**

For Members Hired Prior to January 1, 2011		For Members Hired On or After January 1, 2011	
Retirement Age	MSEP & MSEP 2000 Year of Eligibility	Retirement Age	MSEP 2011 Year of Eligibility
57	3%		
58	4		
59	4		
60	5		
61	7		
62	10	62	10%
63	10	63	10
64	10	64	10
65	50	65	50
66	50	66	50
67	50		
68	50		
69	50		
70	50		
71	50		
72	50		
73	50		
74	50		
75	50		
76	100		

*Summary of Actuarial Assumptions***Judicial Plan - Percent of Eligible Active Members Retiring Next Year - June 30, 2011**

For Members Hired Prior to January 1, 2011			For Members Hired On or After January 1, 2011		
Retirement Age	Percent Men	Percent Women	Retirement Age	Percent Men	Percent Women
55	10%	8%			
56	10	8			
57	10	8			
58	10	8			
59	10	8			
60	10	15			
61	5	10			
62	10	15	62	30%	35%
63	5	10	63	20	20
64	5	10	64	15	20
65	20	40	65	30	50
66	25	25	66	25	25
67	20	25	67	20	25
68	20	25	68	20	25
69	30	50	69	30	50
70	100	100	70	100	100



## Summary of Actuarial Assumptions

### Miscellaneous and Technical Assumptions - June 30, 2011

#### Pay Increase Timing

- Middle of fiscal year for MSEP
- Beginning of fiscal year for judges.

#### Decrement Timing

Decrements of all types are assumed to occur mid-year.

#### Eligibility Testing

Eligibility for benefits is determined based upon age at nearest birthday and service nearest whole year on the date the decrement is assumed to occur.

#### Benefit Service

Exact fractional service is used to determine the amount of benefit payable.

#### Decrement Relativity

Decrement rates are used directly from the experience study, without adjustments for multiple decrement table effects.

#### Decrement Operation

Disability and mortality decrements do not operate during the first five years of service. Disability and withdrawal do not operate during normal retirement eligibility.

#### Normal Form of Benefit

The assumed normal form of benefit is the straight life form for the MSEP 2000 with 50% continuing to an eligible surviving spouse for the MSEP. No adjustment has been made for post-retirement option election changes. For judges, the

assumed normal form of benefit is the straight-life form with 50% continuing to an eligible surviving spouse for member hired prior to January 1, 2011.

#### Other Liability Adjustments

##### *MSEP 2000 Benefits for Active Employees*

- Normal retirement form of payment adjustment: 0.994
- Early retirement form of payment adjustment: 0.993

##### *Pre-Retirement Survivor Benefits for Spouse of Terminated-Vested Member*

Age	Male	Female
<30	3.20	2.32
30-39	1.89	1.52
40-49	1.32	1.18
>50	1.07	1.04

There are no other liability adjustments for judges.

#### Incidence of Contributions

Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report and the actual payroll payable at the time contributions are made. New entrant normal cost contributions are applied to the funding of new entrant benefits.

#### MSEP 2000 Election

All regular state employees are assumed to elect MSEP 2000 at retirement. Elected officials, the General Assembly, and uniformed water patrol members hired before

July 1, 2000 and administrative law judges hired before April 26, 2005, are assumed to elect MSEP at retirement.

#### Service Adjustment

It is assumed that each member will be granted one half year of service credit, 2 months for unused leave upon retirement and 4 months for military service purchases.

#### Forfeitures

For those hired on or after January 1, 2011, 50% of state employees terminating at first vesting eligibility are assumed to take a refund and forfeit their deferred pension. This percentage decreases to 0% at first retirement eligibility.

For judges, vested members are assumed not to take a refund of member contributions and forfeit their benefit upon separation from service.

Active and retired member data was reported as of May 31, 2011. It was brought forward to June 30, 2011, by adding one month of service for all active members and the June COLA for certain retired members. It is expected that this procedure resulted in a slight overstatement of total liabilities as of June 30, 2011. Financial information continues to be reported as of June 30. This procedure was instituted to provide sufficient time for the board of trustees to certify the appropriate contribution rate prior to the October 1 statutory deadline.

## Summary of Member Data Included in Valuations

### Pension Trust Funds - June 30, 2011

Active Members			Group Averages		
Valuation Group	Number	Annual Payroll	Salary	Age (Yrs.)	Service (Yrs.)
<b>MSEP</b>					
Regular state employees	48,243	\$1,690,733,459	\$ 35,046	45.6	11.1
Elected officials	5	552,232	110,446	49.4	6.9
Legislative clerks	31	988,835	31,898	58.6	20.2
Legislators	195	7,011,439	35,956	50.2	3.6
Uniformed water patrol	89	5,443,716	61,165	41.3	16.6
Conservation department	1,370	56,384,847	41,157	44.1	13.7
School-term salaried employees	1,694	111,214,294	65,652	55.4	19.6
Administrative law judges	33	3,240,994	98,212	55.7	17.2
Total MSEP group	<u>51,660</u>	<u>\$1,875,569,816</u>	36,306	45.9	11.4
<b>Judicial Plan</b>	399	\$ 45,888,020	\$115,008	55.8	11.8

Retired Members			Group Averages	
Type of Benefit Payment	Number	Annual Benefits	Benefit	Age (Yrs.)
<b>MSEP</b>				
Retirement	31,305	\$484,797,154	\$15,486	69.1
Disability	8	29,232	3,654	59.8
Survivor of active member	1,425	13,652,622	9,581	61.3
Survivor of retired member	2,577	27,088,377	10,512	74.9
Total MSEP group	<u>35,315</u>	<u>\$525,567,385</u>	\$14,882	69.2
<b>Judicial Plan</b>	486	\$ 26,479,053	\$54,484	75.1

Others			
Group	Terminated-Vested	Leave of Absence	Long-Term Disability
Missouri State Employees' Plan	17,712	262	1,051
Judicial Plan	45	0	0

## Active Members by Attained Age and Years of Service

June 30, 2011

## MSEP

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30+	No.	Valuation Payroll
15-19	27							27	\$ 518,148
20-24	1,183	16						1,199	29,081,523
25-29	3,401	677	12					4,090	121,163,365
30-34	2,537	1,982	591	7				5,117	165,823,117
35-39	1,758	1,540	1,703	400	11			5,412	187,071,918
40-44	1,571	1,362	1,758	1,346	408	33		6,478	233,393,599
45-49	1,582	1,401	1,545	1,204	1,163	607	55	7,557	283,392,619
50-54	1,412	1,281	1,561	1,162	1,201	1,019	589	8,225	315,733,601
55-59	1,099	1,169	1,480	1,076	1,139	678	561	7,202	283,058,599
60	181	214	239	184	181	107	91	1,197	46,513,860
61	158	197	222	176	172	95	86	1,106	42,957,410
62	146	178	205	183	138	75	65	990	39,257,340
63	109	145	163	102	100	44	46	709	27,847,488
64	89	139	148	112	77	38	53	656	27,752,149
65	73	96	132	73	67	47	51	539	22,840,870
66	28	55	65	57	30	20	24	279	12,261,873
67	19	39	52	39	29	21	25	224	9,346,150
68	16	29	50	28	17	15	23	178	7,505,950
69	18	28	28	13	12	3	20	122	5,124,748
70 & Over	44	48	92	49	47	20	53	353	14,925,489
Totals	15,451	10,596	10,046	6,211	4,792	2,822	1,742	51,660	\$1,875,569,816

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

**Group Averages:** Age - 45.9 years • Service - 11.4 years • Annual Pay - \$36,306

## Judicial Plan

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30+	No.	Valuation Payroll
30-34	1							1	\$ 109,368
35-39	8							8	874,934
40-44	15	11	3					29	3,246,048
45-49	21	10	9	2				42	4,837,844
50-54	26	9	27	11	3			76	8,719,368
55-59	22	11	19	24	14	7		97	11,133,383
60	3	2	11	6	1		1	24	2,762,522
61	5	4	3		1		1	14	1,605,554
62		3	5	6	4	3	2	23	2,648,837
63	3	4	5	3	3	2	1	21	2,420,222
64	4		6	7	1	1		19	2,223,164
65	4	1	4	3	1		1	14	1,638,908
66		2	1	2	3	2	3	13	1,583,772
67	1		3	2	3	1		10	1,115,898
68			3				1	4	470,818
69	1				1	1		3	376,896
70						1		1	120,484
Totals	114	57	99	66	35	18	10	399	\$45,888,020

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

**Group Averages:** Age - 55.8 years • Service - 11.8 years • Annual Pay - \$115,008

## Schedules of Active Member Valuation Data

Last Six Years Ended June 30, 2011

### MSEP

Valuation Date	Schedule of Active Member Valuation Data			
	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
June 30, 2006	54,493	\$1,777,277,138	\$32,615	1.00%
June 30, 2007	54,363	1,846,643,330	33,969	4.15
June 30, 2008	54,542	1,916,527,398	35,139	3.44
June 30, 2009	55,057	2,002,402,087	36,370	3.50
June 30, 2010	53,478	1,945,095,321	36,372	0.01
June 30, 2011	51,660	1,875,569,816	36,306	(0.18)

### Judicial Plan

Valuation Date	Schedule of Active Member Valuation Data			
	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
June 30, 2006	394	\$40,270,535	\$102,209	0.12%
June 30, 2007	400	40,846,581	102,116	(0.09)
June 30, 2008	401	44,542,530	111,079	8.78
June 30, 2009	397	45,505,512	114,623	3.19
June 30, 2010	402	46,112,730	114,708	0.07
June 30, 2011	399	45,888,020	115,008	0.26

## MSEP - Retirees and Beneficiaries Added and Removed

### Last Six Years Ended June 30, 2011

Fiscal Year Ended	Classification	Benefit Type	Added to Rolls	
			Number	Annual Allowances
June 30, 2006	General employees	Retirement	1,853	\$30,323,860
		Survivor of active	76	997,296
		Survivor of retired	214	2,460,805
		Disability	0	1,356
	Lincoln university - vested	Occupational disability	0	0
		Retirement	1	3,535
	Legislators	Survivor of active	0	0
		Retirement	6	141,548
		Survivor of active	0	4,398
	Elected officials	Survivor of retired	5	53,788
		Retirement	1	24,113
		Survivor of active	0	2,664
	ALJ's	Survivor of retired	0	1,132
		Retirement	6	219,793
Survivor of active		0	0	
Survivor of retired		1	30,686	
June 30, 2007	General employees	Retirement	2,211	37,839,159
		Survivor of active	89	897,874
		Survivor of retired	213	2,630,107
		Disability	0	1,104
	Lincoln university - vested	Occupational disability	0	0
		Retirement	0	0
	Legislators	Survivor of active	0	0
		Retirement	19	303,741
		Survivor of active	1	8,157
	Elected officials	Survivor of retired	5	95,976
		Retirement	0	0
		Survivor of active	0	2,771
	ALJs	Survivor of retired	0	1,178
		Retirement	0	35,846
Survivor of active		0	0	
Survivor of retired		0	6,071	
June 30, 2008	General employees	Retirement	2,159	36,365,696
		Survivor of active	91	971,449
		Survivor of retired	234	2,715,274
		Disability	0	900
	Lincoln university - vested	Occupational disability	0	0
		Retirement	2	5,478
	Legislators	Survivor of active	0	0
		Retirement	9	147,136
		Survivor of active	0	4,489
	Elected officials	Survivor of retired	5	114,053
		Retirement	0	37,804
		Survivor of active	0	2,882
	ALJs	Survivor of retired	0	1,225
		Retirement	2	102,631
Survivor of active		0	0	
Survivor of retired		1	30,876	

Removed from Rolls		Rolls at End of Year		Increase (Decrease) in Annual Allowances	Average Annual Allowances	Percentage in Average Annual Allowances
Number	Annual Allowances	Number	Annual Allowances			
749	\$7,656,047	23,822	\$341,697,518	7.11%	\$14,344	2.14%
48	201,958	1,254	10,161,535	8.49	8,103	6.06
80	658,501	1,914	16,669,421	12.12	8,709	4.27
5	13,560	16	57,144	(17.60)	3,572	8.18
0	0	0	0	0.00	0	0.00
0	0	11	50,475	7.53	4,589	(2.24)
0	0	1	2,624	0.00	2,624	0.00
6	124,079	238	4,609,580	0.38	19,368	0.38
0	0	13	142,555	3.18	10,966	3.19
2	39,490	47	522,953	2.81	11,127	(3.75)
0	0	12	477,190	5.32	39,766	(3.45)
0	0	1	69,274	4.00	69,274	4.00
0	0	1	29,440	4.00	29,440	4.00
2	105,777	25	1,054,900	12.12	42,196	(5.82)
0	0	0	0	0.00	0	0.00
0	0	9	209,021	17.21	23,225	4.19
740	8,391,528	25,293	371,145,149	8.62	14,674	2.30
39	281,916	1,304	10,777,493	6.06	8,265	2.00
106	810,074	2,021	18,489,454	10.92	9,149	5.05
4	18,658	12	39,590	(30.72)	3,299	(7.64)
0	0	0	0	0.00	0	0.00
0	0	11	50,475	0.00	4,589	0.00
0	0	1	2,624	0.00	2,624	0.00
7	178,306	250	4,735,015	2.72	18,940	(2.21)
0	0	14	150,712	5.72	10,765	(1.83)
0	0	52	618,929	18.35	11,902	6.97
0	0	12	477,190	0.00	39,766	0.00
0	0	1	72,045	4.00	72,045	4.00
0	0	1	30,618	4.00	30,618	4.00
0	0	25	1,090,746	3.40	43,630	3.40
0	0	0	0	0.00	0	0.00
0	0	9	215,092	2.90	23,899	2.90
853	9,745,552	26,599	397,765,293	7.17	14,954	1.91
59	259,787	1,336	11,489,155	6.60	8,600	4.05
137	916,500	2,118	20,288,228	9.73	9,579	4.70
1	4,074	11	36,416	(8.02)	3,311	0.36
0	0	0	0	0.00	0	0.00
0	0	13	55,953	10.85	4,304	(6.21)
0	0	1	2,624	0.00	2,624	0.00
10	300,216	249	4,581,935	(3.23)	18,401	(2.85)
0	0	14	155,201	2.98	11,086	2.98
3	24,638	54	708,344	14.45	13,117	10.21
0	0	12	514,994	7.92	42,916	7.92
0	0	1	74,927	4.00	74,927	4.00
0	0	1	31,843	4.00	31,843	4.00
2	94,035	25	1,099,342	0.79	43,974	0.79
0	0	0	0	0.00	0	0.00
0	0	10	245,968	14.35	24,597	2.92

Source of Data: MOSERS benefit payment database as of June 30, 2011.

Other Actuarial Section information reported based on MOSERS data as of May 31, 2011.

MSEP continued on pages 118-119

## MSEP - Retirees and Beneficiaries Added and Removed

### Six Years Ended June 30, 2011

Continued from pages 116-117

Fiscal Year Ended	Classification	Benefit Type	Added to Rolls	
			Number	Annual Allowances
June 30, 2009	General employees	Retirement	2,195	\$37,338,992
		Survivor of active	82	996,258
		Survivor of retired	251	3,077,466
		Disability	0	876
		Occupational disability	0	0
	Lincoln university - vested	Retirement	0	0
		Survivor of active	0	0
	Legislators	Retirement	21	746,414
		Survivor of active	0	5,137
		Survivor of retired	4	84,108
	Elected officials	Retirement	2	105,141
		Survivor of active	0	2,997
		Survivor of retired	0	1,274
ALJs	Retirement	3	168,517	
	Survivor of active	0	0	
	Survivor of retired	2	57,238	
June 30, 2010	General employees	Retirement	2,298	34,755,192
		Survivor of active	83	1,054,292
		Survivor of retired	246	3,080,424
		Disability	0	830
		Occupational disability	0	0
	Lincoln university - vested	Retirement	1	5,671
		Survivor of active	0	0
	Legislators	Retirement	12	201,562
		Survivor of active	0	3,975
		Survivor of retired	5	78,765
	Elected officials	Retirement	0	0
		Survivor of active	0	3,117
		Survivor of retired	1	34,780
ALJs	Retirement	3	113,877	
	Survivor of active	0	0	
	Survivor of retired	0	7,332	
June 30, 2011	General employees	Retirement	2,850	41,203,358
		Survivor of active	65	914,689
		Survivor of retired	298	3,059,195
		Disability	0	79
		Occupational disability	0	0
	Lincoln university - vested	Retirement	1	1,780
		Survivor of active	0	0
	Legislators	Retirement	41	601,171
		Survivor of active	0	2,903
		Survivor of retired	5	73,841
	Elected officials	Retirement	0	0
		Survivor of active	0	3,242
		Survivor of retired	0	1,053
ALJs	Retirement	4	212,519	
	Survivor of active	0	0	
	Survivor of retired	0	2,599	

Removed from Rolls		Rolls at End of Year		Increase (Decrease) in Annual Allowances	Average Annual Allowances	Percentage in Average Annual Allowances
Number	Annual Allowances	Number	Annual Allowances			
852	\$9,903,887	27,942	\$425,200,398	6.90	\$15,217	1.76
54	390,167	1,364	12,095,246	5.28	8,867	3.10
110	827,564	2,259	22,538,130	11.09	9,977	4.15
1	4,237	10	33,055	(9.23)	3,306	(0.15)
0	0	0	0	0.00	0	0.00
0	0	13	55,953	0.00	4,304	0.00
0	0	1	2,624	0.00	2,624	0.00
8	120,396	262	5,207,953	13.66	19,878	8.03
1	14,128	13	146,210	(5.79)	11,247	1.45
2	20,473	56	771,979	8.98	13,785	5.09
0	0	14	620,135	20.42	44,295	3.21
0	0	1	77,924	4.00	77,924	4.00
0	0	1	33,117	4.00	33,117	4.00
2	90,337	26	1,177,522	7.11	45,289	2.99
0	0	0	0	0.00	0	0.00
1	27,354	11	275,852	12.15	25,077	1.95
833	9,979,318	29,407	449,976,272	5.83	15,302	0.56
49	276,401	1,398	12,873,137	6.43	9,208	3.85
117	1,078,265	2,388	24,540,289	8.88	10,277	3.00
1	2,985	9	30,900	(6.52)	3,433	3.85
0	0	0	0	0.00	0	0.00
0	0	14	61,624	10.13	4,402	0.00
0	0	1	2,624	0.00	2,624	0.00
12	239,880	262	5,169,635	(0.74)	19,731	(0.74)
1	16,709	12	133,476	(8.71)	11,123	(1.10)
0	0	61	850,744	10.20	13,947	1.17
1	66,911	13	553,224	(10.79)	42,556	(3.93)
0	0	1	81,041	4.00	81,041	4.00
0	0	2	67,897	105.02	33,948	2.51
1	46,794	28	1,244,605	5.70	44,450	(1.85)
0	0	0	0	0.00	0	0.00
0	0	11	283,184	2.66	25,744	2.66
892	10,670,476	31,365	480,509,154	6.79	15,320	0.12
46	261,503	1,417	13,526,323	5.07	9,546	3.67
176	1,670,990	2,510	25,928,494	5.66	10,330	0.52
1	1,732	8	29,247	(5.35)	3,656	6.50
0	0	0	0	0.00	0	0.00
0	0	15	63,404	2.89	4,227	(3.98)
0	0	1	2,624	0.00	2,624	0.00
10	185,635	293	5,585,171	8.04	19,062	(3.39)
1	19,612	11	116,767	(12.52)	10,615	(4.57)
2	16,628	64	907,957	6.73	14,187	1.72
0	0	13	553,224	0.00	42,556	0.00
0	0	1	84,283	4.00	84,283	4.00
0	0	2	68,950	1.55	34,475	1.55
0	0	32	1,457,124	17.08	45,535	2.44
0	0	0	0	0.00	0	0.00
1	27,724	10	258,059	(8.87)	25,806	0.24

Source of Data: MOSERS benefit payment database as of June 30, 2011.

