MPERS
Serving those who keep us safe.

Missouri Department of Transportation and Highway Patrol Employees' Retirement System

A Component Unit of the State of Missouri

2015

Scott Simon, Executive Director
Jennifer Even, Chief Financial Officer
1913 William Street, PO Box 1930
Jefferson City, MO 65102-1930
(800) 270-1271, (573) 298-6080

60th Anniversary

1955 - 2015

Comprehensive Annual Financial Report

For the Fiscal Years Ended June 30, 2015 & 2014

MoDOT and Patrol Employees' Retirement System

Mailing Address
PO Box 1930
Jefferson City, Missouri 65102-1930

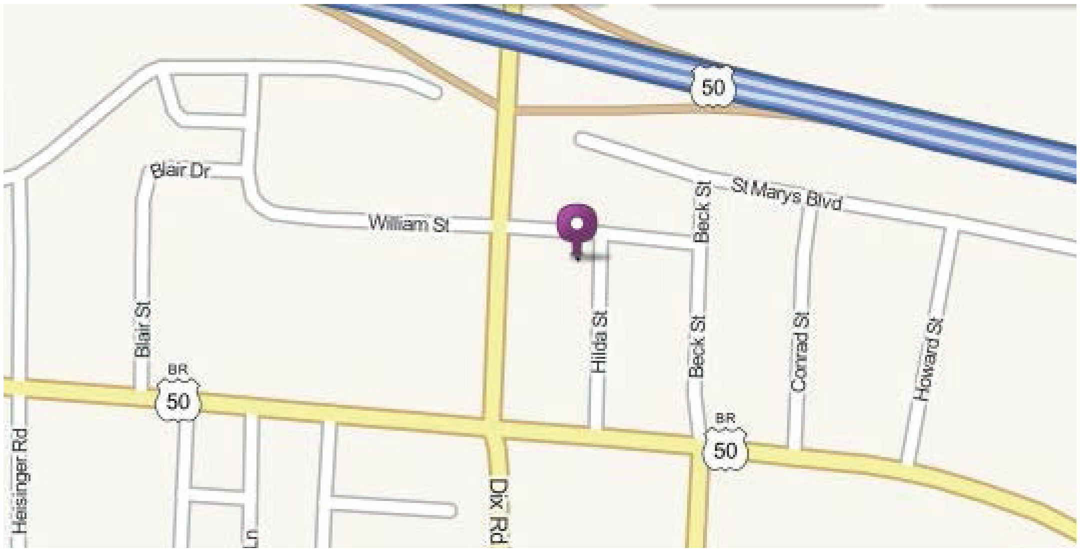
Street Address
1913 William Street
Jefferson City, Missouri 65109

Phone Numbers
(573) 298-6080 (800) 270-1271

Fax Number
(573) 522-6111

E-Mail Address
mpers@mpers.org

WebSite
www.mpers.org



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Creation of the System

In 1955, Senate Bill 66 was enacted, and the Highways and Transportation Employees' and Highway Patrol Retirement System (HTEHPRS) was established, providing disability and retirement benefits for the employees of the Missouri Department of Transportation and the Missouri State Highway Patrol. One month later, MPERS accepted 109 retirements…and so our journey began.

The establishment of MPERS was a collaborative effort of employees from the State Highways Commission, the Missouri State Highway Patrol and the Highway Employees' Association, who negotiated an arrangement with the State Highways Commission to forego a future employee raise in order to fund the first contributions of the retirement system.

Through the passage of House Bill 1440 in 2004, the system was renamed the Missouri Department of Transportation and Highway Patrol Employees' Retirement System (MPERS).

Important System Events

September 1, 1955	Highways and Transportation Employees' and Highway Patrol Retirement System (HTEHPRS) was created through the passage of Senate Bill 66. In 2004, the System was renamed the MoDOT and Highway Patrol Employees' Retirement System (MPERS).
October 1, 1955	System accepted 109 retirements. The System started with $0 start-up funding - only the monthly contributions. No contributions were paid on the service earned prior to the creation of MPERS; however, benefits were calculated and paid using that service.
August 13, 1988	First Executive Director hired.
July 1, 2000	The Year 2000 Plan became effective.
August 9, 2002	MPERS moved to its current location at 1913 William Street.
January 1, 2011	The 2011 Tier of the Year 2000 Plan became effective (result of pension reform legislation).

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Missouri Department of Transportation and Highway Patrol Employees' Retirement System

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

June 30, 2014

Executive Director/CEO

Public Pension Coordinating Council

Public Pension Standards Award For Funding and Administration 2015

Presented to

MoDOT and Patrol Employees' Retirement System

In recognition of meeting professional standards for
plan funding and administration as
set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)

Alan H. Winkle
Program Administrator

MoDOT & Patrol Employees' Retirement System

MPERS Serving those who keep us safe.

Scott L. Simon
Executive Director

Pam Henry
Asst. Executive Director

November 10, 2015

To the Board of Trustees and System Members:

We are pleased to provide this *Comprehensive Annual Financial Report* (CAFR), of the Missouri Department of Transportation and Highway Patrol Employees' Retirement System (MPERS), for the fiscal year ended June 30, 2015. This report is intended to provide MPERS' stakeholders with a thorough review of the System's operations for the past fiscal year. The material presented in this report has been prepared in a manner intended to be useful and informative to MPERS' members, the management of the Missouri Department of Transportation (MoDOT), the Missouri State Highway Patrol (MSHP), and the elected officials of the state of Missouri.

MPERS is a traditional defined benefit pension plan providing lifetime retirement benefits to eligible MoDOT and Highway Patrol employees. The monthly retirement and survivor benefits provided by MPERS are a valuable source of retirement income for the members we serve. These benefits, when combined with social security, provide the basic foundation for our members to retire with dignity.

The average monthly benefit of a new MPERS retiree is $2,044, which equates to $24,528 per year. Given the increasing cost of living, this amount alone will not provide a life of luxury for the retiree. However, this monthly benefit and those provided by other traditional pension plans have a significant impact that reaches beyond the retirees served. Over the past 10 years alone, MPERS has paid over $2 billion in benefit payments to its members. Most of these members, retirees and beneficiaries reside in Missouri, reinvesting their retirement dollars in housing, goods, and services. In turn, the local economies benefit from these expenditures, which help to fuel the economy. It is easy to see that defined benefit pensions have a long-term positive impact on our economy and the lives of our members.

Report Contents and Structure:
This CAFR is designed to comply with the statutory reporting requirements stipulated in Sections 104.190, 104.1006, and 105.661 of the Revised Statutes of Missouri (RSMo), as amended.

To the best of our knowledge and belief, the information presented is accurate in all material respects and is reported in a manner designed to fairly present the financial position of the fund. 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 information displayed in the basic financial statements.

The MPERS Board of Trustees is ultimately responsible for the CAFR and the basic financial statements. MPERS' Executive Director and staff prepare the information contained in the CAFR and the financial statements to assist the Board in fulfilling their statutory duty.

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. Inherent limitations exist in all control systems. No evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud have been detected. The objective of internal controls is to provide reasonable assurance the financial statements are free of any material misstatements, recognizing that the cost of a control should not exceed the benefits to be derived.

Office Location: 1913 William St., Jefferson City, MO 65109 • **Mailing Address:** Post Office Box 1930, Jefferson City, MO 65102-1930
Telephone Number: (573) 298-6080 • **Toll Free:** 1-800-270-1271 • **Fax:** (573) 522-6111
Website: www.mpers.org • **E-Mail:** mpers@mpers.org

In accordance with Section 104.190, RSMo, as amended, an independent auditing firm, Williams-Keepers, LLC, has audited the financial statements included in this report and has issued an unqualified opinion (meaning no audit findings on MPERS' financial statements). Their opinion letter is presented in the *Financial Section* of this CAFR. Management's Discussion and Analysis (MD & A) immediately follows the *Independent Auditors' Report* and provides a narrative introduction, overview, and analysis of the basic financial statements. *Management's Discussion and Analysis* complements this letter of transmittal.

Background Information:
MPERS was established by Senate Bill 66. Under this legislation, employees of MoDOT and the Highway Patrol became members of the retirement system on September 1, 1955. Effective October 1, 1955, the System accepted 109 retirements.

The plan provisions have changed many times over the years. The System offers not only enhanced retirement and disability benefits, but also benefits for survivors of active and retired members, benefits for qualified terminated-vested members, and death benefits. Since January 1, 2011, new employees hired for the first time in a benefit eligible position are required to contribute 4% of pay to help fund the cost of their MPERS benefits.

An eleven-member Board of Trustees is responsible for the oversight of MPERS. The Trustees serve as fiduciaries to the members and are responsible for selecting and retaining competent management. The Trustees and management jointly establish sound policies and objectives, and monitor operations for compliance and oversee performance.

As an instrumentality of the state, MPERS 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.

Fiscal Year 2015 Highlights:
MPERS celebrated two important milestones in 2015. September marked the 60th Anniversary of the System. As mentioned above, MPERS was created through the passage of SB 66, which became effective September 1, 1955. In May 2015, MPERS attained $2 billion in assets. Through sound practices and professional management, the fund continues to grow and produce notable investment returns.

MPERS has multiple sources available for communicating the benefit provisions to its members. This year, five videos were created and posted to the MPERS website. The videos cover basic benefit information including the different retirement plans, service credit, applying for retirement, and disability benefits.

As a result of the information technology architectural audit conducted by Brown Smith Wallace, LLC in 2013, staff took steps to enhance the privacy of member information and retained a source of professional technology guidance. Since MPERS does not employ internal IT staff, we contracted with Huber and Associates to maintain our technology, provide vulnerability testing, and proactively offer professional technology consulting. In addition, MPERS created an internal IT security team to work with Huber and Associates and the pension administration system provider (Levi, Ray and Shoup) to further enhance the security of member records.

In September 2014, the Board adopted a contribution stabilization fund from experience gains in an effort to keep the employer contribution rate at or near 58%, in the near term. In February 2015, the Board established a maximum of $250 million in the stabilization reserve account. The contribution rate stabilization reserve is expected to result in the fund becoming more than 100% funded by the end of the amortization period, if experience is exactly as assumed.

The Governmental Accounting Standards Board (GASB) sets forth the standards for state and local governmental accounting and financial reporting. GASB revised those standards through the passage of GASB Statements 67 and 68. These statements change how governments calculate and report the costs and obligations associated with pensions. They are designed to improve the decision-usefulness of reported pension information and to increase the transparency, consistency, and comparability of pension information across the state and local governments.

Statement 67, *Financial Reporting for Pension Plans*, applies to pension plans that administer pension benefits. This new reporting standard became effective and was implemented by MPERS in the fiscal year ending June 30, 2014. This statement builds upon the existing framework for financial reports, which includes a statement of fiduciary net position (the amount held in a trust for paying retirement benefits) and a statement of changes in fiduciary net position.