Other *Actuarial Section* information reported based on MOSERS data as of May 31, 2011.



## Judicial Plan - Retirees and Beneficiaries Added and Removed

### Six Years Ended June 30, 2011

Fiscal Year Ended	Benefit Type	Added to Rolls		Removed from Rolls	
		Number	Allowances	Number	Allowances
June 30, 2006	Retirement	11	\$952,792	11	\$583,695
	Survivor of active	2	89,661	2	33,794
	Survivor of retired	6	219,711	4	79,701
	Disability	1	54,000	0	0
June 30, 2007	Retirement	47	2,802,873	15	967,969
	Survivor of active	1	64,452	2	40,742
	Survivor of retired	13	526,008	4	91,948
	Disability	0	0	1	54,000
June 30, 2008	Retirement	21	1,554,013	17	946,602
	Survivor of active	0	31,650	4	53,658
	Survivor of retired	11	387,194	8	181,387
	Disability	0	0	0	0
June 30, 2009	Retirement	30	1,922,615	15	957,943
	Survivor of active	1	59,484	0	0
	Survivor of retired	9	418,266	2	61,344
	Disability	0	0	0	0
June 30, 2010	Retirement	12	1,137,305	13	750,021
	Survivor of active	0	32,700	2	32,399
	Survivor of retired	11	436,312	5	130,920
	Disability	0	0	0	0
June 30, 2011	Retirement	36	2,501,248	9	563,214
	Survivor of active	0	14,893	1	35,792
	Survivor of retired	4	167,535	9	206,465
	Disability	0	0	0	0

## Rolls at End of Year

Number	Annual Allowances	Percentage Increase (Decrease) in Annual Allowances	Average Annual Allowances	Percentage Increase (Decrease) in Average Annual Allowances
275	\$16,217,558	2.33%	\$58,973	2.33%
41	995,239	5.95	24,274	5.94
84	2,143,040	6.99	25,512	4.44
1	54,000	100.00	54,000	100.00
307	18,052,462	11.31	58,803	(0.29)
40	1,018,949	2.38	25,474	4.94
93	2,577,100	20.25	27,711	8.62
0	0	(100.00)	0	(100.00)
311	18,659,873	3.36	60,000	2.04
36	996,941	(2.16)	27,693	8.71
96	2,782,907	7.99	28,989	4.61
0	0	0.00	0	0.00
326	19,624,545	5.17	60,198	0.33
37	1,056,425	5.97	28,552	3.10
103	3,139,829	12.83	30,484	5.16
0	0	0.00	0	0.00
325	20,011,829	1.97	61,575	2.29
35	1,056,726	0.03	30,192	5.74
109	3,445,221	9.73	31,608	3.69
0	0	0.00	0	0.00
352	21,949,863	9.68	62,358	1.27
34	1,035,827	(1.98)	30,466	0.91
104	3,406,291	(1.13)	32,753	3.62
0	0	0.00	0	0.00

Source of Data: MOSERS benefit payment database as of June 30, 2011.

Other *Actuarial Section* information reported based on MOSERS data as of May 31, 2011.

## Short-Term Solvency Test

### Pension Trust Funds - Ten Years Ended June 30, 2011

#### MSEP

Fiscal Year	Actuarial Accrued Liabilities for			Actuarial Value of Assets Available for Benefits	Percentage of Actuarial Liabilities Covered by Actuarial Value of Assets Available for:		
	Member Contributions (1)	Current Retirees and Beneficiaries (2)	Active and Inactive Members, Employer Financed Portion (3)		(1)	(2)	(3)
2002	\$ 0	\$2,716,457,033	\$3,577,815,242	\$6,033,133,598	100.0%	100.0%	92.7%
2003	0	3,016,029,050	3,646,262,356	6,057,329,072	100.0	100.0	83.4
2004	0	3,405,053,804	3,824,957,124	6,118,214,495	100.0	100.0	70.9
2005	0	3,629,506,014	3,948,522,003	6,435,344,102	100.0	100.0	71.1
2006	0	3,876,349,145	4,136,856,269	6,836,567,188	100.0	100.0	71.6
2007	0	4,208,621,537	4,291,807,104	7,377,289,283	100.0	100.0	73.8
2008	0	4,408,682,437	4,719,665,033	7,838,495,768	100.0	100.0	72.7
2009	0	4,737,859,976	4,756,946,739	7,876,079,342	100.0	100.0	66.0
2010	0	5,012,677,769	4,840,477,676	7,923,377,393	100.0	100.0	60.1
2011	67,126	5,357,794,617	4,765,682,300	8,022,481,408	100.0	100.0	55.9

#### ALJLAP\*

Fiscal Year	Actuarial Accrued Liabilities for			Actuarial Value of Assets Available for Benefits	Percentage of Actuarial Liabilities Covered by Actuarial Value of Assets Available for:		
	Member Contributions (1)	Current Retirees and Beneficiaries (2)	Active and Inactive Members, Employer Financed Portion (3)		(1)	(2)	(3)
2001	\$0	\$7,534,368	\$ 9,275,594	\$14,410,199	100.0%	100.0%	74.1%
2002	0	8,268,650	9,906,692	15,172,619	100.0	100.0	69.7
2003	0	9,709,096	10,237,391	15,626,461	100.0	100.0	57.8
2004	0	9,188,086	11,196,127	16,238,804	100.0	100.0	63.0

\*Assets and liabilities transferred to the MSEP during FY05

#### Judicial Plan

Fiscal Year	Actuarial Accrued Liabilities for			Actuarial Value of Assets Available for Benefits	Percentage of Actuarial Liabilities Covered by Actuarial Value of Assets Available for:		
	Member Contributions (1)	Current Retirees and Beneficiaries (2)	Active and Inactive Members, Employer Financed Portion (3)		(1)	(2)	(3)
2002	\$0	\$149,135,989	\$106,979,463	\$29,651,113	100.0%	19.9%	0.0%
2003	0	157,923,805	109,126,052	34,566,516	100.0	21.9	0.0
2004	0	162,539,486	117,857,978	39,120,142	100.0	24.1	0.0
2005	0	168,703,822	123,600,064	44,223,509	100.0	26.2	0.0
2006	0	171,677,032	137,325,720	51,652,867	100.0	30.1	0.0
2007	0	199,489,503	127,176,870	61,903,516	100.0	31.0	0.0
2008	0	216,369,879	138,426,574	73,194,379	100.0	33.8	0.0
2009	0	231,505,591	137,601,250	81,337,881	100.0	35.1	0.0
2010	0	236,113,077	145,899,696	88,976,738	100.0	37.7	0.0
2011	284	251,532,354	141,951,951	98,398,628	100.0	39.1	0.0

## Derivation of Experience Gain (Loss)

### MSEP

Actual experience will never coincide exactly with assumed experience (except by coincidence). Gains and losses may offset each other over a period of years, but sizeable year-to-year variations from assumed experience are common. Detail on the derivation of the experience gain (loss) is shown below, along with a year-by-year comparative schedule.

	<u>Millions</u>
(1) Unfunded actuarial accrued liability (UAAL) at beginning of year	\$1,929.8
(2) Normal cost from last valuation	148.5
(3) Actual employer contributions	266.4
(4) Interest accrual: (1) x .085 + [ (2) - (3) ] x (.085 ÷ 2)	159.0
(5) Expected UAAL before changes: (1) + (2) - (3) + (4)	1,970.9
(6) Change from any changes in benefits, assumptions, or methods	(107.4)
(7) Expected UAAL after changes: (5) + (6)	1,863.5
(8) Actual UAAL at end of year	2,101.1
(9) Gain (loss) (7) - (8)	(237.6)
(10) Gain (loss) as a percent of actuarial accrued liabilities at start of year (\$9,853)	(2.4)%

Actuarial Gain (Loss) As a % of Beginning Accrued Liabilities (Valuation Date as of June 30)	
2002	(3.8)%
2003	(6.4)
2004	(6.0)
2005	(3.4)
2006	(0.1)
2007	1.0
2008	0.1
2009	(5.2)
2010	(4.0)
2011	(2.4)

### Judicial Plan

The actuarial gains or losses realized in the operation of the retirement system provide an experience test. Gains and losses often cancel each other over a period of years, but sizable year-to-year fluctuations are common. Detail on the derivation of the actuarial gain (loss) is shown below, along with a year-by-year comparative schedule.

	<u>Millions</u>
(1) Unfunded actuarial accrued liability (UAAL) at beginning of year	\$293.0
(2) Employer normal cost middle of year	9.0
(3) Employer contributions	27.7
(4) Interest	
a. on (1)	24.9
b. on (2)	0.4
c. on (3)	1.2
d. total [a + b - c]	24.1
(5) Expected UAAL end of year before changes	298.4
(6) Change in UAAL end of year	
a. amendments	0.0
b. assumptions and technical corrections	(4.8)
c. methods	0.0
d. total	(4.8)
(7) Expected UAAL after changes: (5) + (6d.)	293.6
(8) Actual UAAL at end of year	295.1
(9) Gain (loss) (7) - (8)	(1.5)
(10) Gain (loss) as a percent of actuarial accrued liabilities at start of year (\$382)	(0.4)%

Actuarial Gain (Loss) As a % of Beginning Accrued Liabilities (Valuation Date as of June 30)	
2002	(0.2)%
2003	(1.6)
2004	(1.0)
2005	(0.1)
2006	(1.1)
2007	(0.6)
2008	(3.0)
2009	(1.8)
2010	(1.1)
2011	(0.4)

*Summary of Plan Provisions***Comparison of Plans for General State Employees - June 30, 2011**

MSEP, MSEP 2000 and MSEP 2011\*

Plan Provision	MSEP
Membership eligibility	<ul style="list-style-type: none"> <li>Members who work in a position normally requiring at least 1,040 hours of work a year.</li> </ul>
Normal retirement eligibility	<ul style="list-style-type: none"> <li>Age 65 and active with 4 years of service,</li> <li>Age 65 with 5 years of service,</li> <li>Age 60 with 15 years of service, or</li> <li>“Rule of 80” - minimum age 48.</li> </ul>
Early retirement eligibility	<ul style="list-style-type: none"> <li>Age 55 with 10 years of service.</li> </ul>
Benefit formula	
Life benefit	<ul style="list-style-type: none"> <li>1.6% x final average pay (FAP) x service.</li> </ul>
Temporary benefit until age 62	<ul style="list-style-type: none"> <li>Not available.</li> </ul>
Vesting	<ul style="list-style-type: none"> <li>5 years of service.</li> </ul>
In-service cost-of-living adjustment (COLA)	<ul style="list-style-type: none"> <li>COLA given for service beyond age 65. COLA provisions are determined by employment date.</li> </ul>
COLA	<ul style="list-style-type: none"> <li>If hired before August 28, 1997, annual COLA is equal to 80% of the percentage increase in the average Consumer Price Index (CPI) from one year to the next with a minimum of 4% and a maximum of 5% until reaching 65% cap. Thereafter, the rate is based on 80% of the change in the CPI with a maximum of 5%.</li> <li>If hired on or after August 28, 1997, annual COLA is equal to 80% of the percentage increase in the average CPI with a maximum of 5%.</li> </ul>
Survivor benefit (death before retirement)	
<i>Non duty-related death</i>	<ul style="list-style-type: none"> <li>Survivor benefit to eligible spouse calculated using the Joint &amp; 100% Survivor Option or 80% of the member’s Life Income Annuity paid to eligible children.</li> </ul>
<i>Duty-related death</i>	<ul style="list-style-type: none"> <li>Survivor benefit to eligible spouse or children no less than 50% of current pay (no service requirement).</li> </ul>
Benefit payment options (death after retirement)	<ul style="list-style-type: none"> <li>Survivor benefit to eligible spouse based on payment option elected at retirement. Payment options include: <ul style="list-style-type: none"> <li>- Life Income Annuity</li> <li>- Unreduced Joint &amp; 50% Survivor</li> <li>- Joint &amp; 100% Survivor</li> <li>- 60 or 120 Guaranteed Payments</li> </ul> </li> </ul>
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. Member must work at least two years beyond normal retirement to be eligible.</li> </ul>
Member contributions	<ul style="list-style-type: none"> <li>None.</li> </ul>

\* This summary describes the plan provisions of the RSMo, as amended, that govern the programs, which MOSERS administered during the period covered by this report. It does not overrule any applicable statute or administrative rule and, in the event of a conflict, the applicable statute or rule would apply.

**MSEP 2000**

**MSEP 2011**

<ul style="list-style-type: none"> <li>Members hired for the first time on or after July 1, 2000, in a position normally requiring at least 1,040 hours of work a year.</li> <li>Members who left state employment prior to becoming vested and returned to work on or after July 1, 2000, in a position normally requiring at least 1,040 hours of work a year.</li> </ul>	<ul style="list-style-type: none"> <li>Members hired for the first time on or after January 1, 2011, in a position normally requiring at least 1,040 hours of work a year.</li> </ul>
<ul style="list-style-type: none"> <li>Age 62 with 5 years of service, or</li> <li>“Rule of 80” - minimum age 48.</li> </ul>	<ul style="list-style-type: none"> <li>Age 67 with 10 years of service, or</li> <li>“Rule of 90” - minimum age 55.</li> </ul>
<ul style="list-style-type: none"> <li>Age 57 with 5 years of service.</li> </ul>	<ul style="list-style-type: none"> <li>Age 62 with 10 years of service.</li> </ul>
<ul style="list-style-type: none"> <li>1.7% x FAP x service.</li> <li>0.8% x FAP x service (must retire under the “Rule of 80”).</li> </ul>	<ul style="list-style-type: none"> <li>1.7% x FAP x service.</li> <li>0.8% x FAP x service (must retire under “Rule of 90”).</li> </ul>
<ul style="list-style-type: none"> <li>5 years of service.</li> </ul>	<ul style="list-style-type: none"> <li>10 years of service.</li> </ul>
<ul style="list-style-type: none"> <li>Not available.</li> </ul>	<ul style="list-style-type: none"> <li>Not available.</li> </ul>
<ul style="list-style-type: none"> <li>Annual COLA is equal to 80% of the percentage increase in the average CPI with a maximum of 5%.</li> </ul>	<ul style="list-style-type: none"> <li>Annual COLA is equal to 80% of the percentage increase in the average CPI with a maximum of 5%.</li> </ul>
<ul style="list-style-type: none"> <li>Survivor benefit to eligible spouse calculated using the Joint &amp; 100% Survivor Option or 80% of the members’ Life Income Annuity paid to eligible children.</li> <li>Survivor benefit to eligible spouse or children no less than 50% of current pay (no service requirement).</li> </ul>	<ul style="list-style-type: none"> <li>Survivor benefit to eligible spouse calculated using the Joint &amp; 100% Survivor Option or 80% of the members’ Life Income Annuity paid to eligible children.</li> <li>Survivor benefit to eligible spouse or children no less than 50% of current pay (no service requirement).</li> </ul>
<ul style="list-style-type: none"> <li>Survivor benefit to eligible spouse based on payment option elected at retirement. Payment options include:                             <ul style="list-style-type: none"> <li>- Life Income Annuity</li> <li>- Joint &amp; 50% Survivor</li> <li>- Joint &amp; 100% Survivor</li> <li>- 120 or 180 Guaranteed Payments</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Survivor benefit to eligible spouse based on payment option elected at retirement. Payment options include:                             <ul style="list-style-type: none"> <li>- Life Income Annuity</li> <li>- Joint &amp; 50% Survivor</li> <li>- Joint &amp; 100% Survivor</li> <li>- 120 or 180 Guaranteed Payments</li> </ul> </li> </ul>
<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. Member must work at least two years beyond normal retirement to be eligible.</li> </ul>	<ul style="list-style-type: none"> <li>Not available.</li> </ul>
<ul style="list-style-type: none"> <li>None.</li> </ul>	<ul style="list-style-type: none"> <li>4% of pay.</li> </ul>

*Summary of Plan Provisions***Comparison of Plans for Legislators - June 30, 2011**

MSEP, MSEP 2000 and MSEP 2011

Plan Provision	MSEP
Membership eligibility	<ul style="list-style-type: none"> <li>Elected to the General Assembly.</li> </ul>
Normal retirement eligibility	<ul style="list-style-type: none"> <li>Age 55 with 3 full-biennial assemblies, or.</li> <li>“Rule of 80” - minimum age 48.</li> </ul>
Early retirement eligibility	<ul style="list-style-type: none"> <li>Not available.</li> </ul>
Benefit formula Life benefit	<ul style="list-style-type: none"> <li>\$150 per month per biennial assembly.</li> </ul>
Vesting	<ul style="list-style-type: none"> <li>3 full-biennial assemblies.</li> </ul>
In-service cost-of-living adjustment (COLA)	<ul style="list-style-type: none"> <li>COLA given for service beyond age 65. COLA provisions are determined by employment date.</li> </ul>
COLA	<ul style="list-style-type: none"> <li>If hired before August 28, 1997, annual COLA is equal to 80% of the percentage increase in the average CPI from one year to the next with a minimum of 4% and a maximum of 5% until reaching 65% cap. Thereafter, the rate is based on 80% of the change in the CPI with a maximum of 5%.</li> <li>If hired on or after August 28, 1997, annual COLA is equal to 80% of the percentage increase in the average CPI with a maximum of 5%.</li> </ul>
Survivor benefit (death before retirement) <i>Non duty-related death</i>  <i>Duty-related death</i>	<ul style="list-style-type: none"> <li>Survivor benefit to eligible spouse calculated using the Joint &amp; 100% Survivor Option or 80% of the member’s Life Income Annuity paid to eligible children.</li> <li>Survivor benefit to eligible spouse or children no less than 50% of current pay (no service requirement).</li> </ul>
Benefit payment options (death after retirement)	<ul style="list-style-type: none"> <li>Survivor benefit to eligible spouse based on payment option elected at retirement. Payment options include: <ul style="list-style-type: none"> <li>- Life Income Annuity</li> <li>- Unreduced Joint &amp; 50% Survivor</li> <li>- Joint &amp; 100% Survivor</li> <li>- 60 or 120 Guaranteed Payments</li> </ul> </li> </ul>
Member contributions	<ul style="list-style-type: none"> <li>None.</li> </ul>

## MSEP 2000

## MSEP 2011

<ul style="list-style-type: none"> <li>• Elected to the General Assembly on or after July 1, 2000.</li> <li>• Age 55 with 3 full-biennial assemblies, or</li> <li>• “Rule of 80” - minimum age 50.</li> <li>• Not available.</li> </ul>	<ul style="list-style-type: none"> <li>• Elected to the General Assembly on or after January 1, 2011.</li> <li>• Age 62 with 3 full-biennial assemblies, or</li> <li>• “Rule of 90” - minimum age 55.</li> <li>• Not available.</li> </ul>
<ul style="list-style-type: none"> <li>• (Monthly base pay ÷ 24) x service capped at 100% of pay.</li> <li>• 3 full-biennial assemblies.</li> <li>• Not available.</li> </ul>	<ul style="list-style-type: none"> <li>• (Monthly base pay ÷ 24) x service capped at 100% of pay.</li> <li>• 3 full-biennial assemblies.</li> <li>• Not available.</li> </ul>
<ul style="list-style-type: none"> <li>• Benefit adjusted each year based on the percentage increase in the current pay for an active member of the General Assembly.</li> </ul>	<ul style="list-style-type: none"> <li>• Benefit adjusted each year based on the percentage increase in the current pay for an active member of the General Assembly.</li> </ul>
<ul style="list-style-type: none"> <li>• Survivor benefit to eligible spouse calculated using the Joint &amp; 100% Survivor Option or 80% of the members’ Life Income Annuity paid to eligible children.</li> <li>• Survivor benefit to eligible spouse or children no less than 50% of current pay (no service requirement).</li> <li>• Survivor benefit to eligible spouse based on payment option elected at retirement. Payment options include: <ul style="list-style-type: none"> <li>- Life Income Annuity</li> <li>- Joint &amp; 50% Survivor</li> <li>- Joint &amp; 100% Survivor</li> <li>- 120 or 180 Guaranteed Payments</li> </ul> </li> <li>• None.</li> </ul>	<ul style="list-style-type: none"> <li>• Survivor benefit to eligible spouse calculated using the Joint &amp; 100% Survivor Option or 80% of the members’ Life Income Annuity paid to eligible children.</li> <li>• Survivor benefit to eligible spouse or children no less than 50% of current pay (no service requirement).</li> <li>• Survivor benefit to eligible spouse based on payment option elected at retirement. Payment options include: <ul style="list-style-type: none"> <li>- Life Income Annuity</li> <li>- Joint &amp; 50% Survivor</li> <li>- Joint &amp; 100% Survivor</li> <li>- 120 or 180 Guaranteed Payments</li> </ul> </li> <li>• 4% of pay.</li> </ul>



*Summary of Plan Provisions***Comparison of Plans for Elected Officials - June 30, 2011**

MSEP, MSEP 2000 and MSEP 2011

Plan Provision	MSEP
Membership eligibility	<ul style="list-style-type: none"> <li>Elected to state office.</li> </ul>
Normal retirement eligibility	<ul style="list-style-type: none"> <li>Age 60 with 15 years of service, or</li> <li>“Rule of 80” - minimum age 50.</li> </ul>
Early retirement eligibility	<ul style="list-style-type: none"> <li>Age 55 with 10 years of service.</li> </ul>
Benefit formula Life benefit	<ul style="list-style-type: none"> <li>12 or more years of service <ul style="list-style-type: none"> <li>50% of current pay for highest position held.</li> </ul> </li> <li>Less than 12 years of service <ul style="list-style-type: none"> <li>1.6% x FAP x service.</li> </ul> </li> </ul>
Vesting	<ul style="list-style-type: none"> <li>4 years (1 term) of service.</li> </ul>
In-service cost-of-living adjustment (COLA)	<ul style="list-style-type: none"> <li>COLA provisions determined by amount of service relative to 12 years and date of employment.</li> </ul>
COLA	<ul style="list-style-type: none"> <li>12 or more years of service <ul style="list-style-type: none"> <li>COLA is equal to the percentage increase in the current pay of an active elected state official in the highest position held.</li> </ul> </li> <li>Less than 12 years of service <ul style="list-style-type: none"> <li>If hired before August 28, 1997, annual COLA is equal to 80% of the percentage increase in the average CPI from one year to the next with a minimum of 4% and a maximum of 5% until reaching 65% cap. Thereafter, the rate is based on 80% of the change in the CPI with a maximum of 5%.</li> <li>If hired on or after August 28, 1997, annual COLA is equal to 80% of the percentage increase in the average CPI with a maximum of 5%.</li> </ul> </li> </ul>
Survivor benefit (death before retirement) <i>Non duty-related death</i>  <i>Duty-related death</i>	<ul style="list-style-type: none"> <li>Survivor benefit to eligible spouse calculated using the Joint &amp; 100% Survivor Option or 80% of the member’s Life Income Annuity paid to eligible children.</li> <li>Survivor benefit to eligible spouse or children no less than 50% of current pay (no service requirement).</li> </ul>
Benefit payment options (death after retirement)	<ul style="list-style-type: none"> <li>Survivor benefit to eligible spouse based on payment option elected at retirement. Payment options include: <ul style="list-style-type: none"> <li>Life Income Annuity</li> <li>Unreduced Joint &amp; 50% Survivor</li> <li>Joint &amp; 100% Survivor</li> <li>60 or 120 Guaranteed Payments</li> </ul> </li> </ul>
Member contributions	<ul style="list-style-type: none"> <li>None.</li> </ul>

MSEP 2000

MSEP 2011

<ul style="list-style-type: none"> <li>• Elected to state office on or after July 1, 2000.</li> </ul>	<ul style="list-style-type: none"> <li>• Elected to state office on or after January 1, 2011.</li> </ul>
<ul style="list-style-type: none"> <li>• Age 55 with 4 years of service, or</li> <li>• “Rule of 80” - minimum age 50.</li> </ul>	<ul style="list-style-type: none"> <li>• Age 62 with 4 years of service, or</li> <li>• “Rule of 90” - minimum age 55.</li> </ul>
<ul style="list-style-type: none"> <li>• Not available.</li> </ul>	<ul style="list-style-type: none"> <li>• Not available.</li> </ul>
<ul style="list-style-type: none"> <li>• (Monthly base pay ÷ 24) x service</li> <li>- Capped at 12 years or 50% of pay.</li> </ul>	<ul style="list-style-type: none"> <li>• (Monthly base pay ÷ 24) x service</li> <li>- Capped at 12 years or 50% of pay.</li> </ul>
<ul style="list-style-type: none"> <li>• 4 years (1 term) of service.</li> </ul>	<ul style="list-style-type: none"> <li>• 4 years (1 term) of service.</li> </ul>
<ul style="list-style-type: none"> <li>• Not available.</li> </ul>	<ul style="list-style-type: none"> <li>• Not available.</li> </ul>
<ul style="list-style-type: none"> <li>• Benefit adjusted each year based on the percentage increase in the current pay for an active elected state official in the highest position held.</li> </ul>	<ul style="list-style-type: none"> <li>• Benefit adjusted each year based on the percentage increase in the current pay for an active elected state official in the highest position held.</li> </ul>
<ul style="list-style-type: none"> <li>• Survivor benefit to eligible spouse calculated using the Joint &amp; 100% Survivor Option or 80% of the members’ Life Income Annuity paid to eligible children.</li> <li>• Survivor benefit to eligible spouse or children no less than 50% of current pay (no service requirement).</li> </ul>	<ul style="list-style-type: none"> <li>• Survivor benefit to eligible spouse calculated using the Joint &amp; 100% Survivor Option or 80% of the members’ Life Income Annuity paid to eligible children.</li> <li>• Survivor benefit to eligible spouse or children no less than 50% of current pay (no service requirement).</li> </ul>
<ul style="list-style-type: none"> <li>• Survivor benefit to eligible spouse based on payment option elected at retirement. Payment options include: <ul style="list-style-type: none"> <li>- Life Income Annuity</li> <li>- Joint &amp; 50% Survivor</li> <li>- Joint &amp; 100% Survivor</li> <li>- 120 or 180 Guaranteed Payments</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Survivor benefit to eligible spouse based on payment option elected at retirement. Payment options include: <ul style="list-style-type: none"> <li>- Life Income Annuity</li> <li>- Joint &amp; 50% Survivor</li> <li>- Joint &amp; 100% Survivor</li> <li>- 120 or 180 Guaranteed Payments</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• None.</li> </ul>	<ul style="list-style-type: none"> <li>• 4% of pay.</li> </ul>

*Summary of Plan Provisions***Judicial Plan - June 30, 2011****Judicial Plan and Judicial Plan 2011**

<b>Plan Provision</b>	<b>Judicial Plan</b>
<b>Membership eligibility</b>	<ul style="list-style-type: none"> <li>• Must be a judge or commissioner of the supreme court or the court of appeals, a judge of the circuit court, probate court, magistrate court, court of common pleas, court of criminal corrections, a justice of the peace, or a commissioner or deputy commissioner of the circuit court appointed after February 29, 1972; a commissioner of the juvenile division of the circuit court appointed pursuant to Section 211.023, RSMo; a commissioner of the drug court pursuant to Section 478.466, RSMo; or a commissioner of the family court.</li> </ul>
<b>Normal retirement eligibility</b>	<ul style="list-style-type: none"> <li>• Age 62 with 12 years of service,</li> <li>• Age 60 with 15 years of service, or</li> <li>• Age 55 with 20 years of service.</li> </ul>
<b>Reduced retirement eligibility</b>	<ul style="list-style-type: none"> <li>• Age 60 with less than 15 years of service, or</li> <li>• Age 62 with less than 12 years of service with a reduced benefit based on years of service relative to 12 or 15 years.</li> </ul>
<b>Benefit formula</b>	<ul style="list-style-type: none"> <li>• Normal retirement eligibility <ul style="list-style-type: none"> <li>- 50% of the FAP</li> </ul> </li> <li>• Reduced retirement eligibility <ul style="list-style-type: none"> <li>- If between age 60 and 62 (years of service ÷ 15) x 50% of compensation on the highest court served.</li> <li>- If age 62 (years of service ÷ 12) x 50% of compensation on the highest court served.</li> </ul> </li> </ul>
<b>Vesting</b>	<ul style="list-style-type: none"> <li>• Immediate.</li> </ul>
<b>In-service cost-of-living adjustment (COLA)</b>	<ul style="list-style-type: none"> <li>• Judges who are at least age 60 and work beyond the date first eligible for unreduced benefits will receive COLAs for each year worked beyond normal retirement eligibility. COLA provisions are determined by date of employment.</li> </ul>
<b>COLA</b>	<ul style="list-style-type: none"> <li>• If hired before August 28, 1997, annual COLA is equal to 80% of the percentage increase in the average CPI from one year to the next with a minimum of 4% and a maximum of 5% until reaching 65% cap. Thereafter, the rate is based on 80% of the change in the CPI with a maximum of 5%.</li> <li>• If hired on or after August 28, 1997, annual COLA is equal to 80% of the percentage increase in the average CPI with a maximum of 5%.</li> </ul>
<b>Survivor benefit</b> (death <b>before</b> retirement) <i>Non duty-related death</i>  <i>Duty-related death</i>	<ul style="list-style-type: none"> <li>• Survivor benefit to eligible spouse equal to 50% of the benefit the member would have received based on service to age 70.</li> <li>• Survivor benefit to eligible spouse equal to 50% of the member's annuity at the time of death.</li> </ul>
<b>Benefit Payment Options</b> (death <b>before</b> retirement)	<ul style="list-style-type: none"> <li>• Life Income Annuity (if unmarried)</li> <li>• Automatic <i>Unreduced</i> Joint and 50% Survivor Option</li> </ul>
<b>Member contributions</b>	<ul style="list-style-type: none"> <li>• None.</li> </ul>

**Judicial Plan 2011**

- Must be a judge or commissioner of the supreme court or the court of appeals, a judge of the circuit court, probate court, magistrate court, court of common pleas, court of criminal corrections, a justice of the peace, or a commissioner or deputy commissioner of the circuit court; a commissioner of the juvenile division of the circuit court appointed pursuant to Section 211.023, RSMo; a commissioner of the drug court pursuant to Section 478.466, RSMo; or a commissioner of the family court appointed or elected a judge for the first time on or after January 1, 2011.
- Age 67 with 12 years of service, or
- Age 62 with 20 years of service.
- Age 67 with less than 12 years of service, or
- Age 62 with less than 20 years of service with a reduced benefit based on years of service relative to 12 or 20 years.
- Normal retirement eligibility
  - 50% of the FAP
- Reduced retirement eligibility
  - If between age 62 and 67  
(years of service ÷ 12) x 50% of compensation on the highest court served.
  - If age 67  
(years of service ÷ 20) x 50% of compensation on the highest court served.
- Immediate.
- Not available.
- Annual COLA is equal to 80% of the percentage increase in the average CPI with a maximum of 5%.
- Survivor benefit to eligible spouse equal to 50% of the benefit the member would have received based on service to age 70.
- Survivor benefit to eligible spouse equal to 50% of the member's annuity at the time of death.
- Survivor benefit to eligible spouse based on payment option elected at retirement. Payment options include:
  - Life Income Annuity
  - Joint & 50% Survivor
  - Joint & 100% Survivor
  - 120 or 180 Guaranteed Payments
- 4% of pay.

*Summary of Plan Provisions*

## Comparison of Plans for Uniformed Members of the Water Patrol - June 30, 2011

### MSEP, MSEP 2000\*

Plan Provision	MSEP	MSEP 2000
<b>Membership eligibility</b>	<ul style="list-style-type: none"> <li>Members who work in a position normally requiring at least 1,040 hours of work a year.</li> </ul>	<ul style="list-style-type: none"> <li>Members hired for the first time on or after July 1, 2000, in a position normally requiring at least 1,040 hours of work a year.</li> <li>Members who left state employment prior to becoming vested and returned to work on or after July 1, 2000, in a position normally requiring at least 1,040 hours of work a year.</li> </ul>
<b>Normal retirement eligibility</b>	<ul style="list-style-type: none"> <li>Age 55 and active with 4 years of service,</li> <li>Age 55 with 5 years of service, or</li> <li>"Rule of 80" - minimum age 48.</li> </ul>	<ul style="list-style-type: none"> <li>Age 62 with 5 years of service, or</li> <li>"Rule of 80" - minimum age 48.</li> </ul>
<b>Early retirement eligibility</b>	<ul style="list-style-type: none"> <li>Not available.</li> </ul>	<ul style="list-style-type: none"> <li>Age 57 with 10 years of service.</li> </ul>
<b>Benefit</b>		
Life benefit	<ul style="list-style-type: none"> <li>1.6% x FAP x service increased by 33.3%.</li> </ul>	<ul style="list-style-type: none"> <li>1.7% x FAP x service.</li> </ul>
Temporary benefit until age 62	<ul style="list-style-type: none"> <li>Not available.</li> </ul>	<ul style="list-style-type: none"> <li>0.8% x FAP x service (must retire under "Rule of 80").</li> </ul>
<b>Vesting</b>	<ul style="list-style-type: none"> <li>5 years of service.</li> </ul>	<ul style="list-style-type: none"> <li>5 years of service.</li> </ul>
<b>In-service COLA</b>	<ul style="list-style-type: none"> <li>COLA given for service beyond age 65. COLA provisions are determined by employment date.</li> </ul>	<ul style="list-style-type: none"> <li>Not available.</li> </ul>
<b>COLA</b>	<ul style="list-style-type: none"> <li>If hired before August 28, 1997, annual COLA is equal to 80% of the percentage increase in the average CPI from one year to the next with a minimum of 4% and a maximum of 5% until reaching 65% cap. Thereafter, the rate is based on 80% of the change in the CPI with a maximum of 5%.</li> <li>If hired on or after August 28, 1997, annual COLA is equal to 80% of the percentage increase in the average CPI with a maximum of 5%.</li> </ul>	<ul style="list-style-type: none"> <li>Annual COLA is equal to 80% of the percentage increase in the average CPI with a maximum of 5%.</li> </ul>
<b>Survivor benefit</b>		
Death before retirement		
<i>Non duty-related death</i>	<ul style="list-style-type: none"> <li>Survivor benefit to eligible spouse calculated using the Joint &amp; 100% Survivor Option or 80% of the member's Life Income Annuity paid to eligible children.</li> </ul>	<ul style="list-style-type: none"> <li>Survivor benefit to eligible spouse calculated using the Joint &amp; 100% Survivor Option or 80% of the member's Life Income Annuity paid to eligible children.</li> </ul>
<i>Duty-related death</i>	<ul style="list-style-type: none"> <li>Survivor benefit to eligible spouse or children no less than 50% of current pay (no service requirement).</li> </ul>	<ul style="list-style-type: none"> <li>Survivor benefit to eligible spouse or children no less than 50% of current pay (no service requirement).</li> </ul>
<b>Optional forms of payment</b>		
Death after retirement	<ul style="list-style-type: none"> <li>Survivor benefit to eligible spouse based on payment option elected at retirement. Payment options include: <ul style="list-style-type: none"> <li>- Life Income Annuity</li> <li>- Unreduced Joint &amp; 50% Survivor</li> <li>- Joint &amp; 100% Survivor</li> <li>- 60 or 120 Guaranteed Payments</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Survivor benefit to eligible spouse based on payment option elected at retirement. Payment options include: <ul style="list-style-type: none"> <li>- Life Income Annuity</li> <li>- Joint &amp; 50% Survivor</li> <li>- Joint &amp; 100% Survivor</li> <li>- 120 or 180 Guaranteed Payments</li> </ul> </li> </ul>

\* On June 30, 2010, the Governor signed HB 1868, which, among other things, establishes the Division of Water Patrol within the State Highway Patrol. This legislation gave those transferring employees a 90-day window to choose to remain a member of MOSERS or transfer their service to the Missouri Department of Transportation and Highway Patrol Employees' Retirement System (MPERS).