Statement 68, *Accounting and Financial Reporting for Pensions*, applies to the employers that provide pension benefits to their employees. This statement requires employers to recognize their long-term obligation for pension benefits as a liability for the first time, and to more comprehensively and comparably measure the annual costs of pension benefits. This new reporting became effective and was implemented by MoDOT and Patrol in the fiscal year ending June 30, 2015.

Actuarial Funding Status:
The funding objective of MPERS is to meet future benefit obligations of retirees and beneficiaries through investment earnings and contributions that remain approximately level as a percent of member payroll. Historical information relating to this objective is presented in the *Schedule of Funding Progress* in the *Actuarial Section* of this report. During the year ended June 30, 2015, the funded ratio of MPERS, which covers 18,294 participants, increased from 49.2% to 52.9%, primarily the result of favorable investment market experience in previous years and gains in demographic experience.

Each year an independent actuarial firm conducts a valuation to determine the actuarial soundness of the Plan, based on its long-term obligations and the sufficiency of current contribution levels to fund the liabilities over a reasonable time frame. In our most recent valuation, dated June 30, 2015, our actuary concluded that the System continues to be financed in accordance with actuarial principles of level percent of payroll financing. This statement is based upon the fact that the employers are contributing to the System based upon actuarially determined rates and presumes a continuation of payment of actuarially determined contributions. Additional information regarding the financial condition of the System can be found in the *Actuarial Section* of this report.

In an effort to address the System's underfunding situation, in September 2006, the Board of Trustees adopted a permanent funding policy that was intended to improve MPERS' funded status over time.

The permanent funding policy provided:
- The total contribution is based on the Plan's normal cost plus a 29-year amortization period for MPERS' unfunded actuarial accrued liabilities. The financing period is a closed period starting July 1, 2007.

On September 17, 2009, after the market downturn, the Board of Trustees adopted the following temporary accelerated funding policy:
- The total contribution is based on the Plan's normal cost plus a 15-year amortization period for unfunded retiree liabilities and a 30-year amortization period for other unfunded liabilities. Both amortization periods are closed periods starting July 1, 2010.
- The temporary accelerated funding policy will remain in effect until such time as the retiree liability becomes 100% funded or the permanent funding policy produces a higher contribution rate.

As of June 30, 2015, the permanent funding policy is at a closed amortization period of 20 years and the temporary accelerated funding policy is at a closed amortization period of 9 years for unfunded retiree liabilities and 24 years for other unfunded liabilities.

Investment Activities:
State statutes require the System to make investments using the same care, skill, and diligence that a prudent person acting in a similar capacity would use. In fulfilling this obligation, the Board of Trustees has established a formal investment policy to clearly define the roles and responsibilities of the Board, staff and consultants, and to ensure that System assets are invested in a diversified portfolio following prudent investment standards. The Board of Trustees determines the broad asset allocation policies and return objectives of the Plan. To implement and execute these policies, the Board retains investment staff, consultants, a master custodian and other advisors.

As of June 30, 2015, MPERS' investment portfolio had a total market value of $2.004 billion, representing a return of 6.62% for the fiscal year. The portfolio continues to perform very well versus the peer universe. Relative to our peer group, the 6.62% return for FY2015 ranked MPERS in the 1st percentile, outpacing 99% of other public funds within the universe. The trailing three-year performance of 12.45% ranks MPERS in the top 3% of the peer universe. The trailing ten-year performance of 7.20% ranks MPERS in the top 6% of the universe.

Awards:
The Government Finance Officer Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to MPERS for its FY2014 CAFR. This was the tenth consecutive year that MPERS has achieved 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 CAFR. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year. We believe that our current CAFR continues to meet the program's requirements, and therefore, we are submitting this report to GFOA to determine its eligibility for another certificate.

MPERS also received the Public Pension Coordinating Council (PPCC), Public Pension Standards Award, in recognition of meeting professional standards for plan design and administration. This is the eleventh consecutive year MPERS received the council's award. 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).

Acknowledgements and Distribution:
This report, prepared by the MPERS' Executive Director and staff, is intended to provide comprehensive and reliable information about the System, to demonstrate compliance with legal provisions, and to allow for the evaluation of responsible stewardship of the System's funds.

Copies of this report are provided to the Governor, the State Auditor, and the Joint Committee on Public Employee Retirement. It is also distributed to all MoDOT divisions, district offices, Highway Patrol general headquarters, and troop headquarters. These offices form the link between MPERS and its members, and their cooperation contributes significantly to the success of MPERS. We hope all readers of this report find it informative and useful. Additional copies will be furnished upon request. An electronic version of this report is available on the MPERS' website at www.mpers.org.

We express our gratitude to the members of the Board, the staff, the consultants, and the many people who have worked so diligently to assure the continued successful operation of MPERS. The steady, monthly benefit payments offered by defined benefit plans, like MPERS, provide peace of mind and security for retirees and their families. For 60 years, MPERS has been committed to providing a foundation for financial security to plan participants through the delivery of quality benefits, exceptional member service, and professional plan administration.

Respectfully submitted,

Scott Simon
Executive Director

Lloyd J. Carmichael
Board Chairman

Board of Trustees

MPERS is governed by a Board of Trustees. As set out in Section 104.160 of the Revised Statutes of Missouri (RSMo), the Board is comprised of eleven members:

Lloyd "Joe" Carmichael

Board Chair
Commission Member

Highways & Transportation Commissioner
Term Expires 3-1-2015

Colonel J. Bret Johnson

Board Vice Chair
Superintendent of the Missouri State Highway Patrol

Ex-Officio Member

Roberta Broeker

Interim Director of the Missouri Department of Transportation

Ex-Officio Member

Sue Cox

MoDOT Retiree Representative

Elected by Retired Members of MoDOT
Term Expires 7-1-2018

Michael B. Pace

Commission Member

Highways & Transportation Commissioner
Term Expires 7-1-2019

Representative Shawn Rhoads

State Representative

District 154
Appointed by the Speaker of the House

Senator Dave Schatz

State Senator

District 26
Appointed by President Pro-Tem of the Senate

William "Bill" Seibert

MSHP Retiree Representative

Elected by Retired Members of MSHP
Term Expires 7-1-2018

Major Kemp Shoun

MSHP Employees' Representative

Elected by MSHP Employees
Term Expires 7-1-2018

Todd Tyler

MoDOT Employees' Representative

Elected by MoDOT Employees
Term Expires 7-1-2018

Vacant

Vacant

Commission Member

Highways & Transportation Commissioner

MPERS
Serving those who keep us safe.

Administrative Organization

Executive Team

Front Row: Larry Krummen-*Chief Investment Officer*, Scott Simon-*Executive Director*

Back Row: Jennifer Even-*Chief Financial Officer,* Greta Bassett-Seymour-*General Counsel,* Pam Henry-*Assistant Executive Director*

Our Mission is to provide a foundation for financial security to plan participants by delivering quality benefits and exceptional member service through professional plan administration and prudent management of assets, at a reasonable cost to the taxpayers of Missouri.

Administrative Organization

Director's Office

The Director's Office staff provides administrative oversight and support in the areas of legislation, operations, benefits, and investments.

Financial Services

The Financial Services section is responsible for maintaining all the financial records of MPERS. The chief financial officer (accountant) interacts with the investment custodian, the auditors, the depository bank, Missouri's Department of Revenue, and the Internal Revenue Service. In addition, the accountant assists the chief investment officer in tracking and predicting target cash balances, participates in annual budget development, prepares monthly budget-to-actual reports, and calculates monthly premium payments to the long-term disability insurer. The accountant also processes MPERS' semi-monthly office payrolls, reconciles monthly benefit payments and contributions/payrolls posted, and reconciles investment activity.

Investments

The Investments section staff works closely with the general investment consultant to oversee the investment portfolio and provide consulting services to the Board and the executive director. This includes, but is not limited to: (a) formulating investment policy and asset recommendations, (b) providing recommendations on the selection, (c) monitoring and evaluating external investment advisors, (d) measuring and reporting on investment performance, (e) conducting market research on political, financial, and economic developments that may affect the System, and (f) serving as a liaison to the investment community.

Legal Services

The Legal Services section advises the executive director and Board on legal matters, reviews and approves investment and other contracts for MPERS, advises staff on the application of state and federal statutes affecting the administration of plan benefits, responds to requests from members and their attorneys related to plan benefits, engages in or oversees litigation affecting MPERS, and assists in developing policies, rules, and legislation impacting MPERS' operations and the administration of plan benefits.

Member Services

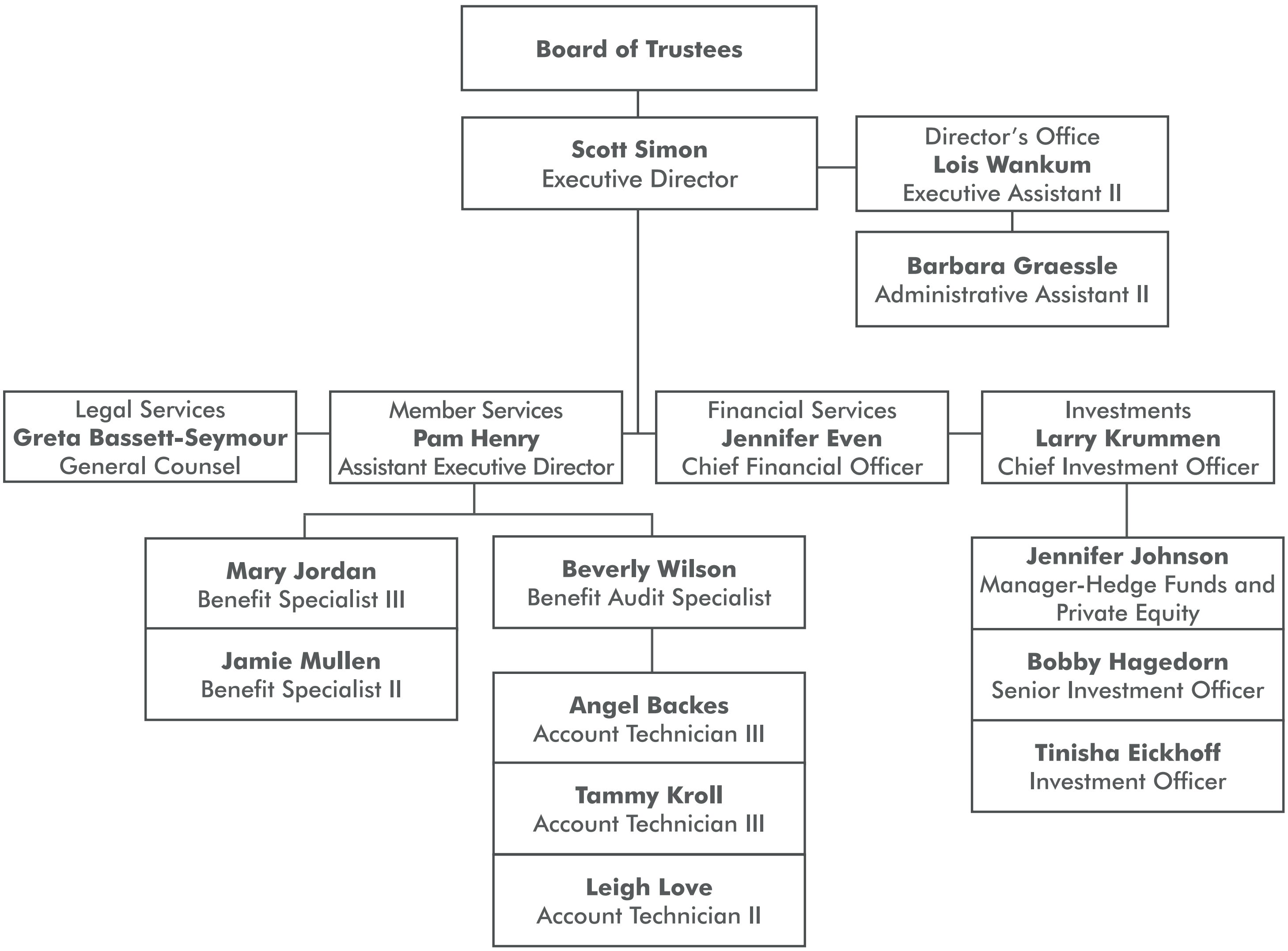
The Member Services section consists of two units devoted to serving member needs.