*Summary of Plan Provisions***Administrative Law Judges and Legal Advisors Plan\* - June 30, 2011**

Plan Provision	Requirement
Membership eligibility	<ul style="list-style-type: none"> <li>Administrative law judge or legal advisor in the Division of Workers' Compensation, a member or legal counsel of the Labor and Industrial Relations Commission, chairperson of the State Board of Mediation, or an administrative hearing commissioner hired prior to April 26, 2005.</li> </ul>
Normal retirement eligibility	<ul style="list-style-type: none"> <li>Age 62 with 12 years of service,</li> <li>Age 60 with 15 years of service, or</li> <li>Age 55 with 20 years of service.</li> </ul>
Reduced retirement eligibility	<ul style="list-style-type: none"> <li>Age 65 with less than 12 years of service with reduced benefit, based upon years of service relative to 12 years.</li> </ul>
Benefit	<ul style="list-style-type: none"> <li>Normal retirement eligibility               <ul style="list-style-type: none"> <li>- 50% of the average highest 12 consecutive months of salary.</li> </ul> </li> <li>Reduced retirement eligibility               <ul style="list-style-type: none"> <li>- <math>(\text{years of service} \div 12) \times 50\%</math> of the average highest 12 months of salary.</li> </ul> </li> </ul>
Vesting	<ul style="list-style-type: none"> <li>Immediate.</li> </ul>
In-service COLA	<ul style="list-style-type: none"> <li>Not available.</li> </ul>
COLA	<ul style="list-style-type: none"> <li>If hired before August 28, 1997, annual COLA is equal to 80% of the percentage increase in the average CPI from one year to the next with a minimum of 4% and a maximum of 5% until reaching 65% cap. Thereafter, the rate is based on 80% of the change in the CPI with a maximum of 5%.</li> <li>If hired on or after August 28, 1997, annual COLA is equal to 80% of the percentage increase in the average CPI with a maximum of 5%.</li> </ul>
Survivor benefit	
Death before retirement	<ul style="list-style-type: none"> <li>Survivor benefit to eligible spouse equal to 50% of the benefit the member would have received based on service relative to 12 years.</li> </ul>
Death after retirement	<ul style="list-style-type: none"> <li>Survivor benefit to eligible spouse equal to 50% of the member's annuity at the time of death.</li> </ul>

\* All new administrative law judges and legal advisors hired on or after April 26, 2005, who were not previously covered by a retirement system under Chapter 287, RSMo, participate in the MSEP, which is covered under Chapter 104, RSMo.

*Summary of Plan Provisions***Life Insurance Plans - June 30, 2011**

MOSERS administers basic and optional term life insurance plans for eligible state employees and retirees.

**Active Members\***

<b>Plan Provision</b>	<b>Requirement</b>
<ul style="list-style-type: none"> <li>• <b>Basic life insurance</b> - An amount equal to one times annual salary (with a minimum of \$15,000) while actively employed.</li> </ul>	<ul style="list-style-type: none"> <li>• Actively employed in an eligible state position resulting in membership in MOSERS.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Duty-related death benefit</b> - Duty-related death benefit equivalent to two times the annual salary the member was earning at the time of death in addition to the basic life insurance amount of one times annual salary.</li> </ul>	<ul style="list-style-type: none"> <li>• Actively employed in an eligible state position resulting in membership in MOSERS.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Optional life insurance</b> - Additional life insurance may be purchased in a flat amount in multiples of \$10,000 not to exceed the maximum (lesser of six times annual salary or \$800,000). Spouse coverage may be purchased in multiples of \$10,000 up to a maximum of \$100,000; however, the amount of spouse coverage cannot exceed the amount of optional life insurance coverage the member has purchased. Coverage for children is available in a flat amount of \$10,000 per child.</li> </ul>	<ul style="list-style-type: none"> <li>• Actively employed in an eligible state position resulting in membership in MOSERS.</li> </ul>

\* Terminating employees may convert coverage up to the amount they had as an active employee at individual rates.

**Retired Members**

<b>Plan Provision</b>	<b>Requirement</b>
<ul style="list-style-type: none"> <li>• <b>Basic life insurance at retirement</b> - \$5,000 basic life insurance during retirement.</li> </ul>	<ul style="list-style-type: none"> <li>• Must retire directly from active employment.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Optional life insurance at retirement (MSEP)</b> - An employee may retain up to the lesser of \$60,000 or the amount of optional life insurance coverage held at the time of retirement at the group rate and may convert any remaining basic and optional life insurance at individual rates.</li> </ul>	<ul style="list-style-type: none"> <li>• Must retire directly from active employment.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Optional life insurance at retirement (MSEP 2000)</b> - Under "Rule of 80", an employee may retain the current amount of coverage prior to retirement until age 62 at which time coverage is reduced to \$60,000, and may convert any remaining basic and optional life insurance at individual rates. Coverage for spouse ends at member's retirement and may be converted at individual rates.</li> </ul>	<ul style="list-style-type: none"> <li>• Must retire directly from active employment.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Optional life insurance at retirement (MSEP 2011)</b> - Under "Rule of 90", an employee may retain the current amount of coverage prior to retirement until age 62 at which time coverage is reduced to \$60,000, and may convert any remaining basic and optional life insurance at individual rates. Coverage for spouse ends at member's retirement and may be converted at individual rates.</li> </ul>	<ul style="list-style-type: none"> <li>• Must retire directly from active employment.</li> </ul>

*Summary of Plan Provisions***Long-Term Disability (LTD) Plans - June 30, 2011**

MOSERS administers the LTD Plan for eligible state employees who become disabled during active employment.

**Active Members**

Classification	Requirement
<ul style="list-style-type: none"> <li>• <b>General state employees, legislators, and elected state officials</b> - Members of MOSERS in a position normally requiring 1,040 hours of work a year are covered under the LTD plan, unless they work for a state agency which has its own LTD plan.</li> </ul>	<ul style="list-style-type: none"> <li>• Eligible participants receive 60% of their compensation minus primary social security, workers' compensation, and employer provided income. Benefits commence after 90 days of disability or after sick leave expires, whichever occurs last. LTD benefits cease upon the earliest of (i) when disability ends, (ii) when the member is first eligible for normal retirement benefits or is receiving early retirement benefits, (iii) when the member returns to work, or (iv) upon a member's death.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Water patrol</b></li> </ul>	<ul style="list-style-type: none"> <li>• Uniformed members who are eligible for statutory occupational disability receive benefits equal to 50% of compensation with no offset for social security at the time of disability. For nonoccupational disabilities, eligible participants receive the same benefit as general employees.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Judges</b></li> </ul>	<ul style="list-style-type: none"> <li>• In addition to the disability benefits provided to general employees, judges also receive benefits under the state constitution. Participants receive 50% of salary until the current term expires.</li> </ul>



## Changes in Plan Provisions

### Prospective Plan Changes

On July 8, 2011, Governor Nixon signed into law HB 282, retirement legislation that contained provisions affecting the Missouri State Employees' Retirement Plan, the Missouri Department of Transportation and Highway Patrol Employees' Retirement System (MPERS), and the Missouri Deferred Compensation as well as employees of the Missouri Development Finance Board (MDFB).

This legislation contained provisions that automatically enroll new hires on or after July 1, 2012, in the Deferred Compensation Plan that is administered by MOSERS as well as language providing for MOSERS and MPERS to transfer funds between the two systems in connection with service credit transfers occurring on or after September 1, 2011.

The legislation also included provisions making any full-time employee of MDFB employed on or after September 1, 2011, a state employee and member of MOSERS. Provisions further allow MDFB employees to purchase credited service toward retirement based on their employment with MDFB prior to September 1, 2011. Lastly, the legislation contains provisions that would require all public employee defined benefit retirement plans covered under Chapter 105, RSMo, to submit quarterly investment reports to the Joint Committee on Public Employee Retirement (JCPER) in the form and manner requested by the committee. A more detailed description of this legislation follows.

### MDFB Employees Become Members of MOSERS

Section 100.273 makes any full-time employee of MDFB who is employed on or after September 1, 2011, a state employee and member of MOSERS. However, these employees will not be covered under the Missouri Consolidated Health Care Plan (MCHCP), unless the MDFB governing board requests coverage and MCHCP's board approves the request. These employees may purchase credited service toward retirement based on their pre-September 1, 2011, employment with MDFB, and will not be required to be vested before they purchase their prior service. The cost of the full amount of their prior creditable service allowed would be an amount determined to equal the actuarial accrued liability at the time of the purchase to the extent the system's actuarial accrued liability was funded as of the most recent actuarial valuation. If an employee pays less than the full amount so determined, the employee's prior creditable service will be prorated accordingly. Employees can purchase prior creditable service any time on or after September 1, 2011, but must do so before applying for retirement. Additional provisions exist that will allow MDFB employees who purchase their prior creditable service and subsequently terminate prior to being vested in the system to receive a refund equal to the purchase amount.

### MOSERS/MPERS Transfer of Funds

This provision requires MOSERS and MPERS to transfer funds between the two systems in connection with service credit transfers occurring on or after September 1, 2011. Upon a reciprocal transfer of creditable or credited service, the sending system from which the service is transferred will be required to pay the receiving system to which the service is transferred an amount equal to the present value of the accrued benefit determined using the same assumptions used in that system's last regular valuation assuming active member status based on the unit credit actuarial cost method. However, in no event will the payment amount be less than the sum of the member's accumulated contributions and interest plus any purchased service payments from the member held on deposit by the sending system. In the event the member has received a refund of accumulated contributions from the sending system and forfeited service credit with that system, the member will need to reestablish that service with the sending system by again becoming an active member of either system and satisfying the requirements otherwise stipulated for reestablishing service credit with the sending system.

In addition, the service transfer will not be deemed completed until the sending system makes payment to the receiving system, which payment will be made within 90 days of the date that a completed transfer request is submitted by the member.

When the transfer payment includes an amount identified as corresponding to a member's accumulated contributions, the accumulated contributions portion will be identified and the accumulated contribution balance as of the preceding July 1 will be identified and the receiving system will be responsible for crediting interest according to the terms of the receiving plan. Lastly, the systems will be required to coordinate their plan administration for reciprocal transfers to give full effect to the transfer and acceptance of corresponding division of benefit orders as well as allowing a survivor to obtain a reciprocal transfer.

### **Quarterly Investment Reporting to the JCPER**

**Section 105.661** – This provision will require all public employee defined benefit retirement plans covered under Chapter 105, RSMo, to submit quarterly investment reports to the JCPER in the form and manner requested by the committee. Under this provision, if a plan fails to submit this report, the JCPER may subpoena witnesses, take testimony under oath, and compel the production of records regarding this information, pursuant to its authority under Section 21.561.

### **State of Missouri Deferred Compensation Plan – Automatic Enrollment**

**Sections 105.915, 105.927** – These provisions will result in new employees hired on or after July 1, 2012, being automatically enrolled in the State of Missouri Deferred Compensation Plan.

The Deferred Compensation Plan is a voluntary state-sponsored program administered by MOSERS that offers state employees the opportunity to save for retirement with before-tax earnings. Under these provisions, a newly hired employee will automatically be enrolled in the deferred compensation plan at 1% of their annual pay unless the employee elects not to participate within the first thirty days of employment. If the employee elects not to participate in the plan during that period, any amounts contributed and earnings thereon will be refunded by the plan to the employee. (State college or university employees are excluded from the automatic enrollment feature but may elect to participate in the plan.)

A default target date fund will automatically be selected for each new employee based on his/her age at date of hire. Employees can choose to “opt out,” if they so desire. In this context, “opting out” could involve electing not to participate, electing to participate but at a lesser amount, electing another fund, electing to defer more than 1% of their annual pay, or combinations of these possibilities.

Additional provisions allow a spouse to automatically be designated as a primary beneficiary unless the spouse consents in writing to allow the participant to designate a non-spouse beneficiary. The legislation also permits the plan administrator (the MOSERS Board of Trustees) to amend plan documents for consistency with federal law.

Lastly, provisions exist which clarify that employees who are compensated under a local payroll system (such as MOSERS and MCHCP) are eligible to participate in the state match under the deferred compensation incentive plan.

## Actuarial Present Values

As of June 30, 2011

<b>MSEP</b>			
<b>Actuarial Present Value June 30, 2011 for</b>	<b>Actuarial Present Value</b>	<b>Portion Covered by Future Normal Cost Contributions</b>	<b>Actuarial Accrued Liabilities</b>
<b>Active members</b>			
Service retirement benefits based on services rendered before and likely to be rendered after valuation date	\$4,455,805,742	\$675,513,589	\$3,780,292,153
Disability benefits likely to be paid to present active members who become totally and permanently disabled	132,526,064	60,852,661	71,673,403
Survivor benefits likely to be paid to widows and children of present active members who die before retiring	107,793,741	27,659,645	80,134,096
Separation benefits likely to be paid to present active members	456,046,640	214,907,622	241,139,018
Refunds likely to be paid to present active members	3,040,933	2,973,807	67,126
Active member totals	<u>\$5,155,213,120</u>	<u>\$981,907,324</u>	4,173,305,796
<b>Members on leave of absence &amp; LTD</b>			
Service retirement benefits based on service rendered before the valuation date			115,863,820
<b>Terminated-vested members</b>			
Service retirement benefits based on service rendered before the valuation date			476,579,810
<b>Retired lives</b>			
BackDROP installment payments incurred, but not yet paid			5,357,322,470
			472,147
<b>Total actuarial accrued liability</b>			<u>10,123,544,043</u>
<b>Actuarial value of assets</b>			<u>8,022,481,408</u>
<b>Unfunded actuarial accrued liability</b>			<u>\$2,101,062,635</u>

<b>Judicial Plan</b>			
<b>Actuarial Present Value June 30, 2011 for</b>	<b>Actuarial Present Value</b>	<b>Portion Covered by Future Normal Cost Contributions</b>	<b>Actuarial Accrued Liabilities</b>
<b>Active members</b>			
Service retirement benefits based on services rendered before and likely to be rendered after valuation date	\$178,166,409	\$52,109,670	\$126,056,739
Disability benefits likely to be paid to present active members who become totally and permanently disabled	800,116	799,270	846
Survivor benefits likely to be paid to widows and children of present active members who die before retiring	5,487,554	3,191,593	2,295,961
Refunds likely to be paid to present active members	26,228	25,944	284
Active member totals	<u>\$184,480,307</u>	<u>\$56,126,477</u>	128,353,830
<b>Retired lives</b>			
			251,532,354
<b>Terminated-vested members</b>			
			13,450,473
<b>Members on LTD</b>			
			147,932
<b>Total actuarial accrued liability</b>			<u>393,484,589</u>
<b>Actuarial value of assets</b>			<u>98,398,628</u>
<b>Unfunded actuarial accrued liability</b>			<u>\$295,085,961</u>

# POSITIVE BENEFITS

Retirement is about financial security but it is also unveils the next chapter of your life story. Whether your retirement is in the distant future or just on the horizon, our knowledge and experience will help guide you safely to your destination. If we plan together today, you will reap positive benefits tomorrow.

*There are two ways to face the future.  
One way is with apprehension; the other is with anticipation.*

*- Jim Rohn*

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## STATISTICAL SECTION



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## Summary

### Plan Membership

Membership in the pension trusts administered by MOSERS increased by 580. Active members decreased by 1,821, retired members and their beneficiaries increased by 2,085, and terminated-vested members increased by 316. Membership data for the last ten years ended June 30, 2011, can be found on page 149. Page 152 depicts the location of benefit recipients, showing that the majority remain in the state of Missouri after retirement.

### Net Assets vs. Liabilities

The charts on pages 144-147 graphically represent the funding progress of the pension plans for the ten years ended June 30, 2011. The area charts in the middle of the pages show the portion of the pension liabilities that are unfunded compared to the portion covered by assets in the trust funds. The charts on the bottom of the pages illustrate the funded ratio of the plans for the ten years ended June 30, 2011.

The existence of the unfunded actuarial accrued liabilities is not necessarily an indication of financial problems, but the fluctuations are important and must be monitored and controlled.

The remainder of this section contains various statistical and historical data considered useful in evaluating the condition of the plans.

All nonaccounting data is taken from MOSERS' internal sources except for that information which is derived from the actuarial valuations (pages 144-149, 153, and 162-163). Member data may differ between some schedules since the valuations are performed using data as of May 31 each year.

## Changes in Net Assets

### Last Ten Fiscal Years

	FY02	FY03	FY04	FY05
<b>MSEP</b>				
<i>Additions</i>				
Employer contributions	\$ 209,515,026	\$156,576,150	\$ 164,691,836	\$194,524,059
Employee contributions	0	0	0	0
Member service purchases	3,913,426	3,690,820	3,426,367	4,122,001
Service transfers in	48,840	53,119	166,510	29,397
Investment income (net of expenses)	(348,106,057)	332,901,027	873,793,645	727,341,314
Other	447,462	437,574	469,959	1,231,658
Total additions to plan net assets	(134,181,303)	493,658,690	1,042,548,317	927,248,429
<i>Deductions</i>				
Benefits	268,480,982	319,607,447	367,248,099	367,431,297
Refunds	0	4,019	8,585	0
Service transfers out	27,970	2,191,487	529,177	199,201
Administrative expenses	5,753,812	5,954,365	5,694,082	6,228,609
Total deductions from plan net assets	274,262,764	327,757,318	373,479,943	373,859,107
Transfer from ALJLAP plan	0	0	0	18,157,148
<b>Change in net assets</b>	<b>\$(408,444,067)</b>	<b>\$165,901,372</b>	<b>\$ 669,068,374</b>	<b>\$571,546,470</b>
<b>ALJLAP Plan</b>				
<i>Additions</i>				
Employer contributions	\$ 1,072,562	\$ 951,023	\$ 945,950	\$ 1,124,924
Investment income (net of expenses)	(874,249)	862,381	2,344,262	2,057,375
Other	1,124	1,134	1,261	3,484
Total additions to plan net assets	199,437	1,814,538	3,291,473	3,185,783
<i>Deductions</i>				
Benefits	836,615	969,918	1,003,355	749,197
Administrative expenses	14,450	15,425	15,276	17,618
Total deductions from plan net assets	851,065	985,343	1,018,631	766,815
Transfer to MSEP plan	0	0	0	(18,157,148)
<b>Change in net assets</b>	<b>\$ (651,628)</b>	<b>\$ 829,195</b>	<b>\$ 2,272,842</b>	<b>\$ (15,738,180)</b>
<b>Judicial Plan</b>				
<i>Additions</i>				
Employer contributions	\$ 22,088,485	\$ 20,802,140	\$ 20,636,314	\$ 21,852,985
Employee contributions	0	0	0	0
Investment income (net of expenses)	(1,680,566)	1,932,815	5,800,076	5,409,107
Other	2,160	2,541	3,119	9,160
Total additions to plan net assets	20,410,079	22,737,496	26,439,509	27,271,252
<i>Deductions</i>				
Benefits	15,943,642	16,870,011	17,658,269	18,396,397
Administrative expenses	27,778	34,571	37,796	46,321
Total deductions from plan net assets	15,971,420	16,904,582	17,696,065	18,442,718
<b>Change in net assets</b>	<b>\$ 4,438,659</b>	<b>\$ 5,832,914</b>	<b>\$ 8,743,444</b>	<b>\$ 8,828,534</b>
<b>Internal Service Fund</b>				
<i>Operating revenues</i>				
Operating revenues				
Premium receipts	\$ 24,753,708	\$ 25,223,043	\$ 25,771,703	\$ 27,305,305
Deferred compensation receipts	0	0	0	0
Miscellaneous income	436,489	436,494	436,489	436,489
Total operating revenues	25,190,197	25,659,537	26,208,192	27,741,794
<i>Operating expenses</i>				
Premium disbursements	24,675,520	25,169,883	25,736,083	27,271,948
Deferred compensation disbursements	0	0	0	0
Premium refunds	78,188	53,160	35,620	33,357
Administrative expenses	439,232	421,507	474,040	466,531
Total operating expenses	25,192,940	25,644,550	26,245,743	27,771,836
<i>Nonoperating revenues</i>				
Investment income	47,767	31,179	24,353	49,326
<b>Change in net assets</b>	<b>\$ 45,024</b>	<b>\$ 46,166</b>	<b>\$ (13,198)</b>	<b>\$ 19,284</b>