The Benefits Unit is responsible for contact with the membership regarding the benefit programs administered by MPERS, which include retirement and disability. The benefit staff is responsible for preparing and delivering the pre-retirement and benefit basics seminars in addition to assisting with the development of member communication material.

The Payroll Unit is responsible for establishing and maintaining all membership records including: (a) maintaining member data on the pension administration system, (b) verifying retirement calculations, (c) balancing payroll deductions, (d) verifying SAM II data against exception reports, and (e) entering payroll, service, and leave data into the System's computerized database.

Administrative Organization

The executive director of MPERS has charge of the offices and records of the System and hires such employees deemed necessary, subject to the approval of the Board of Trustees. The System employs sixteen full-time staff.



Professional Services

The following firms were retained at fiscal year-end by the Board of Trustees to serve in professional capacities or provide consultant services. Please refer to pages 45 and 46 in the Investment Section for the Schedule of Investment Expenses and Brokerage Commissions for the investment professionals.

Actuary

Gabriel, Roeder, Smith & Company
Southfield, Michigan

Auditor

Williams-Keepers, LLC
Jefferson City, Missouri

Investment Consultant

New England Pension
Consultants (NEPC)
Cambridge, Massachusetts

Information Technology

Levi, Ray & Shoup, Inc.
Springfield, Illinois

Huber & Associates
Jefferson City, Missouri

Legislative Consultant

Michael G. Winter Consultants, LLC
Jefferson City, Missouri

Master Trustee/Custodian

The Northern Trust Company
Chicago, Illinois

Risk Management/Insurance Consultant

Charlesworth Benefits
Overland Park, Kansas

Long-Term Disability Insurer

The Standard Insurance Company
Portland, Oregon

Professional Services

Investment Managers

Aberdeen Asset Management	Philadelphia, Pennsylvania
ABRY Partners	Boston, Massachusetts
Achievement Fund	Chicago, Illinois
Acadian Asset Management	Boston, Massachusetts
AEW Partners	Boston, Massachusetts
Albourne America	San Francisco, California
American Infrastructure MLP	Foster City, California
Anchorage Capital Group	New York, New York
Apollo Aviation Group	New York, New York
Apollo Real Estate	Miami, Florida
AQR Capital Management	Greenwich, Connecticut
Ares Management	New York, New York
Audax Group	Boston, Massachusetts
Barclays Global Investors	San Francisco, California
Bernzott	Camarillo, California
BlueCrest Capital Management	St. Peter Port, Guernsey
Brevan Howard	New York, New York
Bridgewater Associates	Westport, Connecticut
BTG Pactual	Atlanta, Georgia
Capital Partners	Norwalk, Connecticut
CarVal Investors (CVI)	Minnetonka, Minnesota
CBRE Investors	Baltimore, Maryland
Cevian Capital Limited	Jersy, Channel Islands
CenterSquare Investment Management (formally Urdang)	Plymouth Meeting, Pennsylvania
Clarion Partners	Jersy, Channel Islands
Colony Capital	Los Angeles, California
Deephaven Capital Management	Minnetonka, Minnesota
EIF Management	Needham, Massachusetts
Energy & Mineral Group	Houston, Texas
Enhanced Investment Technologies (INTECH)	Palm Beach Gardens, Florida
GMO	Boston, Massachusetts
Golden Sciens Marine Investments	New York, New York
Golub Capital	New York, New York
Grove Street Advisors	Wellesley, Massachusetts
Gryphon	San Francisco, California
GSO Capital Partners	New York, New York
Kennedy Capital	St. Louis, Missouri
Koppenberg	New York, New York
KPS	New York, New York
Luxor Capital	New York, New York
M&G Investments	London, United Kingdom
Metacapital Management	New York, New York
Natural Gas Partners	Houston, Texas
Ned Davis	Venice, Florida
Northern Shipping	Stamford, Connecticut
Och-Ziff Real Estate	New York, New York
OCP Asia	Singapore
Orion Mine Finance Group	New York, New York
Ospraie Management	New York, New York
Parametrics	Minneapolis, Minnesota
Partner Fund Management	San Francisco, California
Pinnacle Associates	New York, New York
Principal Global Investors	Des Moines, Iowa
RK Capital Management	Denver, CO
Ridgewood Energy	Montvale, New Jersey
Shore Capital Partners	Chicago, Illinois
Shoreline Capital	Guangzhou, China
Silchester International Investors Limited	New York, New York
Stark Investments (Shepherd)	Milwaukee, Wisconsin
Stelliam Investment Management	New York, New York
Taconic Capital Advisors	New York, New York
The Northern Trust Company	Chicago, Illinois
Torchlight Investors	New York, New York
Tortoise Capital Advisors	Leawood, Kansas
Tristan Capital Partners	London, United Kingdom
ValueAct Capital	San Francisco, California
Vectis Healthcare	Boston, Massachusetts

Notes

History of Leadership

For the first 35 years, MPERS was operated as a unit of the State Highways Commission, with MoDOT staff assigned part-time to carry out the System's business. In 1988, the first executive director position was established. As the membership base and the assets of the System grew, it became clear that full-time staff would be required to provide continuity and direction to improve and advance the System. In June 2002, a building was purchased at 1913 William Street in Jefferson City to provide a permanent home for the System.

Executive Director	Dates Served
Terry Porterfield	8/13/1988 - 6/30/1991
David DeWitt	7/1/1991 - 12/31/1993
Norm Robinson	2/10/1994 - 6/30/2008
Susie Dahl	7/1/2008 - 8/31/2012
Scott Simon	9/1/2012 - present

Important Staff Events

September 1, 1955	Operated as a unit of the State Highway and Transportation Department. Highway staff were assigned on a part-time basis to carry out the System's business.
August 13, 1988	First Executive Director position was established to administer the System in lieu of the Highway and Transportation Commission Secretary.
October 1, 2001	Transferred 5 full-time employees from MoDOT payroll to MPERS payroll.
November 28, 2001	Hired the first Assistant Executive Director.
December 1, 2003	Hired the first Chief Investment Officer (CIO).
January 1, 2005	Hired the first General Counsel.
February 1, 2006	Hired the first Senior Financial Officer.
September 27, 2007	Hired the first Senior Investment Officer.

WILLIAMS KEEPERS LLC
CERTIFIED PUBLIC ACCOUNTANTS & CONSULTANTS

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

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

www.williamskeepers.com

INDEPENDENT AUDITORS' REPORT

The Board of Trustees
Missouri Department of Transportation and
Highway Patrol Employees' Retirement System

Report on the Financial Statements

We have audited the accompanying statements of fiduciary net position of the Missouri Department of Transportation and Highway Patrol Employees' Retirement System (the System), as of June 30, 2015 and 2014, and the related statements of changes in fiduciary net position for the years then ended, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

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 from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the System's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the System at June 30, 2015 and 2014, and the changes in fiduciary net position for the years then ended, in conformity with U.S. generally accepted accounting principles.

Other Matters

Required Supplementary Information

U.S. generally accepted accounting principles require that the management's discussion and analysis on pages 3 through 7 and the schedules of employers' net pension liability, changes in the employers' net pension liability, employers' contributions, investment returns, OPEB funding progress, and related notes on pages 26 through 29 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context.

We have applied certain limited procedures to the required supplementary information in accordance with U.S. generally accepted auditing standards, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audits were conducted for the purpose of forming an opinion on the financial statements that collectively comprise the System's financial statements as a whole. The introductory, investment, actuarial and statistical sections and the additional information presented on pages 30 through 32 are presented for purposes of additional analysis and are not a required part of the financial statements.

The additional information presented on pages 30 through 32 is the responsibility of management and was derived from and relate directly to the underlying accounting and other records used to prepare the financial statements. The additional information presented on pages 30 through 32 has been subjected to the auditing procedures applied in the audits of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with U.S. generally accepted auditing standards. In our opinion, the additional information presented on pages 30 through 32 is fairly stated in all material respects in relation to the basic financial statements as a whole.

The introductory, investment, actuarial and statistical sections have not been subjected to the auditing procedures applied in the audits of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

Williams-Keepers LLC

November 10, 2015

Management's Discussion and Analysis

The management of the Missouri Department of Transportation and Highway Patrol Employees' Retirement System (the System, or MPERS) provides this discussion and analysis of the System's financial performance for the fiscal years ended June 30, 2015 and 2014. While this discussion is intended to summarize the financial status of MPERS, readers should consider this information in conjunction with the information that is furnished in the more detailed financial statements and corresponding notes.

DESCRIPTION OF BASIC FINANCIAL STATEMENTS

As required by the Governmental Accounting Standards Board (GASB) accounting standards, this financial report consists of Management's Discussion and Analysis (this section), the basic financial statements (including notes to the basic financial statements), and other required supplementary information.

Financial Statements report information about MPERS, using accounting methods similar to those used by private-sector companies, by using the economic resources measurement focus and accrual basis of accounting. These statements provide both long-term and short-term information about the System's overall financial status. These statements follow this Management's Discussion and Analysis section:

- The *Statement of Fiduciary Net Position* includes all the System's assets and liabilities, with the difference between the two reported as net position.
- The *Statement of Changes in Fiduciary Net Position* accounts for all the current year's additions (income) and deductions (expenses), regardless of when cash is received or paid.