FY06	FY07	FY08	FY09	FY10	FY11
\$227,233,195	\$ 239,488,751	\$ 249,770,156	\$ 252,105,008	\$ 251,226,187	\$ 263,418,048
0	0	0	0	0	599,761
3,072,315	3,460,923	3,085,133	3,235,999	3,576,954	2,814,551
161,613	172,936	38,069	28,075	10,009	142,248
728,526,971	1,283,573,438	110,627,355	(1,508,376,715)	859,898,512	1,395,677,299
501,512	542,266	572,274	619,060	639,901	659,474
959,495,606	1,527,238,314	364,092,987	(1,252,388,573)	1,115,351,563	1,663,311,381
400,169,563	447,240,771	479,853,891	511,466,555	543,284,289	597,424,954
1,341	0	0	0	3,106	0
133,866	51,980	251,443	0	462,970	17,745,828
6,486,597	6,689,710	6,950,878	7,088,483	7,064,544	7,054,581
406,791,367	453,982,461	487,056,212	518,555,038	550,814,909	622,225,363
0	0	0	0	0	0
\$552,704,239	\$1,073,255,853	\$(122,963,225)	\$(1,770,943,611)	\$ 564,536,654	\$1,041,086,018
\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
\$ 22,401,569	\$ 23,745,467	\$ 26,215,309	\$ 27,725,882	\$ 27,029,198	\$ 27,702,682
0	0	0	0	0	59,958
5,933,531	11,356,312	1,043,940	(15,847,382)	9,909,718	17,460,050
4,085	4,798	5,506	6,504	7,374	8,250
28,339,185	35,106,577	27,264,755	11,885,004	36,946,290	45,230,940
19,091,587	20,595,504	22,058,085	23,232,088	24,230,545	25,488,531
52,830	59,187	66,880	74,473	81,414	88,253
19,144,417	20,654,691	22,124,965	23,306,561	24,311,959	25,576,784
\$ 9,194,768	\$ 14,451,886	\$ 5,139,790	\$ (11,421,557)	\$ 12,634,331	\$ 19,654,156
\$ 26,415,236	\$ 27,101,931	\$ 27,957,666	\$ 28,990,057	\$ 29,098,799	\$ 28,829,638
0	0	60,393,973	75,661,047	69,143,267	54,221,226
436,501	436,502	536,493	1,027,380	1,039,369	981,404
26,851,737	27,538,433	88,888,132	105,678,484	99,281,435	84,032,268
26,379,919	27,063,815	27,927,265	28,968,981	29,077,825	28,804,638
0	0	60,371,802	75,683,218	69,143,267	54,221,226
35,317	38,116	30,401	21,076	20,974	24,999
487,699	527,040	708,100	819,581	797,020	826,809
26,902,935	27,628,971	89,037,568	105,492,856	99,039,086	83,877,672
85,124	117,729	77,396	20,755	9,816	11,071
\$ 33,926	\$ 27,191	\$ (72,040)	\$ 206,383	\$ 252,165	\$ 165,667



## Deductions from Net Assets for Benefits and Refunds by Type

### Last Ten Fiscal Years

<b>MSEP</b>					
	<b>FY02</b>	<b>FY03</b>	<b>FY04</b>	<b>FY05</b>	<b>FY06</b>
<b>Type of benefit</b>					
Retirement	\$229,333,190	\$257,883,204	\$295,200,937	\$314,623,851	\$338,449,307
Survivors	17,482,292	19,689,766	21,930,438	24,251,854	26,944,984
Disability	145,856	118,279	102,696	82,246	62,324
Lump sum	1,893,194	1,384,599	320,267	342,720	459,398
BackDROP & service transfers	19,626,450	40,531,599	49,693,761	28,130,626	34,253,550
<b>Total benefits</b>	<b>\$268,480,982</b>	<b>\$319,607,447</b>	<b>\$367,248,099</b>	<b>\$367,431,297</b>	<b>\$400,169,563</b>
Refunds	\$ 0	\$ 4,019	\$ 8,585	\$ 0	\$ 1,341
	<b>FY07</b>	<b>FY08</b>	<b>FY09</b>	<b>FY10</b>	<b>FY11</b>
<b>Type of benefit</b>					
Retirement	\$366,185,990	\$393,328,057	\$421,847,017	\$448,880,110	\$476,841,741
Survivors	29,340,464	31,894,702	34,615,979	37,718,898	39,968,601
Disability	42,273	36,825	33,812	33,403	29,191
Lump sum	556,568	454,643	272,189	409,787	293,147
BackDROP & service transfers	51,115,476	54,139,664	54,697,557	56,705,060	98,038,103
<b>Total benefits</b>	<b>\$447,240,771</b>	<b>\$479,853,891</b>	<b>\$511,466,554</b>	<b>\$543,747,258</b>	<b>\$615,170,783</b>
Refunds	\$ 0	\$ 0	\$ 0	\$ 3,106	\$ 0

<b>ALJLAP*</b>					
	<b>FY02</b>	<b>FY03</b>	<b>FY04</b>	<b>FY05</b>	<b>FY06</b>
<b>Type of benefit</b>					
Retirement	\$680,391	\$808,124	\$ 840,963	\$616,370	\$0
Survivors	156,224	161,794	162,392	132,827	0
<b>Total benefits</b>	<b>\$836,615</b>	<b>\$969,918</b>	<b>\$1,003,355</b>	<b>\$749,197</b>	<b>\$0</b>

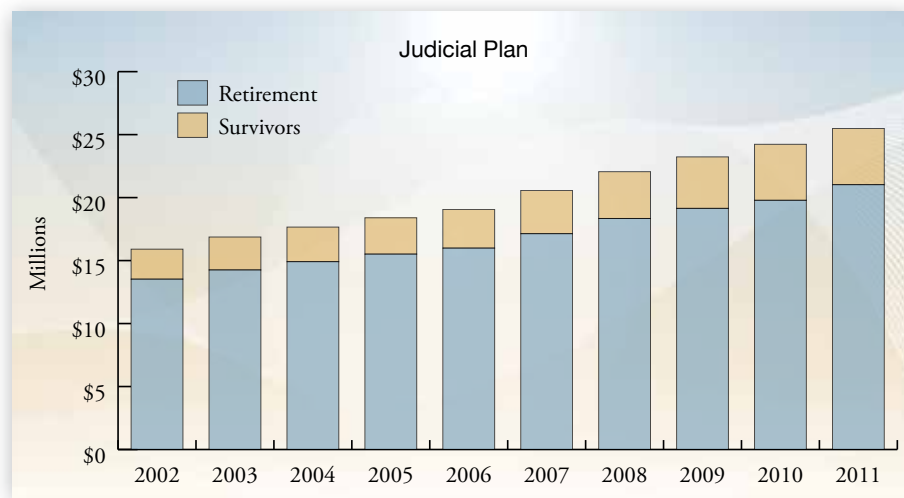
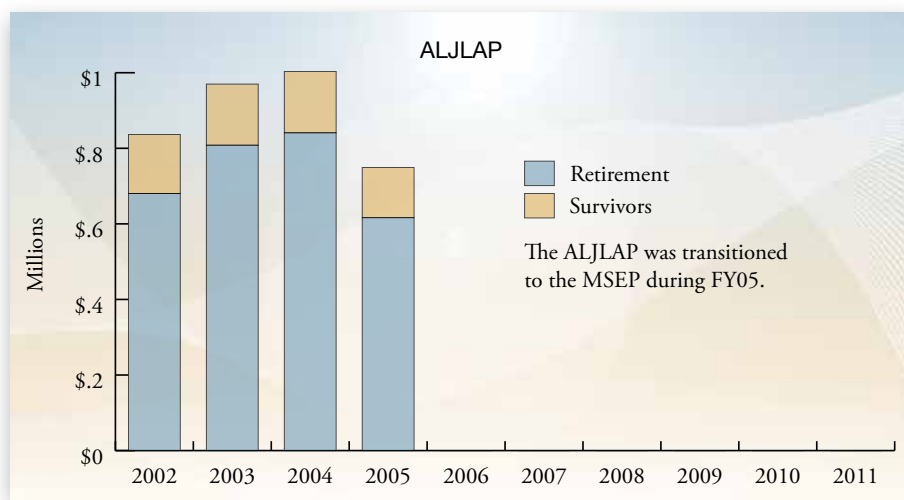
\* ALJLAP transitioned to the MSEP in FY05.

<b>Judicial Plan</b>					
	<b>FY02</b>	<b>FY03</b>	<b>FY04</b>	<b>FY05</b>	<b>FY06</b>
<b>Type of benefit</b>					
Retirement	\$13,525,249	\$14,256,361	\$14,913,678	\$15,513,182	\$15,989,341
Survivors	2,379,860	2,613,650	2,744,591	2,883,215	3,070,746
Disability	38,533	0	0	0	31,500
<b>Total benefits</b>	<b>\$15,943,642</b>	<b>\$16,870,011</b>	<b>\$17,658,269</b>	<b>\$18,396,397</b>	<b>\$19,091,587</b>
	<b>FY07</b>	<b>FY08</b>	<b>FY09</b>	<b>FY10</b>	<b>FY11</b>
<b>Type of benefit</b>					
Retirement	\$17,135,426	\$18,342,676	\$19,143,753	\$19,784,720	\$21,025,904
Survivors	3,433,078	3,715,409	4,088,335	4,445,825	4,462,627
Disability	27,000	0	0	0	0
<b>Total benefits</b>	<b>\$20,595,504</b>	<b>\$22,058,085</b>	<b>\$23,232,088</b>	<b>\$24,230,545</b>	<b>\$25,488,531</b>

# Deductions from Net Assets for Benefits and Refunds by Type Last Ten Fiscal Years



Disability benefits are included, but amounts are too minimal to display visually in graph.



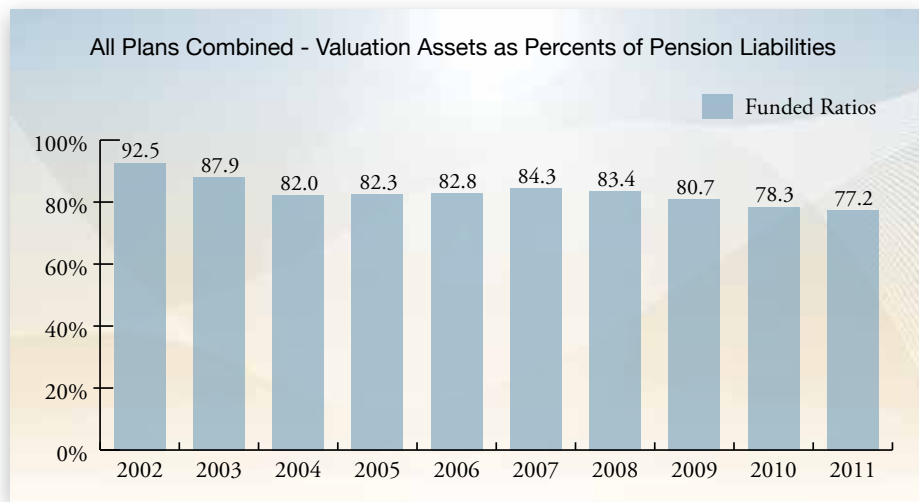
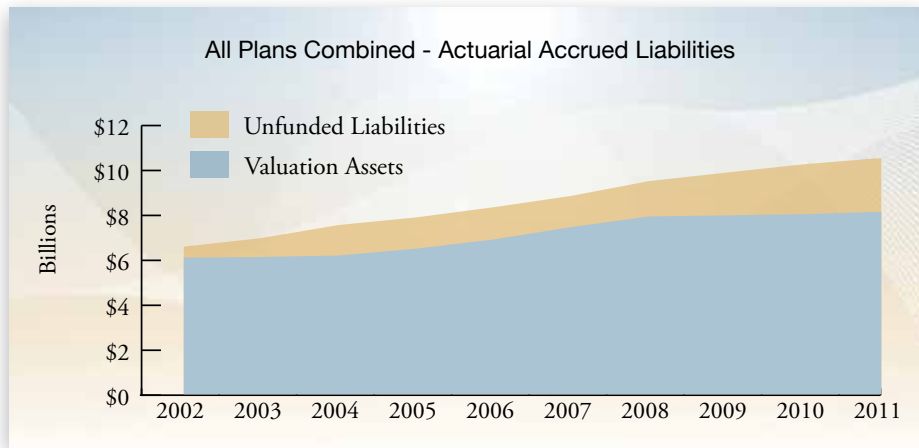
# Valuation Assets vs. Pension Liabilities

## Pension Trust Funds - Last Ten Fiscal Years

### All Plans Combined - Valuation Assets (smoothed market) vs. Pension Liabilities

Dollars in Billions

Fiscal Year	Valuation Assets	Unfunded Liabilities	Accrued Liabilities	Funded Ratios
2002	\$6.0780	\$0.4906	\$ 6.5686	92.5%
2003	6.1075	0.8417	6.9492	87.9
2004	6.1735	1.3573	7.5308	82.0
2005	6.4795	1.3908	7.8703	82.3
2006	6.8883	1.4339	8.3222	82.8
2007	7.4392	1.3879	8.8271	84.3
2008	7.9117	1.5714	9.4831	83.4
2009	7.9574	1.9065	9.8639	80.7
2010	8.0124	2.2228	10.2352	78.3
2011	8.1210	2.3960	10.5170	77.2



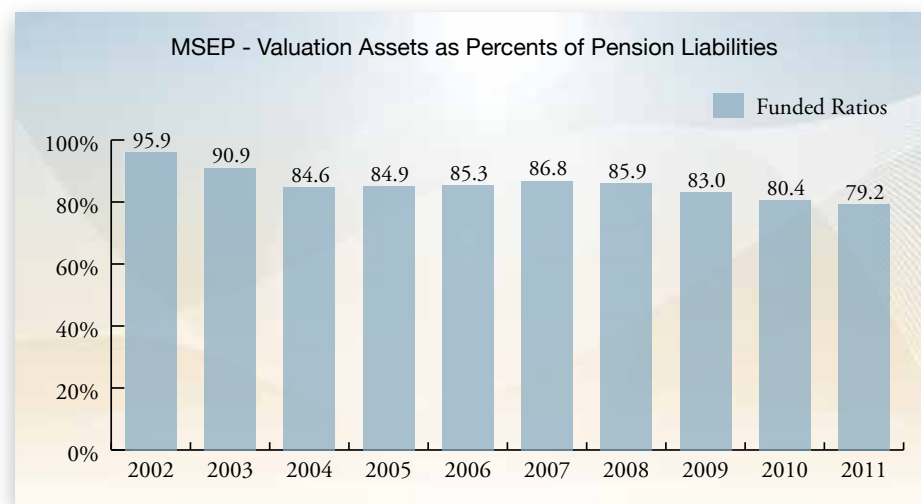
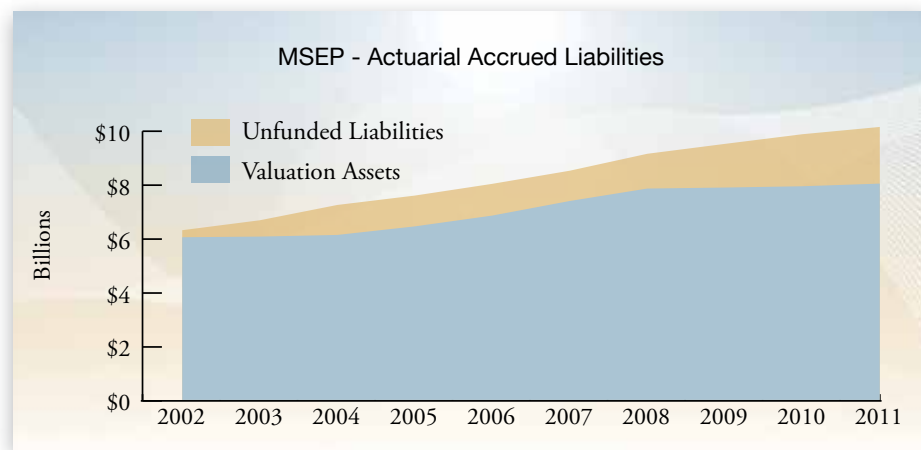
# Valuation Assets vs. Pension Liabilities

## Pension Trust Funds - Last Ten Fiscal Years

### MSEP - Valuation Assets (smoothed market) vs. Pension Liabilities

Dollars in Billions

Fiscal Year	Valuation Assets	Unfunded Liabilities	Accrued Liabilities	Funded Ratios
2002	\$6.0331	\$0.2612	\$6.2943	95.9%
2003	6.0573	0.6050	6.6623	90.9
2004	6.1182	1.1118	7.2300	84.6
2005	6.4353	1.1427	7.5780	84.9
2006	6.8366	1.1766	8.0132	85.3
2007	7.3773	1.1231	8.5004	86.8
2008	7.8385	1.2898	9.1283	85.9
2009	7.8761	1.6187	9.4948	83.0
2010	7.9234	1.9298	9.8532	80.4
2011	8.0225	2.1010	10.1240	79.2



# Valuation Assets vs. Pension Liabilities

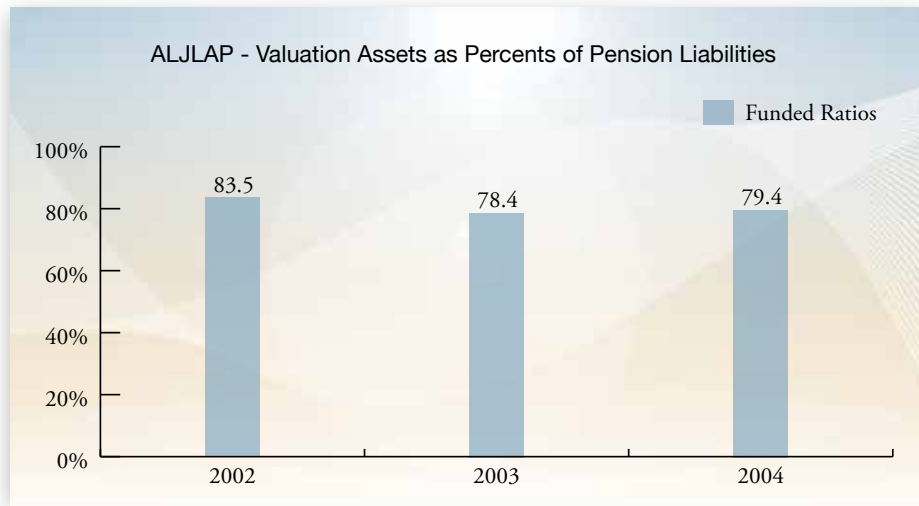
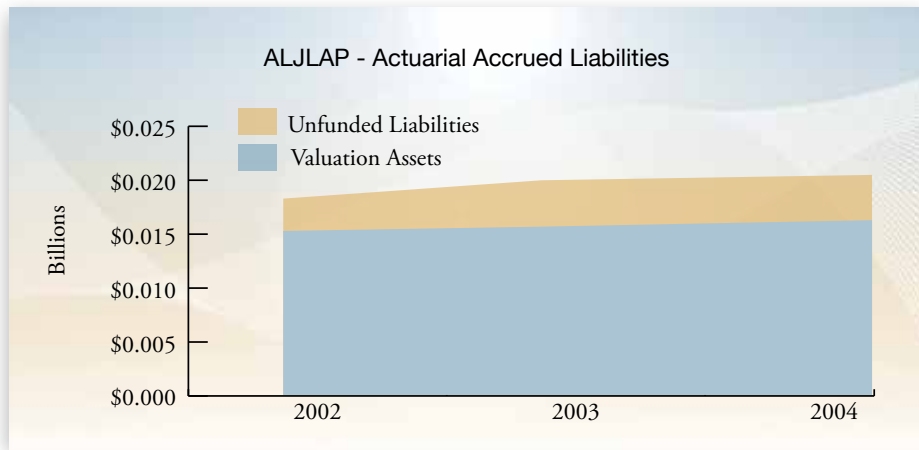
## Pension Trust Funds - Last Ten Fiscal Years

### ALJLAP\* - Valuation Assets (smoothed market) vs. Pension Liabilities

Dollars in Billions

Fiscal Year	Valuation Assets	Unfunded Liabilities	Accrued Liabilities	Funded Ratios
2002	\$0.0152	\$0.0030	\$0.0182	83.5%
2003	0.0156	0.0043	0.0199	78.4
2004	0.0162	0.0042	0.0204	79.4

\* ALJLAP transitioned to the MSEP in FY05.