Notes to the Financial Statements includes all the System's assets and liabilities, with the difference between the two reported as net position.

Required Supplementary Information follows the notes and further supports the information in the financial statements.

ANALYSIS OF FINANCIAL POSITION AND RESULTS OF OPERATIONS

Overall, the financial position of MPERS improved by $52 million, reported as the "net increase." This is primarily a result of net appreciation in the fair value of investments for the year ended June 30, 2015. With this net increase in value in FY15, the funded status of the plan showed an increase of 3.76%.

The following schedules present summarized comparative data from the System's financial statements for each of the fiscal years ended June 30, 2015, 2014, and 2013. Following each schedule is a brief summary providing explanation and analyses of the major reasons for changes in the condensed financial statements.

Summarized Comparative Statements of Fiduciary Net Position

	As of June 30, 2015	As of June 30, 2014	As of June 30, 2013	% Change 2015/2014	% Change 2014/2013
Cash and Receivables	$ 23,606,579	$ 15,256,813	$ 39,152,820	55	-61
Investments	1,991,396,397	1,937,710,335	1,651,622,264	3	17
Invested Securities Lending Collateral	80,780,418	86,192,337	92,327,975	-6	-7
Capital Assets	1,921,467	2,283,961	2,627,203	-16	-13
Other Assets	6,366	5,899	69,961	8	-92
Total Assets	2,097,711,227	2,041,449,345	1,785,800,223	3	14
Accounts Payable	3,994,860	7,784,728	5,298,016	-49	47
OPEB Obligation	643,809	599,399	554,370	7	8
Securities Lending Collateral	83,705,424	75,609,005	94,215,127	11	-20
Total Liabilities	88,344,093	83,993,132	100,067,513	5	-16
Net Position	**$2,009,367,134**	**$1,957,456,213**	**$1,685,732,710**	**3**	**16**

The increase in cash and receivables is primarily attributable to higher investment sales receivables as of June 30, 2015. Some fluctuations in this area are normal, based on investment activity. The decrease from FY13 to FY14 is primarily attributable to lower investment sales receivables which were normal fluctuations based on investment activity.

The System's investments represent the main component of total assets. These investments include holdings of stock, government-sponsored enterprises, bonds, mortgages, real estate, timber, hedge funds, securities lending collateral, limited partnerships, and other fixed income investments. The increase in fair value of investments as of June 30, 2015 is due to favorable market conditions experienced during FY15. The FY15 investment return was 6.62%. The increase in fair value from FY13 to FY14 is due to higher than expected investment returns of 17.59%.

Capital assets decreased in FY15 and FY14 due to depreciation of existing assets and only minimal purchases of new equipment during the year.

The largest component of liabilities is securities lending collateral. This represents the amount owed for collateral to be returned as the result of securities lent. The increase in securities lending collateral liability from FY14 to FY15 is due to the increase in the fair value of investments and changes in securities lending provider policies. The decrease in securities lending collateral liability from FY13 to FY14 is due to fewer securities being utilized for lending. The corresponding securities lending collateral asset is valued at a lower amount at June 30, 2015 due to the market value of the securities on loan being less than the par value. The corresponding securities lending collateral asset is valued at a higher amount at June 30, 2013 due to the market value of the securities on loan being more than par value.

The decrease in accounts payable for FY15 is primarily attributable to lower investment purchases payable and the increase in accounts payable for FY14 is primarily attributable to higher investment purchases payable. Some fluctuations in this area are normal, based on investment activity.

The OPEB obligation liability of $643,809 at June 30, 2015, $599,399 at June 30, 2014, and $554,370 at June 30, 2013 reflects the System's provision of post-employment health care benefits through its participation in the MoDOT and MSHP Medical and Life Insurance Plan. This plan is an internal service fund of the Missouri Department of Transportation (MoDOT); therefore, assets have not been set aside. With this, the increases from FY14 to FY15 and from FY13 to FY14 are expected.

Management's Discussion and Analysis

The System's total net position was $2.009 billion at June 30, 2015, a $52 million increase from the $1.957 billion at June 30, 2014. This is in addition to an increase of the previous year, when net position increased $272 million from the June 30, 2013 amount of $1.685 billion to the June 30, 2014 amount of $1.957 billion.

Summarized Comparative Statements of Changes in Fiduciary Net Position

	Year Ended June 30, 2015	Year Ended June 30, 2014	Year Ended June 30, 2013	% Change 2015/2014	% Change 2014/2013
Contributions	$ 205,047,170	$ 187,398,786	$ 173,703,401	9	8
Net Investment Income	92,645,423	319,445,655	198,139,438	-71	61
Other Income	148	125	1,650	18	-92
Net Additions	297,692,741	506,844,566	371,844,489	-41	36
Benefits	241,714,876	231,384,708	224,518,100	4	3
Administrative Expenses	4,066,944	3,736,355	2,997,225	9	25
Total Deductions	245,781,820	235,121,063	227,515,325	5	3
Net Increase	51,910,921	271,723,503	144,329,164	-81	88
Net Position-Beginning	1,957,456,213	1,685,732,710	1,541,403,546	16	9
Net Position-Ending	**$2,009,367,134**	**$1,957,456,213**	**$1,685,732,710**	**3**	**16**

The main component of the changes in contributions to MPERS is employer contributions. In FY15 the contribution rate for the non-uniformed Highway Patrol and MoDOT increased by 4.51% and the contribution rate for the uniformed Highway Patrol increased by 2.96% from the FY14 rates, therefore increasing the FY15 amount of employer contributions. In FY14 the contribution rate for the non-uniformed Highway Patrol and MoDOT increased by 3.33% and the contribution rate for the uniformed Highway Patrol increased by 0.20% from the FY13 rates, therefore increasing the FY14 amount of employer contributions.

Net investment income, a primary component of plan additions, resulted in income of over $92 million for FY15. The income represented a 6.62% return for the fiscal year ended June 30, 2015. In comparison, the FY14 gain of over $319 million represented an investment return of 17.59%. Annual fluctuations within the broad investment markets are outside of the control of the System and are expected to fluctuate from year to year. The Board of Trustees has approved a diversified asset allocation that, over time, is expected to realize the assumed actuarial rate of investment return of 7.75%.

Administrative expenses increased in FY15 due to adding investment staff and moving to an outsourced hosted IT solution.

Benefits increased primarily due to increases in benefit rolls for all of the years shown.

CURRENTLY KNOWN FACTS AND RECENT EVENTS

Based on the June 30, 2014 actuarial valuation, the Board of Trustees approved a slight decrease in the required state contribution, effective July 1, 2015. The rate applied to non-uniformed payroll (MoDOT, civilian patrol, and MPERS) will decrease from 58.76% to 58.05%. The rate applied to uniformed patrol payroll will decrease from 58.19% to 57.76%. The decrease in both rates is primarily due to positive investment returns.

Based on the June 30, 2015 actuarial valuation, the Board of Trustees approved a change in the required state contribution rate, effective July 1, 2016. The rate applied to non-uniformed payroll (MoDOT, civilian patrol, and MPERS) will decrease slightly from 58.05% to 58.00%. The rate applied to uniformed patrol payroll will increase from 57.76% to 58.00%. The decrease in the non-uniformed rate is primarily due to positive investment returns. The increase in the uniformed rate is primarily due to liability experience losses.

In June 2012, the Governmental Accounting Standards Board (GASB) approved new accounting and reporting standards for pensions provided by state and local governments. The new statements are GASB 67, Financial Reporting for Pension Plans and GASB 68, Accounting and Financial Reporting for Pensions. GASB 67 applies to MPERS and other state and local pension plans established as trusts, implemented in fiscal years beginning after June 15, 2013. GASB 68 applies to the employers that participate in MPERS as well as other governmental employers that sponsor or contribute to pension plans, implemented in fiscal years beginning after June 15, 2014. The new accounting and reporting standards break the link between accounting and funding. While these changes affect the accounting measures, they do not have an effect on the actuarial methods and assumptions used by MPERS to determine the employer contributions needed to fund the plan. The new standards, however, impact the financial statement presentation for pension accounting and related disclosures for MPERS and participating employers. MPERS implemented both GASB 67 and GASB 68 in FY14.

CONTACTING THE RETIREMENT SYSTEM'S MANAGEMENT

This financial report is designed to provide a general overview of the System's finances. Questions about this report or requests for additional financial information should be sent to:

MoDOT and Patrol Employees' Retirement System
PO Box 1930
Jefferson City, MO 65102-1930
mpers@mpers.org

Statements of Fiduciary Net Position

As of June 30, 2015 and 2014

	2015	2014
ASSETS:		
Cash	$ 359,068	$ 194,136
Receivables		
Contributions	8,392,952	7,705,671
Accrued Interest and Income	4,264,812	7,241,177
Investment Sales	10,567,358	97,323
Other	22,389	18,506
Total Receivables	23,247,511	15,062,677
Investments, at Fair Value		
Stocks and Rights/Warrants	495,604,884	595,943,370
Government Obligations	187,018,431	145,598,291
Corporate Bonds	27,747,634	32,651,714
Real Estate	199,368,748	203,400,219
Mortgages and Asset-Backed Securities	210,369,202	176,678,785
Hedge Funds (Absolute Return)	235,475,642	204,257,912
Short-Term Investments	61,592,254	39,766,147
Venture Capital & Partnerships	574,219,602	539,413,897
Total Investments	1,991,396,397	1,937,710,335
Invested Securities Lending Collateral	80,780,418	86,192,337
Prepaid Expenses	6,366	5,899
Net Investment in Capital Assets		
Land	84,000	84,000
Building	581,619	581,619
Furniture, Equipment and Software	3,508,918	3,506,428
Accumulated Depreciation	(2,253,070)	(1,888,086)
Net Investment in Capital Assets	1,921,467	2,283,961
TOTAL ASSETS	**$2,097,711,227**	**$2,041,449,345**
LIABILITIES:		
Accounts Payable	1,702,210	1,554,399
OPEB Obligation	643,809	599,399
Security Lending Collateral	83,705,424	75,609,005
Investment Purchases	2,292,650	6,230,329
TOTAL LIABILITIES	**88,344,093**	**83,993,132**
NET POSITION RESTRICTED FOR PENSIONS	**$2,009,367,134**	**$1,957,456,213**

See accompanying Notes to the Financial Statements.

Statements of Changes in Fiduciary Net Position

For the Years Ended June 30, 2015 and 2014

	2015	2014
ADDITIONS:		
Contributions-Employer	$ 200,638,571	$ 183,353,841
Contributions-Employee	2,086,000	1,282,379
Contributions-Service Transfers from Other System	1,114,437	1,784,382
Contributions-Other	1,208,162	978,184
Total Contributions	205,047,170	187,398,786
Investment Income from Investing Activities		
Net Appreciation in Fair Value of Investments	59,440,132	296,466,951
Interest and Dividends	55,794,806	42,844,252
Less: Investment Expenses	22,797,145	20,130,262
Net Investment Income	92,437,793	319,180,941
Income from Securities Lending Activities		
Securities Lending Gross Income	208,633	258,110
Less: Securities Lending Expenses (Income), net	1,003	(6,604)
Net Income from Securities Lending Activities	207,630	264,714
Other Income	148	125
NET ADDITIONS	**$ 297,692,741**	**$ 506,844,566**
DEDUCTIONS:		
Monthly Benefits	241,714,876	231,384,708
Administrative Expenses	4,066,944	3,736,355
TOTAL DEDUCTIONS	**245,781,820**	**235,121,063**
NET INCREASE	51,910,921	271,723,503
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of Year	**1,957,456,213**	**1,685,732,710**
End of Year	**$2,009,367,134**	**$1,957,456,213**

See accompanying Notes to the Financial Statements.

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

As established under Section 104.020 of the Revised Statutes of Missouri (RSMo), the Missouri Department of Transportation and Highway Patrol Employees' Retirement System (MPERS) is a body corporate and an instrumentality of the State of Missouri (State). Due to the nature of MPERS' reliance on funding from the Missouri Department of Transportation (MoDOT) and the Missouri State Highway Patrol (MSHP) and control of the overall plan document by the legislative and executive branches of state government, MPERS is considered a part of the State of Missouri financial reporting entity and is included in the State's financial reports as a component unit shown as a pension trust fund.

Note 1 (a) - Basis of Accounting

The financial statements were prepared using the accrual basis of accounting. Contributions are due to MPERS when employee services have been performed and paid. Contributions are recognized as revenues when due, pursuant to statutory requirements. Benefits are recognized when due and payable and expenses are recorded when the corresponding obligations are incurred. Dividend income is recognized when dividends are declared. Interest income is recognized when earned.

In June 2012, the Governmental Accounting Standards Board (GASB) approved new accounting and reporting standards for pensions provided by state and local governments. The new statements are GASB 67, Financial Reporting for Pension Plans and GASB 68, Accounting and Financial Reporting for Pensions. GASB 67 applies to MPERS and other state and local pension plans established as trusts, implemented in fiscal years beginning after June 15, 2013. GASB 68 applies to the employers that participate in MPERS as well as other governmental employers that sponsor or contribute to pension plans, implemented in fiscal years beginning after June 15, 2014. MPERS implemented both GASB 67 and GASB 68 in FY14.

The requirements for GASB 67 include changes in presentation of the financial statements, notes to the financial statements, and required supplementary information. Significant changes include an actuarial calculation of total and net pension liability. It also includes comprehensive footnote disclosure regarding the pension liability, the sensitivity of the net pension liability to the discount rate, and increased investment activity disclosures. The total pension liability, determined in accordance with GASB 67, is presented in Note 7 and in the Required Supplementary Information.

GASB 68 requires participating employers recognize a liability for their proportionate share of net pension liability. It also requires participating employers recognize pension expense and report deferred outflows and inflows of resources related to pensions for their proportionate share of collective pension expense and collective deferred outflows and inflows or resources related to pensions. The employer proportionate share is discussed in Note 8.

Note 1 (b) - Method Used to Value Investments

Investments are reported at fair value on a trade date basis. Bonds and stocks traded on a national or international exchange are valued at the reported sales price at current exchange rates. Mortgages are valued on the basis of future principal and interest payments and are discounted at prevailing interest rates for similar instruments. The fair value of real estate and timber investments are based on net asset value estimates provided by the general partners' administrators or portfolio managers, which are compared to independent appraisals. Investments that do not have an established market are reported at estimated fair value. The fair value of the hedge fund (absolute return) and venture capital and partnership portfolios are based on valuations of the underlying companies as reported by the general partner or portfolio manager.

Note 1 (c) - Net Investment in Capital Assets

MPERS capitalizes assets with an expected useful life greater than one year and a cost greater than $1,000. Capital assets are depreciated on the straight-line method over the estimated useful lives of the related assets. The estimated useful lives are as follows:

Furniture, Equipment and Software	3 – 10 years
Building and Improvements	30 years

Note 1 (d) - Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

NOTE 2 – PLAN DESCRIPTIONS AND CONTRIBUTION INFORMATION

MPERS is a body corporate and an instrumentality of the state as a multiple-employer, public employee retirement system with one plan that has three benefit structures known as the Closed Plan, the Year 2000 Plan, and the Year 2000 Plan-2011 Tier. The plan provides retirement, survivor, and disability benefits for employees of MoDOT, MSHP, and MPERS' staff. The plan is administered in accordance with the requirements of a cost sharing, multiple-employer, public employee retirement plan under the Revised Statutes of Missouri. In MPERS are vested the powers and duties specified in sections 104.010 to 104.312, 104.601 to 104.805, and 104.1003 to 104.1093, 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 outlined pursuant to these sections. Responsibility for the operation and administration of the System is vested in the Board of Trustees, which consists of eleven members, four elected by the active and retired plan members, three Highway and Transportation Commissioners, a State Senator appointed by the President Pro-Tem of the Senate, a State Representative appointed by the Speaker of the House, and the Director of the MoDOT and Superintendent of the MSHP who serve as ex-officio members. Detailed information regarding contributions can be found in Note 5.

Generally, all covered employees hired before July 1, 2000 are eligible for membership in the Closed Plan. All covered employees hired on or after July 1, 2000 and before January 1, 2011 are eligible for membership in the Year 2000 Plan. All covered employees hired on or after January 1, 2011 are eligible for membership in the Year 2000 Plan's 2011 Tier.

Membership in the Closed Plan, Year 2000 Plan, and 2011 Tier as of June 30

	2015			2015	2014
	Closed	**Year 2000**	**2011 Tier**	**Total**	**Total**
Retirees, Beneficiaries, and Disabilities Currently Receiving Benefits	5,090	3,529	2	8,621	8,438
Terminated Employees Entitled to But Not Yet Receiving Benefits	1,564	736	0	2,300	2,222
Active Employees					
Vested	3,062	2,600	0	5,662	5,977
Non-Vested	2	155	1,554	1,711	1,438
Total Membership	**9,718**	**7,020**	**1,556**	**18,294**	**18,075**

Closed Plan Description

Employees covered by the Closed Plan are fully vested for benefits upon receiving 5 years of creditable service. Under the Closed Plan, MoDOT and civilian employees may retire with full benefits upon the earliest of attaining:

- Age 65 with 4 or more years of creditable service (active);
- Age 65 with 5 or more years of creditable service (terminated & vested);
- Age 60 with 15 or more years of creditable service (active or terminated & vested); or
- "Rule of 80" – at least age 48 with sum of member's age and service equaling 80 or more (active or terminated & vested).

The following provisions apply for uniformed patrol members of the Closed Plan:

- Age 55 with 4 or more years of creditable service (active);
- Age 55 with 5 or more years of creditable service (terminated & vested);
- "Rule of 80" – at least age 48 with sum of member's age and service equaling 80 or more (active or terminated & vested); or
- Mandatory retirement at age 60 (active).

All non-uniformed members may retire early, with reduced benefits, at age 55 with at least 10 years of creditable service.

The base benefit in the Closed Plan is equal to 1.6% multiplied by the final average pay multiplied by years of creditable service. For members of the uniformed patrol, the base benefit is calculated by applying the same formula, then multiplying the product by 1.333333.

Retired uniformed members will receive an additional benefit of $90 per month, plus cost-of-living adjustments (COLAs), until attainment of age 65. This payment, however, is reduced by any amount earned during gainful employment. This benefit is not available to uniformed members hired after January 1, 1995.

For members employed prior to August 28, 1997, COLAs are provided annually based on 80% of the increase in the consumer price index for all urban consumers for the United States (CPI-U). The minimum rate is 4% and the maximum rate is 5%, until the cumulative amount of COLAs equals 65% of the original benefit. Thereafter, the 4% minimum rate is eliminated and the annual COLA rate will be equal to 80% of the increase in the CPI-U (annual maximum of 5%). For members employed on or after August 28, 1997, COLAs are provided annually based on 80% of the increase in the CPI-U, up to a maximum rate of 5%.

The BackDROP is a payment option that is available to eligible members upon retirement. This option provides for a benefit to be calculated as if the member elected to retire at a previous date. If the BackDROP is elected, the monthly benefit payable on the actual retirement date is based on the benefit that would have been received by the member had he/she left employment and retired on the BackDROP date. In addition, the member will receive a lump sum payment equal to 90% of the life income annuity amount the member would have received during the BackDROP period. This lump sum amount includes any COLAs and other benefit increases; also, credit will be received for the unused sick leave balance as of the date of retirement.

The life income annuity payment option (which contains no provision for survivorship) and the life income with 60 or 120 month guaranteed payment options are available to all members. Joint and 50% or 100% survivor options are available if married at the time of retirement. In the Closed Plan, the reduction for the joint & 100% survivor option is based on the difference between the age of the member and the survivor. There is no reduction for the joint and 50% survivor option.

If a reduced joint and survivor option is chosen at the time of retirement and the spouse precedes the member in death, the benefit will revert back (pop-up) to a normal annuity.

Members may name a new spouse as beneficiary if:

- They were single at retirement and since married;
- They elected a spouse option at the time of retirement, the spouse preceded the member in death, and then a remarriage occurred.

The member has 1 year from the date of marriage to re-elect a payment option and name a new spouse.

All members who retire from active employment or long-term disability, or begin receiving normal or work-related disability benefits, on or after September 28, 1985, are provided a $5,000 death benefit payable to designated beneficiaries.

Year 2000 Plan Description

Employees covered by the Year 2000 Plan are fully vested for benefits upon earning 5 years of creditable service. Under the Year 2000 Plan, MoDOT and civilian employees may retire with full benefits upon the earliest of attaining:

- Age 62 and with 5 or more years of creditable service (active or terminated & vested);
- "Rule of 80" – at least age 48 with sum of member's age and service equaling 80 or more (active).

The following provisions apply for uniformed patrol members of the Year 2000 Plan:

- "Rule of 80" – at least age 48 with sum of member's age and service equaling 80 or more (active);
- Mandatory retirement at age 60 with 5 or more years of creditable service (active only).

All members may retire early with reduced benefits at age 57 with at least 5 years of creditable service.