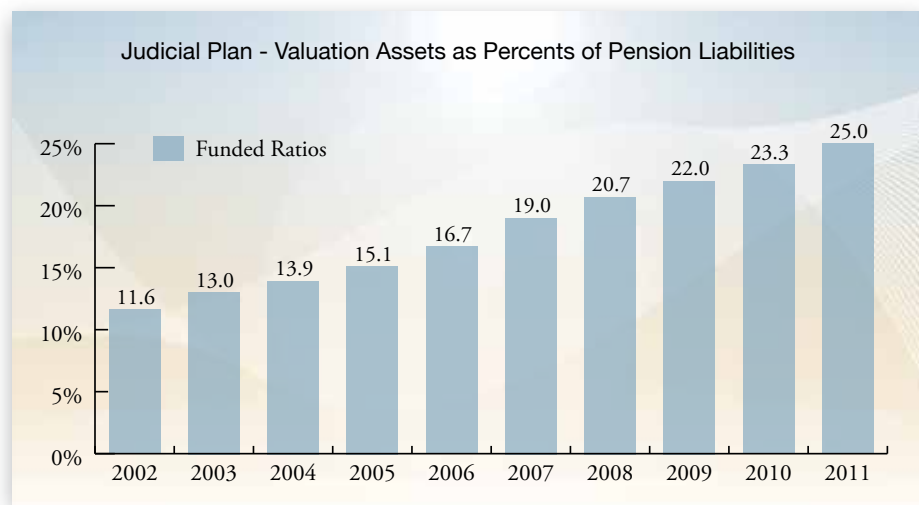
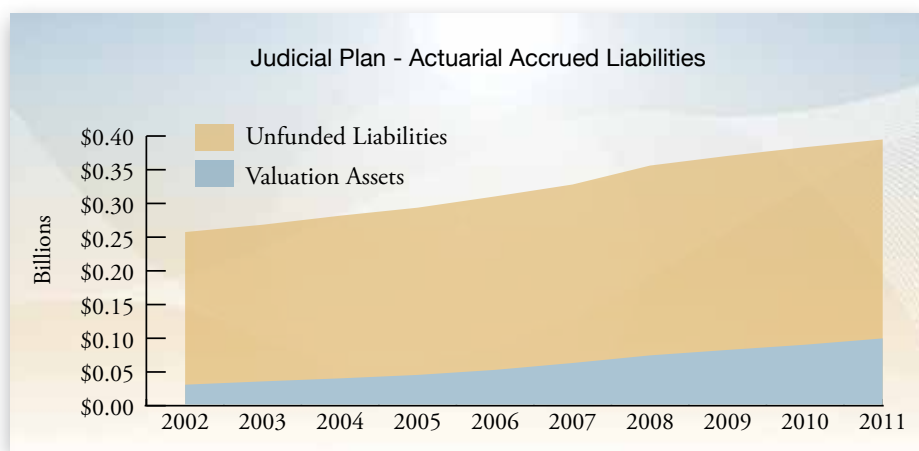
# Valuation Assets vs. Pension Liabilities

Pension Trust Funds - Last Ten Fiscal Years

## Judicial Plan - Valuation Assets (smoothed market) vs. Pension Liabilities

Dollars in Billions

Fiscal Year	Valuation Assets	Unfunded Liabilities	Accrued Liabilities	Funded Ratios
2002	\$0.0297	\$0.2264	\$0.2561	11.6%
2003	0.0346	0.2324	0.2670	13.0
2004	0.0391	0.2413	0.2804	13.9
2005	0.0442	0.2481	0.2923	15.1
2006	0.0517	0.2573	0.3090	16.7
2007	0.0619	0.2648	0.3267	19.0
2008	0.0732	0.2816	0.3548	20.7
2009	0.0813	0.2878	0.3691	22.0
2010	0.0890	0.2930	0.3820	23.3
2011	0.0984	0.2951	0.3935	25.0



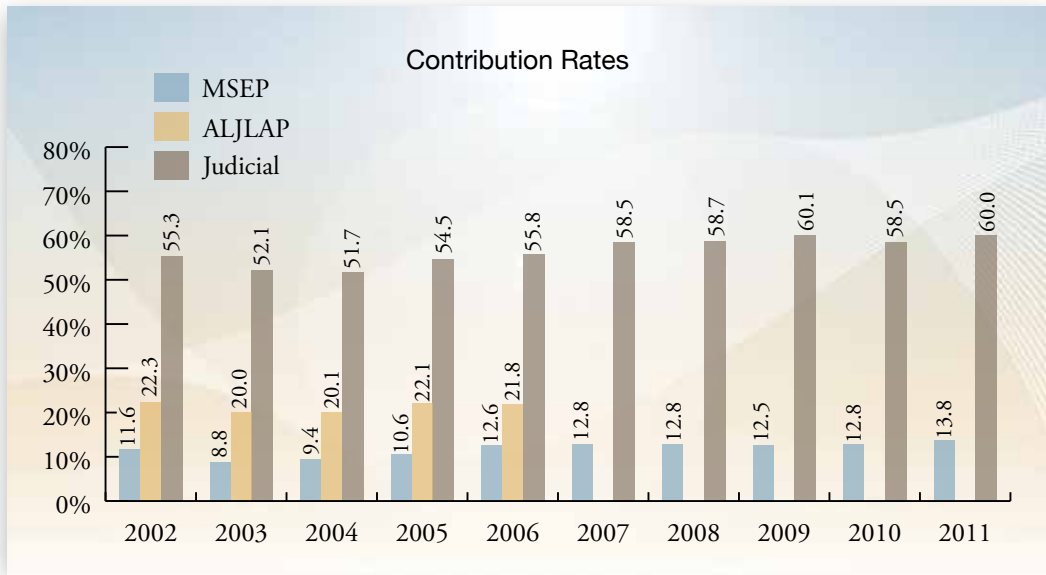
# Contribution Rates

## Last Ten Fiscal Years

### Contribution Rates as a Percent of Payroll

Fiscal Year	MSEP	ALJLAP*	Judicial Plan
2002	11.59%	22.32%	55.30%
2003	8.81	20.02	52.12
2004	9.35	20.12	51.68
2005	10.64	22.13	54.51
2006	12.59	21.79	55.76
2007	12.78	0.00	58.48
2008	12.84	0.00	58.65
2009	12.53	0.00	60.07
2010	12.75	0.00	58.48
2011	13.81	0.00	60.03

\*ALJLAP included in MSEP beginning FY07.

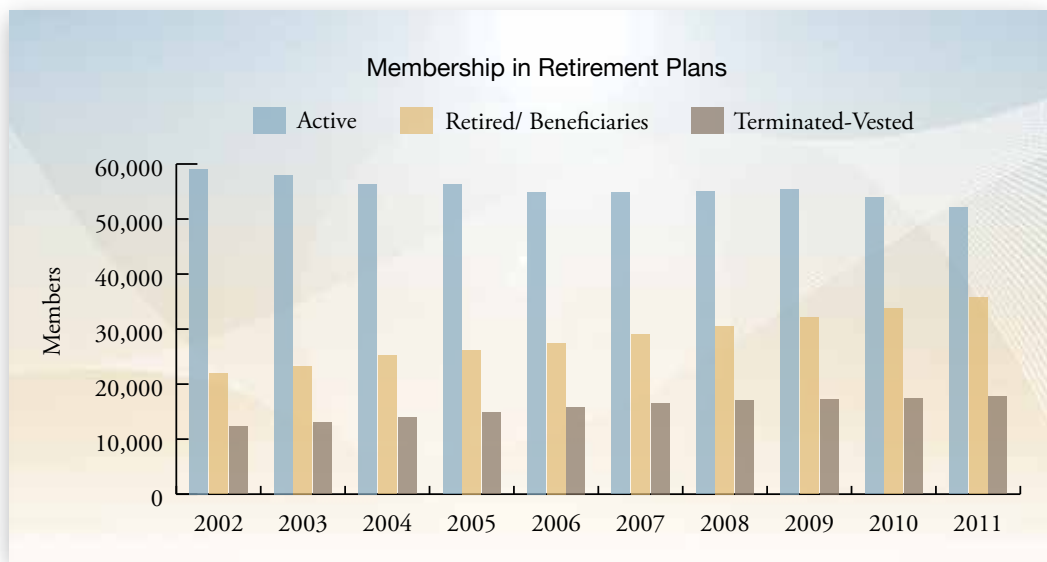


# Membership in Retirement Plans

## Last Ten Fiscal Years

### Membership in Retirement Plans

Fiscal Year	Active	Retired/Beneficiaries	Terminated-Vested	Totals
2002	59,066	21,910	12,339	93,315
2003	58,007	23,292	13,073	94,372
2004	56,362	25,179	13,898	95,439
2005	56,336	26,177	14,789	97,302
2006	54,887	27,450	15,829	98,166
2007	54,763	29,129	16,578	100,470
2008	54,943	30,572	17,123	102,638
2009	55,454	32,100	17,304	104,858
2010	53,880	33,716	17,441	105,037
2011	52,059	35,801	17,757	105,617





# Benefit Recipients by Type of Retirement and Option Selected

June 30, 2011

MSEP			Type of Retirement						
			A	B	C	D	E	F	G
Amount of Monthly Benefit	Number of Benefit Recipients								
\$ 1-250	4,338	1,623	1,905	287	467	3	0	53	
251-500	6,059	2,896	2,125	361	617	5	0	55	
501-750	4,706	2,965	965	273	471	0	0	32	
751-1,000	3,981	3,088	411	166	299	0	0	17	
1,001-1,250	3,155	2,662	188	98	199	0	0	8	
1,251-1,500	2,654	2,375	81	72	122	0	0	4	
1,501-1,750	2,135	1,960	38	39	96	0	0	2	
1,751-2,000	1,869	1,739	25	34	69	0	0	2	
Over 2,000	6,845	6,456	42	100	246	0	0	1	
Total	35,742	25,764	5,780	1,430	2,586	8	0	174	

Judicial Plan			Type of Retirement						
Amount of Monthly Benefit	Number of Benefit Recipients		A	B	C	D	E	F	G
\$ 1-250	3	0	2	0	1	0	0	0	
251-500	9	0	8	0	0	0	0	1	
501-750	6	0	2	0	3	0	0	1	
751-1,000	9	0	2	1	6	0	0	0	
1,001-1,250	6	0	4	1	0	0	0	1	
1,251-1,500	3	0	3	0	0	0	0	0	
1,501-1,750	8	0	3	3	1	0	0	1	
1,751-2,000	11	1	5	0	5	0	0	0	
Over 2,000	435	276	40	29	88	0	0	2	
Total	490	277	69	34	104	0	0	6	

**Type of Retirement**

- A Normal retirement
- B Early retirement
- C Survivor of active
- D Survivor of retired
- E Disability
- F Occupational disability (Water Patrol)
- G Ex-spouse

Option Selected									
1	2	3	4	5	6	7	8	9	10
0	19	144	126	235	1	868	568	38	2,339
7	39	172	100	260	4	1,208	1,057	17	3,195
10	32	99	51	208	2	1,007	1,134	6	2,157
7	19	57	32	260	0	831	950	4	1,821
12	14	46	22	285	1	656	660	2	1,457
10	12	44	21	319	0	527	456	-	1,265
10	7	27	13	295	1	424	318	1	1,039
10	3	21	18	297	0	395	221	1	903
67	20	71	27	946	2	1,851	960	1	2,900
133	165	681	410	3,105	11	7,767	6,324	70	17,076

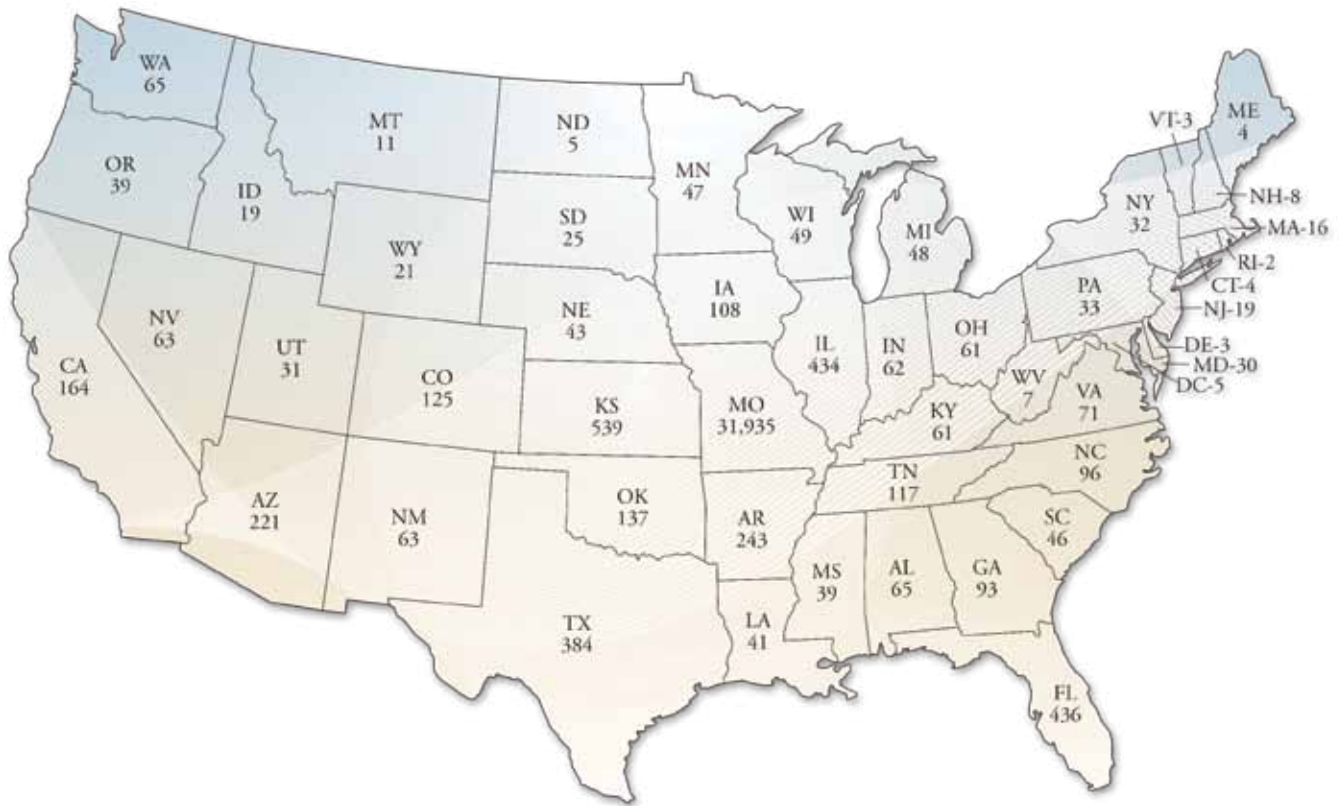
Option Selected									
1	2	3	4	5	6	7	8	9	10
3	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	1
4	0	0	0	1	0	0	0	0	1
4	0	0	0	2	0	0	0	0	3
4	0	0	0	0	0	0	0	0	2
3	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	4
8	0	0	0	2	0	0	0	0	1
399	0	0	0	28	0	0	0	1	7
437	0	0	0	33	0	0	0	1	19

**Option Selected**

- 1 Automatic 50% joint & survivor
- 2 60-month guaranteed
- 3 120-month guaranteed
- 4 180-month guaranteed
- 5 50% joint & survivor
- 6 75% joint & survivor
- 7 100% joint & survivor
- 8 Unreduced 50% joint & survivor
- 9 Automatic minor survivor
- 10 No survivor option (includes pop-ups)

# Distribution of Benefit Recipients by Location

June 30, 2011



## Benefit Recipients Outside the Continental United States

- |                             |                          |
|-----------------------------|--------------------------|
| 10 - Alaska                 | 1 - Marshall Islands     |
| 8 - Hawaii                  | 1 - Nigeria              |
| 4 - APO                     | 1 - P.R. China           |
| 1 - Argentina               | 1 - Panama               |
| 2 - Australia               | 1 - Philippines          |
| 1 - Bermuda                 | 1 - Puerto Rico          |
| 8 - Canada                  | 1 - Slovak Republic      |
| 1 - Colombia, South America | 1 - Sri Lanka            |
| 1 - Costa Rica              | 1 - Sweden               |
| 2 - Germany                 | 1 - Thailand             |
| 1 - Guam                    | 1 - The Netherlands      |
| 1 - Ireland                 | 1 - United Arab Emirates |
| 2 - Israel                  | 2 - United Kingdom       |
| 2 - Italy                   | 1 - Wales UK             |
| 1 - Mexico                  |                          |

## Benefits Payable June 30, 2011

Tabulated by Option and Type of Benefit

### MSEP

Type of Benefit	Number	Annual Benefits	Average Annual Benefits
<b>Service retirement</b>			
Life annuity	4,991	\$ 60,008,557	\$12,023
50% joint and survivor	5,277	83,756,204	15,872
75% joint and survivor	1	29,760	29,760
100% joint and survivor	2,594	48,588,274	18,731
5-year certain and life	124	1,326,292	10,696
10-year certain and life	124	1,153,804	9,305
Survivor beneficiary	2,139	22,968,833	10,738
Total	15,250	217,831,724	14,284
<b>Disability retirement</b>	8	29,232	3,654
<b>Death-in-service</b>	1,355	13,447,485	9,924
<b>Grand totals</b>	<u>16,613</u>	<u>\$231,308,441</u>	13,923

### MSEP 2000

Type of Benefit	Number	Annual Benefits	Average Annual Benefits
<b>Service retirement</b>			
Life annuity	11,629	\$171,485,655	\$14,746
50% joint and survivor	2,820	58,308,815	20,677
100% joint and survivor	2,884	51,170,009	17,743
5-year certain and life	35	525,741	15,021
10-year certain and life	478	5,384,622	11,265
15-year certain and life	348	3,059,421	8,791
Survivor beneficiary	438	4,119,544	9,405
Total	18,632	294,053,807	15,782
<b>Death-in-service</b>	70	205,137	2,931
<b>Grand totals</b>	<u>18,702</u>	<u>\$294,258,944</u>	15,734

### Judicial Plan

Type of Benefit	Number	Annual Benefits	Average Annual Benefits
<b>Service retirement</b>			
50% joint and survivor	347	\$22,011,425	\$63,434
Survivor beneficiary	105	3,428,035	32,648
Total	452	25,439,460	56,282
<b>Death-in-service</b>	34	1,039,593	30,576
<b>Grand totals</b>	<u>486</u>	<u>\$26,479,053</u>	54,484

# Average Monthly Benefit Amounts

Ten Years Ended June 30, 2011

Total MSEP		Years Credited Service by Category							All Members
		<5	5-10	10-15	15-20	20-25	25-30	30+	
Members Retiring During Fiscal Year									
2002	Average monthly benefit	\$ 107	\$ 260	\$ 423	\$ 646	\$1,016	\$1,444	\$1,896	\$ 986
	Average final average salary	\$1,497	\$2,251	\$2,165	\$2,647	\$2,647	\$3,042	\$3,349	\$2,706
	Number of retirees	4	222	261	226	235	348	244	1,540
2003	Average monthly benefit	\$ 111	\$ 274	\$ 513	\$ 766	\$1,065	\$1,465	\$1,810	\$1,064
	Average final average salary	\$1,533	\$2,208	\$2,444	\$2,638	\$2,741	\$3,082	\$3,267	\$2,786
	Number of retirees	5	201	241	227	279	434	254	1,641
2004	Average monthly benefit	\$ 125	\$ 282	\$ 423	\$ 689	\$1,036	\$1,451	\$1,650	\$1,011
	Average final average salary	\$1,837	\$2,403	\$2,263	\$2,564	\$2,699	\$3,054	\$3,033	\$2,728
	Number of retirees	6	296	288	313	382	589	347	2,221
2005	Average monthly benefit	\$ 281	\$ 287	\$ 465	\$ 688	\$1,189	\$1,569	\$1,950	\$ 944
	Average final average salary	\$4,085	\$2,374	\$2,278	\$2,587	\$3,083	\$3,349	\$3,482	\$2,814
	Number of retirees	4	303	263	274	261	329	128	1,562
2006	Average monthly benefit	\$ 426	\$ 282	\$ 439	\$ 692	\$1,039	\$1,567	\$1,871	\$ 911
	Average final average salary	\$3,520	\$2,442	\$2,329	\$2,664	\$2,746	\$3,319	\$3,473	\$2,786
	Number of retirees	3	340	293	279	285	351	155	1,706
2007	Average monthly benefit	\$ 150	\$ 275	\$ 483	\$ 688	\$1,121	\$1,566	\$1,839	\$ 949
	Average final average salary	\$2,613	\$2,341	\$2,509	\$2,635	\$2,958	\$3,311	\$3,393	\$2,831
	Number of retirees	1	419	311	328	341	441	206	2,047
2008	Average monthly benefit	\$ 0	\$ 263	\$ 465	\$ 721	\$1,103	\$1,587	\$2,033	\$ 931
	Average final average salary	\$ 0	\$2,345	\$2,431	\$2,769	\$2,936	\$3,365	\$3,674	\$2,844
	Number of retirees	0	401	390	327	351	374	192	2,035
2009	Average monthly benefit	\$ 111	\$ 291	\$ 490	\$ 754	\$1,230	\$1,635	\$2,175	\$ 977
	Average final average salary	\$1,596	\$2,429	\$2,466	\$2,877	\$3,222	\$3,459	\$3,960	\$2,969
	Number of retirees	1	453	376	308	409	381	175	2,103
2010	Average monthly benefit	\$ 442	\$ 285	\$ 488	\$ 777	\$1,188	\$1,608	\$2,134	\$ 943
	Average final average salary	\$6,215	\$2,529	\$2,542	\$2,891	\$3,174	\$3,461	\$3,837	\$2,974
	Number of retirees	2	488	439	349	389	334	220	2,221
2011	Average monthly benefit	\$ 367	\$ 336	\$ 492	\$ 819	\$1,220	\$1,652	\$2,142	\$1,006
	Average final average salary	\$1,442	\$2,631	\$2,507	\$3,063	\$3,234	\$3,523	\$3,884	\$3,063
	Number of retirees	4	601	498	444	495	495	280	2,817
Ten Years Ended June 30, 2011									
	Average monthly benefit	\$ 225	\$ 288	\$ 471	\$ 730	\$1,131	\$1,551	\$1,933	\$ 973
	Average final average salary	\$2,466	\$2,428	\$2,413	\$2,757	\$2,976	\$3,287	\$3,504	\$2,866
	Number of retirees	30	3,724	3,360	3,075	3,427	4,076	2,201	19,893

Note: COLA increases and temporary benefits payable under MSEP 2000 until age 62 are excluded from the above for comparison purposes.

# Average Monthly Benefit Amounts

Ten Years Ended June 30, 2011

General Employees in the MSEP		Years Credited Service by Category						All Members	
		<5	5-10	10-15	15-20	20-25	25-30		30+
Members Retiring During Fiscal Year									
2002	Average monthly benefit	\$ 107	\$ 257	\$ 411	\$ 634	\$1,004	\$1,440	\$1,891	\$ 979
	Average final average salary	\$1,497	\$2,248	\$2,155	\$2,416	\$2,626	\$3,042	\$3,350	\$2,667
	Number of retirees	4	221	258	224	234	347	242	1,530
2003	Average monthly benefit	\$ 111	\$ 248	\$ 472	\$ 673	\$1,039	\$1,461	\$1,806	\$1,046
	Average final average salary	\$1,533	\$2,176	\$2,418	\$2,558	\$2,737	\$3,082	\$3,270	\$2,774
	Number of retirees	5	193	230	213	274	433	253	1,601
2004	Average monthly benefit	\$ 125	\$ 272	\$ 420	\$ 677	\$1,036	\$1,451	\$1,650	\$1,010
	Average final average salary	\$1,837	\$2,391	\$2,261	\$2,560	\$2,699	\$3,053	\$3,033	\$2,726
	Number of retirees	6	290	287	310	382	588	347	2,210
2005	Average monthly benefit	\$ 229	\$ 262	\$ 413	\$ 678	\$1,142	\$1,569	\$1,903	\$ 922
	Average final average salary	\$4,449	\$2,348	\$2,188	\$2,581	\$3,038	\$3,349	\$3,504	\$2,790
	Number of retirees	3	291	257	271	254	329	124	1,529
2006	Average monthly benefit	\$ 98	\$ 270	\$ 428	\$ 692	\$1,039	\$1,553	\$1,863	\$ 904
	Average final average salary	\$1,362	\$2,409	\$2,322	\$2,664	\$2,746	\$3,296	\$3,465	\$2,770
	Number of retirees	2	336	290	279	285	348	154	1,694
2007	Average monthly benefit	\$ 0	\$ 259	\$ 478	\$ 681	\$1,121	\$1,562	\$1,839	\$ 948
	Average final average salary	\$ 0	\$2,323	\$2,506	\$2,633	\$2,958	\$3,312	\$3,393	\$2,830
	Number of retirees	0	408	309	326	341	440	206	2,030
2008	Average monthly benefit	\$ 0	\$ 257	\$ 452	\$ 711	\$1,103	\$1,587	\$2,033	\$ 928
	Average final average salary	\$ 0	\$2,339	\$2,419	\$2,753	\$2,936	\$3,365	\$3,674	\$2,840
	Number of retirees	0	397	385	326	351	374	192	2,025
2009	Average monthly benefit	\$ 111	\$ 266	\$ 470	\$ 745	\$1,212	\$1,634	\$2,158	\$ 966
	Average final average salary	\$1,596	\$2,397	\$2,442	\$2,876	\$3,197	\$3,457	\$3,937	\$2,954
	Number of retirees	1	439	372	306	406	380	174	2,078
2010	Average monthly benefit	\$ 60	\$ 282	\$ 475	\$ 773	\$1,181	\$1,604	\$2,109	\$ 935
	Average final average salary	\$4,258	\$2,526	\$2,526	\$2,891	\$3,161	\$3,463	\$3,807	\$2,963
	Number of retirees	1	485	436	348	388	333	218	2,209
2011	Average monthly benefit	\$ 39	\$ 302	\$ 472	\$ 802	\$1,217	\$1,622	\$2,124	\$ 992
	Average final average salary	\$ 925	\$2,612	\$2,486	\$3,052	\$3,234	\$3,518	\$3,862	\$3,055
	Number of retirees	3	571	491	440	494	492	278	2,769
Ten Years Ended June 30, 2011									
	Average monthly benefit	\$ 116	\$ 271	\$ 453	\$ 715	\$1,121	\$1,544	\$1,922	\$ 964
	Average final average salary	\$1,975	\$2,409	\$2,393	\$2,730	\$2,966	\$3,284	\$3,497	\$2,854
	Number of retirees	25	3,631	3,315	3,043	3,409	4,064	2,188	19,675

Note: COLA increases and temporary benefits payable under MSEP 2000 until age 62 are excluded from the above for comparison purposes.

# Average Monthly Benefit Amounts

## Ten Years Ended June 30, 2011

### Uniformed Members of the Water Patrol in the MSEP

Members Retiring During Fiscal Year	Years Credited Service by Category							All Members	
	<5	5-10	10-15	15-20	20-25	25-30	30+		
2002	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 1,843	\$ 1,843
	Average final average salary	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 3,432	\$ 3,432
	Number of retirees	0	0	0	0	0	0	1	1
2003	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Average final average salary	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Number of retirees	0	0	0	0	0	0	0	0
2004	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 1,743	\$ 0	\$ 1,743
	Average final average salary	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 3,628	\$ 0	\$ 3,628
	Number of retirees	0	0	0	0	0	1	0	1
2005	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 1,267	\$ 0	\$ 0	\$ 0	\$ 1,267
	Average final average salary	\$ 0	\$ 0	\$ 0	\$ 3,254	\$ 0	\$ 0	\$ 0	\$ 3,254
	Number of retirees	0	0	0	1	0	0	0	1
2006	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 2,848	\$ 3,090	\$ 2,969
	Average final average salary	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 4,657	\$ 4,710	\$ 4,684
	Number of retirees	0	0	0	0	0	1	1	2
2007	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Average final average salary	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Number of retirees	0	0	0	0	0	0	0	0
2008	Average monthly benefit	\$ 0	\$ 0	\$ 750	\$ 0	\$ 0	\$ 0	\$ 0	\$ 750
	Average final average salary	\$ 0	\$ 0	\$ 2,541	\$ 0	\$ 0	\$ 0	\$ 0	\$ 2,541
	Number of retirees	0	0	1	0	0	0	0	1
2009	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 2,351	\$ 5,113	\$ 3,732
	Average final average salary	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 4,173	\$ 7,902	\$ 6,037
	Number of retirees	0	0	0	0	0	1	1	2
2010	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 4,886	\$ 4,886
	Average final average salary	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 7,184	\$ 7,184
	Number of retirees	0	0	0	0	0	0	2	2
2011	Average monthly benefit	\$ 0	\$ 0	\$ 721	\$ 0	\$ 0	\$ 3,086	\$ 4,553	\$ 3,200
	Average final average salary	\$ 0	\$ 0	\$ 2,964	\$ 0	\$ 0	\$ 5,077	\$ 6,912	\$ 5,388
	Number of retirees	0	0	1	0	0	2	2	5
Ten Years Ended June 30, 2011									
	Average monthly benefit	\$ 0	\$ 0	\$ 735	\$ 1,267	\$ 0	\$ 2,623	\$ 4,132	\$ 2,985
	Average final average salary	\$ 0	\$ 0	\$ 2,753	\$ 3,254	\$ 0	\$ 4,522	\$ 6,319	\$ 5,040
	Number of retirees	0	0	2	1	0	5	7	15

Note: COLA increases and temporary benefits payable under MSEP 2000 until age 62 are excluded from the above for comparison purposes.

# Average Monthly Benefit Amounts

Ten Years Ended June 30, 2011

Members Retiring During Fiscal Year		Years Credited Service by Category							All Members
		<5	5-10	10-15	15-20	20-25	25-30	30+	
2002	Average monthly benefit	\$ 0	\$ 871	\$1,451	\$2,068	\$ 0	\$2,830	\$3,365	\$1,944
	Average final average salary	\$ 0	\$2,993	\$2,993	\$2,993	\$ 0	\$2,993	\$2,993	\$2,993
	Number of retirees	0	1	3	2	0	1	1	8
2003	Average monthly benefit	\$ 0	\$1,002	\$1,403	\$1,803	\$2,482	\$3,048	\$2,700	\$1,639
	Average final average salary	\$ 0	\$2,993	\$2,993	\$2,924	\$2,993	\$2,993	\$2,613	\$2,962
	Number of retirees	0	10	9	11	5	1	1	37
2004	Average monthly benefit	\$ 0	\$ 797	\$1,306	\$1,959	\$ 0	\$ 0	\$ 0	\$1,197
	Average final average salary	\$ 0	\$2,993	\$2,993	\$2,993	\$ 0	\$ 0	\$ 0	\$2,993
	Number of retirees	0	6	1	3	0	0	0	10
2005	Average monthly benefit	\$ 435	\$ 889	\$1,379	\$1,742	\$2,409	\$ 0	\$3,411	\$1,616
	Average final average salary	\$2,993	\$2,993	\$2,993	\$2,993	\$2,898	\$ 0	\$2,803	\$2,949
	Number of retirees	1	12	3	2	4	0	4	26
2006	Average monthly benefit	\$ 0	\$ 871	\$1,524	\$ 0	\$ 0	\$ 0	\$ 0	\$1,263
	Average final average salary	\$ 0	\$2,993	\$2,993	\$ 0	\$ 0	\$ 0	\$ 0	\$2,993
	Number of retirees	0	2	3	0	0	0	0	5
2007	Average monthly benefit	\$ 150	\$ 871	\$1,306	\$1,855	\$ 0	\$ 0	\$3,484	\$1,149
	Average final average salary	\$2,613	\$2,993	\$2,993	\$2,993	\$ 0	\$ 0	\$2,993	\$2,971
	Number of retirees	1	11	2	2	0	0	1	17
2008	Average monthly benefit	\$ 0	\$ 816	\$1,306	\$ 0	\$ 0	\$ 0	\$ 0	\$ 980
	Average final average salary	\$ 0	\$2,993	\$2,993	\$ 0	\$ 0	\$ 0	\$ 0	\$2,993
	Number of retirees	0	4	2	0	0	0	0	6
2009	Average monthly benefit	\$ 0	\$ 910	\$1,496	\$2,057	\$2,395	\$ 0	\$ 0	\$1,202
	Average final average salary	\$ 0	\$2,993	\$2,993	\$2,993	\$2,993	\$ 0	\$ 0	\$2,993
	Number of retirees	0	13	3	2	1	0	0	19
2010	Average monthly benefit	\$ 0	\$ 894	\$1,496	\$2,245	\$ 0	\$3,242	\$ 0	\$1,611
	Average final average salary	\$ 0	\$2,993	\$2,993	\$2,993	\$ 0	\$2,993	\$ 0	\$2,993
	Number of retirees	0	3	1	1	0	1	0	6
2011	Average monthly benefit	\$ 0	\$ 992	\$1,512	\$2,021	\$2,744	\$3,242	\$ 0	\$1,247
	Average final average salary	\$ 0	\$2,993	\$2,993	\$2,993	\$2,993	\$2,993	\$ 0	\$2,993
	Number of retirees	0	30	4	4	1	1	0	40
Ten Years Ended June 30, 2011									
	Average monthly benefit	\$ 293	\$ 926	\$1,428	\$1,907	\$2,471	\$3,091	\$3,313	\$1,404
	Average final average salary	\$2,803	\$2,993	\$2,993	\$2,965	\$2,958	\$2,993	\$2,830	\$2,978
	Number of retirees	2	92	31	27	11	4	7	174

Note: COLA increases and temporary benefits payable under MSEP 2000 until age 62 are excluded from the above for comparison purposes.