The base benefit in the Year 2000 Plan is equal to 1.7% multiplied by the final average pay multiplied by years of creditable service. Members retiring under the Rule of 80, and uniform patrol members retiring at the mandatory retirement age (currently 60) with 5 years of creditable service, receive an additional temporary benefit until age 62. The temporary benefit is equivalent to 0.8% multiplied by final average pay multiplied by years of creditable service.

COLAs are provided annually based on 80% of the increase in the CPI-U, up to a maximum rate of 5%.

The BackDROP is a payment option that may be available to members upon retirement. This option provides for a monthly benefit to be calculated as if the member elected to retire at a previous date. If the

BackDROP is elected, the monthly benefit payable on the actual retirement date is based on the benefit that would have been received by the member had he/she left employment and retired on the BackDROP date. In addition, the member will receive a lump sum payment equal to 90% of the life income annuity amount the member would have received during the BackDROP period. This lump sum amount includes any temporary benefits, COLAs and other benefit increases; also, credit will be received for the unused sick leave balance as of the date of retirement.

The life income annuity payment option (with no provision for survivorship) and the life income with 120 or 180 months guaranteed payment options are available to all members. Joint and 50% or 100% survivorship options are available if married at the time of retirement. The reduction for the joint and 50% or 100% survivor options is based on the member's age at retirement, as well as the age difference between the member and the survivor.

If a reduced joint and survivor option is chosen at the time of retirement and the spouse precedes the member in death, the benefit will revert back (pop-up) to a normal annuity.

Members may name a new spouse for survivor benefits if:

- They were single at retirement and since married;
- They elected a spouse option at the time of retirement, the spouse preceded the member in death, and then a remarriage occurred.

The member has 1 year from the date of marriage to re-elect the payment option and name a new spouse.

All members who retire from active employment or long-term disability, or begin receiving work-related disability benefits, on or after July 1, 2000, are provided a $5,000 death benefit payable to designated beneficiaries.

Year 2000 Plan-2011 Tier Description

Employees covered by the 2011 Tier are fully vested for benefits upon earning 10 years of creditable service. Under the 2011 Tier, MoDOT and civilian employees may retire with full benefits upon the earliest of attaining:

- Age 67 and with 10 or more years of creditable service (active or terminated & vested);
- "Rule of 90" – at least age 55 with sum of member's age and service equaling 90 or more (active only).

Active MoDOT and civilian employees may retire early with reduced benefits at age 62 with at least 10 years of creditable service.

The following provisions apply for uniformed patrol members of the 2011 Tier:

- Age 55 and with 10 or more years of creditable service (active only);
- Mandatory retirement at age 60 with no minimum service amount (active only).

Terminated and vested uniformed patrol employees may retire at age 67 with 10 or more years of creditable service.

The base benefit in the 2011 Tier is equal to 1.7% multiplied by the final average pay multiplied by years of creditable service. Members retiring under the Rule of 90, and uniform patrol members retiring at the mandatory retirement age (currently 60) or at age 55 with 10 years of creditable service, receive an additional temporary benefit until age 62. The temporary benefit is equivalent to 0.8% multiplied by final average pay multiplied by years of creditable service.

COLAs are provided annually based on 80% of the change in the CPI-U, up to a maximum rate of 5%.

The life income annuity payment option (with no provision for survivorship) and the life income with 120 or 180 months guaranteed payment options are available to all members. Joint and 50% or 100% survivorship options are available if married at the time of retirement. The reduction for the joint and 50% or 100% survivor options is based on the member's age at retirement, as well as the age difference between the member and the survivor.

If a reduced joint and survivor option is chosen at the time of retirement and the spouse precedes the member in death, the benefit will revert back (pop-up) to a normal annuity.

Members may name a new spouse for survivor benefits if:

- They were single at retirement and since married;
- They elected a spouse option at the time of retirement, the spouse preceded the member in death, and then a remarriage occurred.

The member has 1 year from the date of marriage to re-elect the payment option and name a new spouse.

All members who retire from active employment or long-term disability, or begin receiving work-related disability benefits, on or after January 1, 2011, are provided a $5,000 death benefit payable to designated beneficiaries

Contributions

Beginning January 1, 2011, employee contributions of 4% of gross pay are required for those covered by the Year 2000 Plan-2011 Tier.

Employer contributions are determined through annual actuarial valuations. Administrative expenses are financed through contributions from participating employers and investment earnings.

Participating employers are required to make contributions to the plan based on the actuarially determined rate. Prior to August 13, 1976, contributions by all plan members were required. Accumulated employee contributions made prior to that time, plus interest, were refunded to applicable members. Maximum contribution rates were eliminated August 13, 1976. Detailed information regarding contributions can be found in Note 5.

Schedule of Funded Status and Funding Progress

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)
6/30/2015	**$1,967,001,509**	**$3,715,845,651**	**$1,748,844,142**	**52.94%**	**$342,264,593**	**510.96%**

The schedule of funding progress in the *Actuarial Section* presents multiyear trend information about whether the actuarial values of plan assets are increasing or decreasing over time relative to the actuarial accrued liabilities for benefits. The actuarial assumptions used in the June 30, 2015 valuation were based on the result of an actuarial experience study for the period July 1, 2007 - June 30, 2012.

Additional Information as of the June 30, 2015 Actuarial Valuation follows:

Valuation Date	6/30/2015
Actuarial Cost Method	Entry Age
Amortization Method	Closed, Level Percent of Payroll
Remaining Amortization Period	16 Years*
Asset Valuation Method	3-Year Smoothing
Actuarial Assumptions:	
Investment Rate of Return	7.75%
Projected Salary Increases	3.5% to 11%
COLAs	2.4% Compound
Price Inflation	3.0%

*single equivalent period

NOTE 3 – DEPOSITS AND INVESTMENTS

The Board of Trustees has established policies and procedures by which funds are invested by bank custodians and investment managers. Section 104.150, RSMo, provides the authority for the board to invest MPERS funds. Plan assets are invested in a diversified portfolio following prudent standards for preservation of capital, with the goal of achieving the highest possible rate of return consistent with MPERS' tolerance for risk. The Board of Trustees establishes MPERS' policy in regard to the allocation of invested assets, and may amend the policy. The following is MPERS current asset allocation policy:

Asset Class	Target Allocation
Global Equity	30%
Private Equity	15%
Fixed Income	25%
Real Assets	5%
Real Estate	10%
Hedge Funds	15%
Cash	0%

Note 3 (a) - Deposit and Investment Risk Policies

Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of the System's investment in a single issuer. Within the traditional asset classes (equities and fixed income), the consultant will aggregate exposures across asset classes to create measures of concentration including industries, countries and security issuer for Investment staff review.

Investment Custodial Credit Risk

Custodial credit risk is an investment risk that, in the event of the failure of the counterparty to a transaction, the System will not be able to recover the value of its investment or the collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the System, and are held by either: a) the counterparty or b) the counterparty's trust department or agent but not in the System's name. It is the policy of the System to require that all investments be clearly marked as to ownership and, to the extent possible, shall be registered in the name of the System.

Cash Deposit Custodial Credit Risk

Cash deposit custodial credit risk is the risk that, in the event of the failure of depository financial institution, the System will not be able to recover deposits or will not be able to recover collateral securities that are in the possession of an outside party. Missouri state law requires that all public funds must be collateralized with acceptable securities having market values of at least 100% of the amount of funds on deposit (less any amount covered by FDIC insurance).

Market Risk

Market risk is the risk that the fair value of an investment will be adversely impacted due to a change in value of the underlying market. The three primary market risks prevalent in the System's investment portfolio are equity prices, interest rates, and foreign currencies. Equity risk is the risk that stock prices fall and/or the volatility in the equity market increases. Interest rate risk is the risk that fixed income securities (or any investment primarily valued on a yield basis) will drop in value due to an increase in interest rates. Currency risk is the risk that changes to foreign exchange rates will adversely impact the fair value of non-U.S. Dollar denominated assets. The System protects the portfolio against market risks by adopting a diversified asset allocation that limits the amount of exposure to each underlying market risk. Market risks are also controlled by monitoring the types, amounts, and degree of risk that each investment manager takes for their specific mandate.

Investment Credit Risk

Investment credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. Unless authorized under a separate Investment Management Agreement or operating agreement, it is the policy of the System to limit fixed income managers to purchasing securities that possess a minimum credit rating of "Baa" by Moody's and "BBB" by Standard & Poor's. Issues subsequently downgraded below these ratings must be brought to the attention of the Chief Investment Officer. Where counterparty risk is present, the System's investment managers seek to control credit risk through counterparty credit evaluations and approvals, counterparty credit limits and exposure monitoring procedures.

Note 3 (b) - Cash Deposits

Cash balances include short-term securities held by the custodial bank to meet future obligations and operating balances held by the depository bank. As of June 30, 2015 and 2014, MPERS had carrying amount of deposits of ($127,348) and ($38,925), respectively, and a bank balance of $1 and $2, respectively. The FDIC covered the bank balances. To maximize investment income, cash is invested in overnight repurchase agreements, thus causing the negative cash amounts disclosed above. The balances in these repurchase agreements at June 30, 2015 and 2014 were $486,416 and $233,061, respectively. As of June 30, 2015 and 2014, no investments were held as repurchase agreements that were uninsured or unregistered, with securities held by the counterparty or by its trust department or agent but not in MPERS' name.

Note 3 (c) – Concentrations

No investments in any one organization (other than those issued or sponsored by the U.S. government and those in pooled investments) represent 5% of plan net position.

Note 3 (d) – Rate of Return

For the years ended June 30, 2015 and 2014, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 6.71% and 17.58%, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Note 3 (e) – Investments

The following table shows MPERS' investments by type.

Summary of Investments by Type at June 30

	2015		2014	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Government Obligations	$ 180,913,855	$ 187,018,431	$ 141,084,282	$ 145,598,291
Corporate Bonds	26,467,031	27,747,634	31,435,313	32,651,714
Stock and Rights/Warrants	366,823,175	495,604,884	416,551,454	595,943,370
Real Estate	181,625,918	199,368,748	178,784,181	203,400,219
Mortgages & Asset-Backed Securities	206,349,682	210,369,202	162,913,148	176,678,785
Hedge Funds (Absolute Return)	190,555,442	235,475,642	160,996,066	204,257,912
Limited Partnerships	488,929,018	574,219,602	442,844,448	539,413,897
Short-Term Investments	62,078,670	62,078,670	39,999,208	39,999,208
Securities Lending Collateral	80,780,418	80,780,418	86,192,337	86,192,337
Total Investments	**$1,784,523,209**	2,072,663,231	**$1,660,800,437**	2,024,135,733
Reconciliation to Statement of Fiduciary Net Position:				
Less: Repurchase Agreements		(486,416)		(233,061)
Less: Securities Lending Collateral		(80,780,418)		(86,192,337)
Investments per Statement of Fiduciary Net Position		**$1,991,396,397**		**$1,937,710,335**

Certain investments are not listed on national exchanges, over-the-counter markets, nor do they have quoted market prices. Their valuation is based on the most current net asset values, activities through year-end, independent appraisals, and/or good faith estimates of the investments fair value provided by the general partner or portfolio manager. The estimated fair value of these investments may differ significantly from values that would have been used had a ready market existed. The following investments were priced using those methods and comprised 51% of the total fair value of the System's investments as of June 30, 2015:

Real Estate	$199,368,748
Hedge Funds (Absolute Return)	235,475,642
Limited Partnerships	574,219,602
	$1,009,063,992

Note 3 (f) – Investment Interest Rate Risk
The following table summarizes the maturities of government obligations, corporate bonds, convertible corporate bonds, mortgages, and asset-backed securities which are exposed to interest rate risk.