## Average Monthly Benefit Amounts

Ten Years Ended June 30, 2011

Elected Officials in the MSEP		Years Credited Service by Category							All Members
		<5	5-10	10-15	15-20	20-25	25-30	30+	
Members Retiring During Fiscal Year									
2002	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Average final average salary	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Number of retirees	0	0	0	0	0	0	0	0
2003	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Average final average salary	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Number of retirees	0	0	0	0	0	0	0	0
2004	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Average final average salary	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Number of retirees	0	0	0	0	0	0	0	0
2005	Average monthly benefit	\$ 0	\$ 0	\$ 4,218	\$ 0	\$ 0	\$ 0	\$ 0	\$ 4,218
	Average final average salary	\$ 0	\$ 0	\$ 10,065	\$ 0	\$ 0	\$ 0	\$ 0	\$ 10,065
	Number of retirees	0	0	2	0	0	0	0	2
2006	Average monthly benefit	\$ 0	\$ 2,009	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 2,009
	Average final average salary	\$ 0	\$ 8,979	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 8,979
	Number of retirees	0	1	0	0	0	0	0	1
2007	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Average final average salary	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Number of retirees	0	0	0	0	0	0	0	0
2008	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Average final average salary	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Number of retirees	0	0	0	0	0	0	0	0
2009	Average monthly benefit	\$ 0	\$ 3,336	\$ 4,852	\$ 0	\$ 0	\$ 0	\$ 0	\$ 4,094
	Average final average salary	\$ 0	\$ 8,979	\$ 9,703	\$ 0	\$ 0	\$ 0	\$ 0	\$ 9,341
	Number of retirees	0	1	1	0	0	0	0	2
2010	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Average final average salary	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Number of retirees	0	0	0	0	0	0	0	0
2011	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Average final average salary	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Number of retirees	0	0	0	0	0	0	0	0
Ten Years Ended June 30, 2011									
	Average monthly benefit	\$ 0	\$ 2,673	\$ 4,429	\$ 0	\$ 0	\$ 0	\$ 0	\$ 3,727
	Average final average salary	\$ 0	\$ 8,979	\$ 9,945	\$ 0	\$ 0	\$ 0	\$ 0	\$ 9,558
	Number of retirees	0	2	3	0	0	0	0	5

Note: COLA increases are excluded from the above for comparison purposes.

# Average Monthly Benefit Amounts

Ten Years Ended June 30, 2011

## Administrative Law Judges and Legal Advisors in the MSEP

Members Retiring During Fiscal Year	Years Credited Service by Category							All Members	
	<5	5-10	10-15	15-20	20-25	25-30	30+		
2002	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 0	\$3,739	\$ 0	\$ 0	\$3,739
	Average final average salary	\$ 0	\$ 0	\$ 0	\$ 0	\$7,478	\$ 0	\$ 0	\$7,478
	Number of retirees	0	0	0	0	1	0	0	1
2003	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$3,615	\$ 0	\$ 0	\$ 0	\$3,615
	Average final average salary	\$ 0	\$ 0	\$ 0	\$7,231	\$ 0	\$ 0	\$ 0	\$7,231
	Number of retirees	0	0	0	3	0	0	0	3
2004	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Average final average salary	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Number of retirees	0	0	0	0	0	0	0	0
2005	Average monthly benefit	\$ 0	\$ 0	\$3,750	\$ 0	\$3,584	\$ 0	\$ 0	\$3,626
	Average final average salary	\$ 0	\$ 0	\$7,500	\$ 0	\$7,169	\$ 0	\$ 0	\$7,251
	Number of retirees	0	0	1	0	3	0	0	4
2006	Average monthly benefit	\$1,088	\$1,669	\$ 0	\$ 0	\$ 0	\$3,333	\$ 0	\$2,356
	Average final average salary	\$7,836	\$5,933	\$ 0	\$ 0	\$ 0	\$6,667	\$ 0	\$6,776
	Number of retirees	1	1	0	0	0	2	0	4
2007	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Average final average salary	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Number of retirees	0	0	0	0	0	0	0	0
2008	Average monthly benefit	\$ 0	\$ 0	\$2,040	\$3,968	\$ 0	\$ 0	\$ 0	\$2,683
	Average final average salary	\$ 0	\$ 0	\$4,081	\$7,936	\$ 0	\$ 0	\$ 0	\$5,366
	Number of retirees	0	0	2	1	0	0	0	3
2009	Average monthly benefit	\$ 0	\$ 0	\$ 0	\$ 0	\$4,200	\$ 0	\$ 0	\$4,200
	Average final average salary	\$ 0	\$ 0	\$ 0	\$ 0	\$8,400	\$ 0	\$ 0	\$8,400
	Number of retirees	0	0	0	0	2	0	0	2
2010	Average monthly benefit	\$ 823	\$ 0	\$2,827	\$ 0	\$4,101	\$ 0	\$ 0	\$2,645
	Average final average salary	\$8,172	\$ 0	\$5,851	\$ 0	\$8,202	\$ 0	\$ 0	\$7,019
	Number of retirees	1	0	2	0	1	0	0	4
2011	Average monthly benefit	\$ 0	\$ 0	\$3,216	\$4,101	\$ 0	\$ 0	\$ 0	\$3,511
	Average final average salary	\$ 0	\$ 0	\$6,433	\$8,202	\$ 0	\$ 0	\$ 0	\$7,023
	Number of retirees	0	0	2	1	0	0	0	3
Ten Years Ended June 30, 2011									
	Average monthly benefit	\$ 956	\$1,669	\$2,845	\$3,783	\$3,856	\$3,333	\$ 0	\$3,170
	Average final average salary	\$8,004	\$5,933	\$5,747	\$7,566	\$7,712	\$6,667	\$ 0	\$6,972
	Number of retirees	2	1	7	5	7	2	0	24

Note: COLA increases are excluded from the above for comparison purposes.

# Average Monthly Benefit Amounts

Ten Years Ended June 30, 2011

Judicial Plan		Years Credited Service by Category							All Members
		<5	5-10	10-15	15-20	20-25	25-30	30+	
Members Retiring During Fiscal Year									
2002	Average monthly benefit	\$ 0	\$1,337	\$3,606	\$4,093	\$ 4,000	\$ 4,576	\$ 0	\$3,877
	Average final average salary	\$ 0	\$6,095	\$7,405	\$8,186	\$ 8,000	\$ 9,153	\$ 0	\$8,101
	Number of retirees	0	1	2	4	1	3	0	11
2003	Average monthly benefit	\$ 756	\$1,946	\$4,042	\$3,849	\$ 4,000	\$ 4,500	\$4,250	\$3,379
	Average final average salary	\$8,000	\$6,317	\$8,333	\$7,697	\$ 8,000	\$ 9,000	\$8,500	\$7,807
	Number of retirees	2	3	3	6	3	1	2	20
2004	Average monthly benefit	\$ 855	\$3,028	\$4,500	\$4,061	\$ 4,597	\$ 0	\$4,500	\$3,952
	Average final average salary	\$5,129	\$8,000	\$9,000	\$8,121	\$ 9,194	\$ 0	\$9,000	\$8,350
	Number of retirees	1	1	2	4	3	0	1	12
2005	Average monthly benefit	\$ 0	\$ 0	\$4,388	\$4,500	\$ 4,142	\$ 4,300	\$4,396	\$4,307
	Average final average salary	\$ 0	\$ 0	\$9,000	\$9,000	\$ 8,284	\$ 8,600	\$8,792	\$8,649
	Number of retirees	0	0	2	1	3	5	2	13
2006	Average monthly benefit	\$ 592	\$1,946	\$4,500	\$4,000	\$ 0	\$ 4,396	\$ 0	\$2,930
	Average final average salary	\$5,875	\$6,564	\$9,000	\$8,000	\$ 0	\$ 8,792	\$ 0	\$7,496
	Number of retirees	2	2	1	2	0	2	0	9
2007	Average monthly benefit	\$ 207	\$2,121	\$3,995	\$4,260	\$ 4,357	\$ 4,071	\$4,250	\$3,798
	Average final average salary	\$5,875	\$7,889	\$7,990	\$8,521	\$ 8,714	\$ 8,143	\$8,500	\$8,244
	Number of retirees	2	5	5	15	7	7	4	45
2008	Average monthly benefit	\$ 592	\$2,045	\$4,120	\$4,828	\$ 5,132	\$ 4,593	\$5,186	\$3,908
	Average final average salary	\$5,821	\$6,203	\$8,276	\$9,656	\$10,264	\$ 9,186	\$10,373	\$8,537
	Number of retirees	2	2	6	3	3	2	1	19
2009	Average monthly benefit	\$ 524	\$1,786	\$3,663	\$4,616	\$ 5,286	\$ 5,127	\$5,020	\$3,440
	Average final average salary	\$6,103	\$7,469	\$7,811	\$9,181	\$10,572	\$10,255	\$10,040	\$8,351
	Number of retirees	6	2	7	6	3	3	1	28
2010	Average monthly benefit	\$ 458	\$1,333	\$4,507	\$4,557	\$ 0	\$ 5,181	\$4,973	\$4,064
	Average final average salary	\$6,597	\$8,000	\$9,577	\$9,114	\$ 0	\$10,362	\$9,946	\$9,343
	Number of retirees	1	1	2	1	0	2	3	10
2011	Average monthly benefit	\$ 0	\$2,188	\$4,615	\$4,566	\$ 4,807	\$ 4,866	\$4,650	\$4,384
	Average final average salary	\$ 0	\$7,994	\$9,299	\$9,132	\$ 9,613	\$ 9,732	\$9,299	\$9,187
	Number of retirees	0	4	9	10	5	3	5	36
Ten Years Ended June 30, 2011									
Average monthly benefit		\$ 547	\$2,021	\$4,167	\$4,317	\$ 4,572	\$ 4,519	\$4,588	\$3,842
Average final average salary		\$6,218	\$7,283	\$8,511	\$8,629	\$ 9,143	\$ 9,039	\$9,175	\$8,456
Number of retirees		16	21	39	52	28	28	19	203

Note: COLA increases are excluded from the above for comparison purposes.

## Retirees and Beneficiaries

### Tabulated by Fiscal Year of Retirement

#### MSEP

Fiscal Year of Retirement	Number	Annual Benefit	Average Monthly Benefit
1972 & prior	2	\$ 12,425	\$ 518
1973	7	47,332	563
1974	7	50,224	598
1975	10	62,070	517
1976	25	165,131	550
1977	27	206,955	639
1978	40	267,933	558
1979	37	270,071	608
1980	39	358,682	766
1981	70	661,934	788
1982	105	910,717	723
1983	127	1,353,457	888
1984	149	1,287,866	720
1985	160	1,793,463	934
1986	219	1,911,938	728
1987	266	2,834,428	888
1988	325	4,061,580	1,041
1989	371	5,142,746	1,155
1990	371	4,958,371	1,114
1991	516	8,069,019	1,303
1992	548	8,164,622	1,242
1993	648	9,485,857	1,220
1994	645	9,459,912	1,222
1995	846	13,163,861	1,297
1996	862	13,827,649	1,337
1997	873	14,389,888	1,374
1998	1,057	17,152,094	1,352
1999	1,159	19,172,200	1,379
2000	1,245	20,536,722	1,375
2001	2,423	40,199,566	1,383
2002	1,750	25,982,338	1,237
2003	1,842	29,418,258	1,331
2004	2,432	38,697,224	1,326
2005	1,793	25,706,905	1,195
2006	1,955	27,541,123	1,174
2007	2,322	33,553,920	1,204
2008	2,323	32,539,876	1,167
2009	2,428	34,731,379	1,192
2010	2,540	35,011,340	1,149
2011	3,178	45,929,707	1,204
	<u>35,742</u>	<u>\$529,090,783</u>	1,234

#### Judicial Plan

Fiscal Year of Retirement	Number	Annual Benefit	Average Monthly Benefit
1976 & prior	1	\$ 10,260	\$ 855
1977	0	0	0
1978	1	14,721	1,227
1979	0	0	0
1980	1	20,074	1,673
1981	2	123,071	5,128
1982	1	11,598	967
1983	1	19,717	1,643
1984	1	20,957	1,746
1985	3	153,639	4,268
1986	3	148,725	4,131
1987	13	643,659	4,126
1988	7	337,695	4,020
1989	7	394,037	4,691
1990	6	314,502	4,368
1991	17	893,893	4,382
1992	7	358,853	4,272
1993	8	354,209	3,690
1994	7	311,404	3,707
1995	19	1,202,884	5,276
1996	10	519,405	4,328
1997	6	323,056	4,487
1998	23	1,409,817	5,108
1999	23	1,314,406	4,762
2000	23	1,419,167	5,142
2001	20	1,576,289	6,568
2002	15	915,504	5,086
2003	24	1,327,693	4,610
2004	18	1,068,708	4,948
2005	19	1,114,314	4,887
2006	17	664,743	3,259
2007	61	3,132,294	4,279
2008	31	1,499,759	4,032
2009	39	1,803,920	3,855
2010	16	815,334	4,247
2011	40	2,153,677	4,487
	<u>490</u>	<u>\$26,391,984</u>	4,488

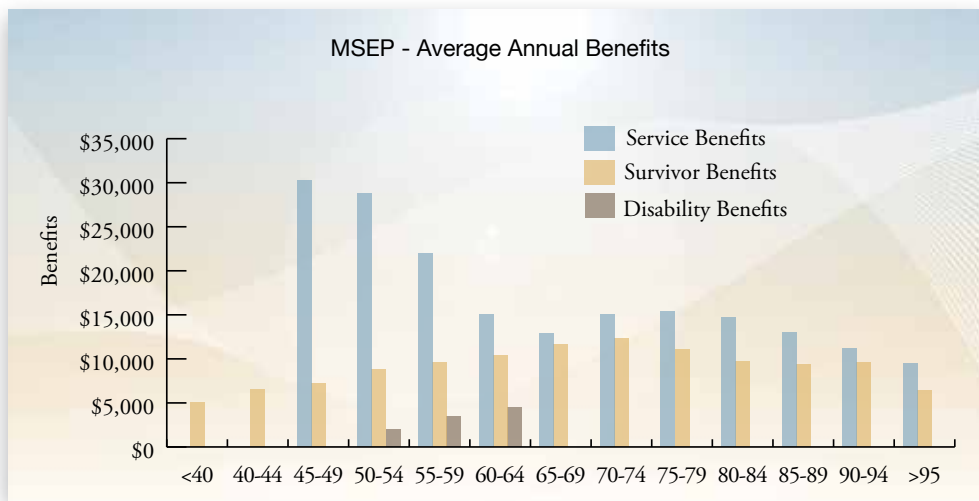
# Total Benefits Payable

Tabulated by Attained Ages of Benefit Recipients

As of June 30, 2011

MSEP Attained Ages	Service Retirement		Disability Retirement		Survivors and Beneficiaries		Totals	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 20					59	\$ 209,350	59	\$ 209,350
20-24					21	147,578	21	147,578
25-29					7	22,968	7	22,968
30-34					23	158,784	23	158,784
35-39					36	202,486	36	202,486
40-44					68	445,188	68	445,188
45-49	4	\$ 121,152			108	778,720	112	899,872
50-54	589	16,971,355	1	\$ 2,040	180	1,581,345	770	18,554,740
55-59	3,775	83,140,273	4	13,836	312	3,002,199	4,091	86,156,308
60-64	7,755	116,248,387	3	13,356	487	5,079,517	8,245	121,341,260
65-69	6,801	87,327,180			468	5,439,191	7,269	92,766,371
70-74	4,862	72,870,951			543	6,713,747	5,405	79,584,698
75-79	3,339	51,408,984			620	6,836,567	3,959	58,245,551
80-84	2,270	33,247,602			549	5,326,027	2,819	38,573,629
85-89	1,279	16,618,990			358	3,345,685	1,637	19,964,675
90-94	502	5,619,273			127	1,219,878	629	6,839,151
95	40	415,179			14	61,370	54	476,549
96	31	282,139			12	100,848	43	382,987
97	25	251,349			5	18,804	30	270,153
98	11	104,031			2	42,540	13	146,571
99	10	67,836			2	5,635	12	73,471
100	4	32,357					4	32,357
101	3	32,892					3	32,892
102	4	28,212					4	28,212
103	0				1	2,572	1	2,572
104	1	9,012					1	9,012
<b>Totals</b>	<b>31,305</b>	<b>\$484,797,154</b>	<b>8</b>	<b>\$29,232</b>	<b>4,002</b>	<b>\$40,740,999</b>	<b>35,315</b>	<b>\$525,567,385</b>

Average age at retirement 60.3 years  
Average age now 69.2 years



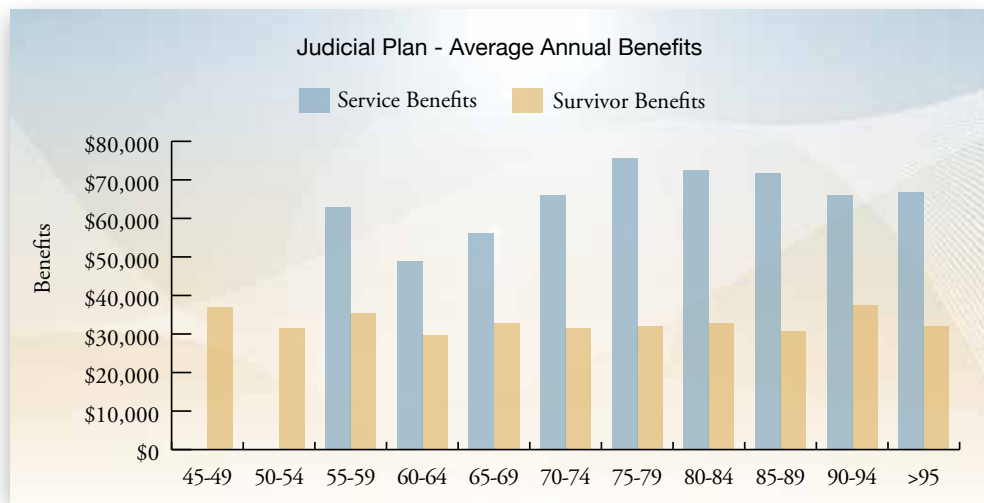
# Total Benefits Payable

Tabulated by Attained Ages of Benefit Recipients

As of June 30, 2011

Judicial Plan						
Attained Ages	Service Retirement		Survivors and Beneficiaries		Totals	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
45-49						
50-54			3	\$ 110,820	3	\$ 110,820
55-59	13	\$ 817,008	3	94,743	16	911,751.00
60-64	62	3,038,036	7	248,749	69	3,286,785.00
65-69	70	3,940,116	17	503,788	87	4,443,904.00
70-74	71	4,685,664	11	361,603	82	5,047,267.00
75-79	47	3,557,112	12	379,173	59	3,936,285.00
80-84	43	3,116,760	38	1,220,591	81	4,337,351.00
85-89	26	1,862,771	27	888,687	53	2,751,458.00
90-94	10	659,865	19	584,515	29	1,244,380.00
95 and over	5	334,092	2	74,958	7	409,050.00
Totals	347	\$22,011,424	139	\$4,467,627	486	\$ 26,479,051

Average age at retirement 65.2 years  
Average age now 75.1 years



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Mailing Address: PO Box 209 • Jefferson City, MO 65102-0209

Office Location: 907 Wildwood Drive • Jefferson City, MO 65109

Phone: (573) 632-6100 • (800) 827-1063 | Fax: (573) 632-6103

Email: [mosers@mosers.org](mailto:mosers@mosers.org) | Web Address: [www.mosers.org](http://www.mosers.org)

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