Summary of Weighted Average Maturities

Investment Type	Fair Value	Investment Maturities (in years) as of 6/30/2015			
		Less than 1	1 - 5	6 - 10	More than 10
Asset-Backed Securities	$ 59,353,277	$ 845,857	$ 3,116,147	$ 27,976,859	$ 27,414,414
Commercial Mortgage-Backed Securities	63,986,730	0	2,058,307	0	61,928,423
Corporate Bonds	16,063,854	1,013,530	3,769,094	495,941	10,785,289
Government Agencies	70,379,870	786,377	1,174,320	9,806,811	58,612,362
Government Bonds	5,029,376	0	0	0	5,029,376
Government Mortgage-Backed Securities	50,704,052	0	0	3,843,239	46,860,813
Government-issued Commercial Mortgage-Backed	9,551,830	0	2,938,399	0	6,613,431
Index Linked Govt Bonds	23,690,938	0	0	16,015,298	7,675,640
Municipal/Provincial Bonds	87,918,246	0	4,684,398	18,602,431	64,631,417
Non-Govt Backed C.M.O.s	26,773,313	0	340,490	0	26,432,823
Total	$413,451,486	**$2,645,764**	**$18,081,155**	**$76,740,579**	**$315,983,988**
Pooled Investments	11,683,781				
Grand Total	**$425,135,267**				

Note 3 (g) – Investment Credit Ratings
The following table summarizes the credit ratings of the government obligations, corporate bonds, mortgages, and asset-backed securities.

Summary of Credit Ratings

Investment Type	Quality Rating	6/30/2015 Fair Value	6/30/2014 Fair Value
Asset-Backed Securities	AAA	$ 40,566,775	$ 3,748,513
Asset-Backed Securities	AA	11,888,727	9,589,678
Asset-Backed Securities	CC	845,857	1,143,616
Asset-Backed Securities	not rated	6,051,918	147,135
Commercial Mortgage-Backed Securities	AAA	4,043,149	2,599,704
Commercial Mortgage-Backed Securities	A	4,996,225	5,158,445
Commercial Mortgage-Backed Securities	BBB	6,749,366	6,901,704
Commercial Mortgage-Backed Securities	BB	349,504	363,707
Commercial Mortgage-Backed Securities	B	10,638,640	15,814,022
Commercial Mortgage-Backed Securities	CCC	6,120,382	11,115,641
Commercial Mortgage-Backed Securities	D	0	3,976,088
Commercial Mortgage-Backed Securities	not rated	29,286,558	28,267,388
Commercial Mortgage-Backed Securities	us gov guar	1,802,906	0
Corporate Bonds	AA	5,305,275	5,293,652
Corporate Bonds	A	249,698	250,710
Corporate Bonds	BBB	202,216	1,132,590
Corporate Bonds	not rated	10,306,665	14,491,885
Government Agencies	AA	68,823,057	47,460,435
Government Agencies	us gov guar	1,556,813	1,419,984
Government Bonds	us gov guar	5,029,376	4,858,124
Government Mortgage-Backed Securities	not rated	5,476,788	5,707,688
Government Mortgage-Backed Securities	us gov guar	45,227,264	61,019,468
Govt issue Commercial Mortgage-Backed Securities	AAA	943,058	0
Govt issue Commercial Mortgage-Backed Securities	not rated	0	2,359,211
Govt issue Commercial Mortgage-Backed Securities	us gov guar	8,608,772	8,208,095
Index Linked Government Bonds	us gov guar	23,690,938	24,248,914
Municipal/Provincial Bonds	AAA	20,963,586	16,927,158
Municipal/Provincial Bonds	AA	54,553,111	42,072,533
Municipal/Provincial Bonds	A	2,658,714	420,707
Municipal/Provincial Bonds	not rated	9,742,835	8,190,436
Non-Government Backed C.M.O.s	AA	1,187,235	1,569,219
Non-Government Backed C.M.O.s	A	945,966	1,192,862
Non-Government Backed C.M.O.s	BB	618,727	278,359
Non-Government Backed C.M.O.s	B	745,231	118,456
Non-Government Backed C.M.O.s	CCC	1,636,744	422,795
Non-Government Backed C.M.O.s	CC	283,232	89,547
Non-Government Backed C.M.O.s	D	9,611,081	803,114
Non-Government Backed C.M.O.s	not rated	11,745,097	6,084,330
Pooled Investments	not rated	11,683,781	11,482,877
Total		**$425,135,267**	**$354,928,790**

Note 3 (h) – Investment Foreign Currency Risk

Exposure to Foreign Currency Risk as of June 30

Foreign Currency	Equities	Real Estate/ Partnerships	2015 Total	2014 Total
Australian Dollar	$1,226,071	$ 0	$ 1,226,071	$ 1,560,255
British Pound Sterling	1,442,249	8,810,985	10,253,234	5,784,728
Euro	1,622,094	15,461,203	17,083,297	23,085,996
Hong Kong Dollar	694,546	0	694,546	0
Japanese Yen	1,288,375	0	1,288,375	1,801,689
Singapore Dollar	0	0	0	395,460
Total Exposure Risk	**$6,273,335**	**$24,272,188**	**$30,545,523**	**$32,628,128**

Note 3 (i) – Securities Lending

In accordance with the Board of Trustees' investment policy, MPERS participates in a securities lending program. The Northern Trust Company administers the program. There are no restrictions on the amount of securities that may be lent.

Securities that may be loaned include U.S. government and agency securities, corporate equity, and fixed income securities. Collateral may include cash, U.S. government securities and irrevocable letters of credit. U.S. securities are loaned in exchange for collateral valued at 102% of the fair value of the securities, plus any accrued interest. Non-U.S. securities are loaned in exchange for collateral valued at 105% of the fair value of the securities, plus any accrued interest. On June 30, 2015 and 2014, MPERS had no credit risk exposure to borrowers, since the amount of collateral exceeded the amount of the loans.

Non-cash collateral cannot be pledged or sold unless the borrower defaults. The average term of the System's loans was approximately 105 days and 95 days, as of June 30, 2015 and June 30, 2014, respectively. Cash open collateral is invested in a short-term investment pool, which had an interest sensitivity of 26 days and 37 days, as of June 30, 2015 and 2014, respectively. Cash collateral may also be invested separately in "term loans", in which case the investments match the loan term. These loans can be terminated on demand by either lender or borrower. There were no known violations of legal or contractual provisions, or borrower or lending agent default losses. There were no dividends or coupon payments owing on the securities lent. Securities lending earnings are credited on approximately the fifteenth day of the following month.

Indemnification deals with a situation in which a client's securities would not be returned due to the insolvency of a borrower and Northern Trust would fail to live up to its contractual responsibilities relating to the lending of those securities. Northern Trust's responsibilities include performing appropriate borrower and collateral investment credit analyses and demanding adequate types and levels of collateral.

The collateral held (including both cash collateral recognized in the Statement of Fiduciary Net Position and non-cash collateral) was as follows at June 30:

Collateral Held

Investment Type	2015	2014
Equities	$74,689,586	$68,070,631
Government & government sponsored securities	7,838,159	6,483,650
Corporate bonds	1,177,679	1,054,724
	$83,705,424	**$75,609,005**

Note 3 (j) – Derivatives

A derivative financial instrument is an investment whose value depends on the values of one or more underlying assets, financial indexes, or commodity prices. These investments include futures contracts, options contracts, and forward foreign currency exchange. Derivative financial instruments involve credit risk and market risk, as described in Note 3 (a), in varying levels. The notional value related to these derivative instruments are generally not recorded on the financial statements; however, the change in market value of these instruments is incorporated in performance. The notional/market value of $80,413,805 and $20,184,080 for the various contracts in MPERS' portfolio as of June 30, 2015 and 2014, respectively, is recorded in investments on the Statement of Fiduciary Net Position. The change in fair value of $80,401,785 and $20,184,080 for the years ended June 30, 2015 and 2014, respectively, is recorded in investment income on the Statement of Changes in Fiduciary Net Position.

Investment Derivatives as of June 30, 2015

Type	Classification	Notional/ Market Value	Cost	Unrealized Gain (Loss)
Futures Contracts	Investments, at fair value	$81,189,900	$0	$81,189,900
Swap Contracts	Investments, at fair value	(788,115)	0	(788,115)
Rights/Warrants	Investments, at fair value	12,020	12,020	$0
		$80,413,805	**$12,020**	**$80,401,785**

Investment Derivatives as of June 30, 2014

Type	Classification	Notional/ Market Value	Cost	Unrealized Gain (Loss)
Futures Contracts	Investments, at fair value	$20,184,080	$0	$20,184,080
		$20,184,080	**$0**	**$20,184,080**

Through the use of derivatives, MPERS is exposed to risk that the counterparties involved in the contracts are unable to meet the terms of their obligation. MPERS' investment managers seek to control this risk through counterparty credit evaluations and approvals, counterparty credit limits, and exposure monitoring procedures. MPERS anticipates the counterparties will be able to satisfy their obligations under the contracts. The associated counterparty's credit rating is an A-.

NOTE 4 – RECEIVABLES

Receivables at June 30 consisted of the following:

Receivables

Type	2015	2014
Contributions-MoDOT	$ 5,182,989	$ 4,796,972
Contributions-MSHP Non-Uniformed	1,122,234	1,013,551
Contributions-MSHP Uniformed	1,957,324	1,754,607
Contributions-Retirement System	130,405	140,542
Amounts Due from Members	2,796	0
Commission Recapture	692	2,796
Securities Lending	18,901	15,710
Investment Interest & Income	4,264,812	7,241,176
Investment Sales	10,567,358	97,323
	$23,247,511	**$15,062,677**

NOTE 5 – CONTRIBUTIONS

MoDOT, the Highway Patrol, and MPERS make contributions to the System, as do employees covered under the Year 2000 Plan-2011 Tier. MPERS permanent funding policy provides for actuarially determined employer contributions using the entry-age normal cost method on a closed group basis (consisting of normal cost and amortization of any unfunded accrued liabilities over a 30-year period, beginning July 1, 2006). (The objective is to reduce the period by one year each year.) A temporary accelerated policy has been adopted where the total contribution is based on entry-age normal cost plus a 15-year amortization period for unfunded retiree liabilities and a 30-year amortization period for other unfunded liabilities. Both amortization periods are closed periods starting July 1, 2010. This temporary accelerated policy was adopted by the MPERS' Board of Trustees on September 17, 2009 and will remain in effect until such time as the retiree liability becomes 100% funded or the permanent policy produces a higher contribution rate. Actuarially determined rates, expressed as percentages of annual covered payroll, provide for amounts sufficient to fund those benefits designated by state statute to be funded in advance. Actuarial assumptions used to compute contribution requirements are the same as those used to compute the pension benefit obligation. The employee contribution rate for members of the Year 2000 Plan-2011 Tier is set by statute.

Required employer contributions totaling $200,638,571 and $183,353,841 for fiscal years 2015 and 2014, respectively, represent funding of normal costs and amortization of the unfunded accrued liability. Actual contributions made were 100% of required contributions. Contribution rates as determined by the System's actuary for the years ended June 30, 2015 and 2014 are shown in the following table. The Board established actual rates to be the same as the actuarially determined rates.

Contribution Rates

2015			2014		
MoDOT, MPERS & Civilian Patrol	**Uniformed Patrol**	**2011 Tier Employee**	**MoDOT, MPERS & Civilian Patrol**	**Uniformed Patrol**	**2011 Tier Employee**
58.76%	58.19%	4.00%	54.25%	55.23%	4.00%

At the September 26, 2014 Board meeting, the Board adopted the use of a contribution stabilization reserve that would result in an MPERS employer contribution rate similar to the fiscal year 2015 rates. The reserve is intended to keep the contribution relatively level over time and may be used if the market experiences a downturn in the future. The Board further adopted (in February 2015) that the employer contribution rate would not fall below 58% unless 1) the fund became fully funded or 2) the contribution stabilization reserve reached $250 million. The balance of the reserve as of June 30, 2015 and June 30, 2014 was $140,830,104 and $77,644,000, respectively.

NOTE 6 – DEFERRED RETIREMENT OPTION PROGRAM

MPERS currently provides a BackDROP option. This is an election made at the time of actual retirement. In effect, it provides members an option to elect to receive a portion of their benefits as cash. Since the election is not made until the member actually retires, the option is not treated as a DROP provision in accordance with generally accepted accounting principles.

NOTE 7 – NET PENSION LIABILITY OF EMPLOYERS

The components of the net pension liability of the employers at June 30, 2015, were as follows:

Total pension liability	$3,715,845,651
Plan fiduciary net position	(2,009,367,134)
Employers' net pension liability	$1,706,478,517

Plan fiduciary net position as a percentage of the total pension liability	54.08%
Covered Employee Payroll	$342,264,593
Employers' net pension liability as a percentage of covered employee payroll	498.58%

The components of the net pension liability of the employers at June 30, 2014, were as follows:

Total pension liability	$3,650,241,741
Plan fiduciary net position	(1,957,456,213)
Employers' net pension liability	$1,692,785,528

Plan fiduciary net position as a percentage of the total pension liability	53.63%
Covered Employee Payroll	$336,590,797
Employers' net pension liability as a percentage of covered employee payroll	502.92%

Actuarial Assumptions

The total pension liability was determined by an actuarial valuation as of June 30, 2015 and 2014, using the following actuarial assumptions, applied to all prior periods included in the measurement:

Inflation	3.0%
Salary Increases	3.5% to 11%
Investment Rate of Return	7.75%

The mortality tables, for post-retirement mortality, used in evaluating allowances to be paid to non-disabled pensioners were the R-P 2000 Combined Healthy Mortality Tables projected 16 years and set back 1 year for males and females. Pre-retirement mortality used was 70% for males and 50% for females of the post-retirement tables set back 1 year for males and set back 1 year for females. Disabled pension mortality was based on PBGC Disabled mortality tables. The healthy mortality tables include a margin for mortality improvement. The margin is in the 16-year projection. The disabled mortality tables do not include a margin for mortality improvement.

The long-term (30 year) expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return were adopted by the plan's trustees after considering input from the plan's investment consultant(s) and actuary(s). These estimates for each major asset class included in MPERS' target asset allocation as of June 30, 2015 and 2014 (see NOTE 3) are summarized in the following table:

	Long-Term Expected Real Rate of Return	
Asset Class	**2015**	**2014**
Global Equity	4.80%	5.05%
Private Equity	6.50%	6.75%
Fixed Income	0.50%	0.59%
Real Assets	4.75%	4.75%
Real Estate	2.75%	2.75%
Hedge Funds	3.00%	3.25%

Discount Rate
A single discount rate of 7.75% was used to measure the total pension liability. This single discount rate was based on the expected rate of return on pension plan investments of 7.75%. The projection of cash flows used to determine this single discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Regarding the sensitivity of the net pension liability to changes in the single discount rate, the following presents the plan's net pension liability, calculated using a single discount rate of 7.75%, as well as what the plan's net pension liability would be if it were calculated using a single discount rate that is 1-percentage-point lower or 1-percentage-point higher:

Current Single Discount	**1% Decrease 6.75%**	**Rate Assumption 7.75%**	**1% Increase 8.75%**
2015 Net Pension Liability	$2,133,261,040	$1,706,478,517	$1,328,460,451
2014 Net Pension Liability	$2,127,509,196	$1,692,785,528	$1,330,274,056

NOTE 8 – EMPLOYER PROPORTIONATE SHARE

MPERS, as the administrative agent for the pension system, is also an employer of the pension system. The administrative expenses of the pension system are included in the deductions to the pension system's fiduciary net position. While the employer contributions of the other participating employers are funded from outside revenue sources, the employer contributions of MPERS are funded from sources already recognized as revenues, such as earnings on plan investments or contributions paid by the other participating employers.

Attempting to allocate a portion of the net pension liability to MPERS as an employer would result in an allocation of the net pension liability to the other participating employers. Accordingly, MPERS excludes its contributions from the employer proportionate share calculation for the reporting of a net pension liability, by assigning itself a proportionate share of 0%. This exclusion in essence shifts the portion of the net pension liability that would accrue to MPERS to the other participating employers.

NOTE 9 – PERSONAL SERVICES AND RETIREMENT PLAN

MPERS employed 16 full-time employees on June 30, 2015 and 17 on June 30, 2014. Seven former MPERS employees have retired. Full-time employees are also members of the System. For these employees, MPERS accrued 58.76% of payroll during FY15, amounting to $907,064, which was equal to the required contribution.

The net obligations for FY15 and the two preceding years are shown below. These amounts are recorded as both a contribution and administrative expense. Information regarding the retirement plans can be found in Notes 2 and 5.

Net Obligations

Year Ended June 30	Annual Required Contribution Percent	Annual Required Contribution Dollars	Percent Contributed	Net Obligation
2013	50.92[1]	562,535	100	$0
2014	54.25[1]	739,002	100	$0
2015	58.76[1]	907,064	100	$0

(1) The Annual Required Contribution rate is equal to the Actuarially Required Contribution rate.

NOTE 10 – OTHER POST-EMPLOYMENT BENEFITS (OPEB)

In addition to the retirement benefits described previously, MPERS provides a portion of health care insurance through the MoDOT and MSHP Medical and Life Insurance Plan (Insurance Plan) in accordance with Missouri State statutes. The Insurance Plan is considered an agent multiple-employer defined benefit plan administered by MoDOT. Medical insurance benefits are established by the Insurance Plan's Board of Trustees and are approved by the Missouri Highways and Transportation Commission. Benefits include general inpatient and outpatient medical services; mental, nervous and substance abuse care; and prescriptions. Eligible members are employees who retired from the System with a minimum of 5 years of service and who participate in the Insurance Plan. MoDOT issues a publicly available financial report that includes financial statements and required supplementary information for the Insurance Plan. Requests for this report should be addressed to MoDOT, Controller's Division, P.O. Box 270, Jefferson City, MO 65102.

Employer and member contributions are established by the Insurance Plan's Board of Trustees and are approved by the Missouri Highways and Transportation Commission. Premiums vary by coverage categories, which include retirees, certain disabled employees, spouses, certain dependents, and survivors of deceased employees and retirees. Member and employer required contribution rates average approximately 31.1% and 68.9%, respectively. The Insurance Plan is financed on a pay-as-you-go basis and is an internal service fund of MoDOT.

MoDOT's actuarial valuations for the Insurance Plan are performed biennially. The July 1, 2013 actuarial valuation was used for the FY15 and FY14 financial statements. For these periods, the annual required contribution (ARC) is equal to the annual OPEB cost. MPERS contributed $33,025 in both FY15 and FY14 (38.5% of the ARC), including implicit rate subsidies. Although funding is not related to payroll amounts, an equivalent Annual Required Contribution (ARC) rate would be 6.4% and 7.1% of annual covered payroll of $1,320,846 and $1,203,673 for FY15and FY14, respectively. MPERS' share of the net OPEB obligation was $643,809 and $599,399 at June 30, 2015 and 2014, respectively. MPERS' share of the changes in the Insurance Plan's net OPEB obligation is shown as follows:

OPEB Cost and Obligation for the Year Ended June 30,

Type	2015	2014	2013
Normal Cost	$ 31,597	$ 31,597	$ 60,443
Amortization Payment	50,392	50,392	61,594
Interest	30,663	28,637	26,188
Adjustment to ARC	(35,217)	(32,572)	(27,022)
Annual OPEB Cost	77,435	78,054	121,203
Contributions	(33,025)	(33,025)	(26,739)
Increase in Net OPEB Obligation	44,410	45,029	94,464
Net OPEB Obligation - Beginning of Year	599,399	554,370	459,906
Net OPEB Obligation - End of Year	$643,809	$599,399	$554,370
% of Annual OPEB Cost Contributed	42.6%	42.3%	22.1%

Because the Insurance Plan is an internal service fund of MoDOT, the Insurance Plan's assets have not been set aside. Because of this, there is no actuarial value of assets, so the entire actuarial accrued liability (AAL) is unfunded. Based on an actuarial report dated July 1, 2013, MPERS' portion of the AAL is $857,676, which is equal to MPERS' portion of the unfunded actuarial accrued liability (UAAL), as shown below.

Actuarial Accrued Liability

Actuarial Accrued Liability	$ 857,676
Actuarial Value of Assets	0
Unfunded Actuarial Accrued Liability (UAAL)	$857,676
Funded Ratio (Actuarial Value of Plan Assets/AAL)	0%
Covered Payroll	$1,320,846
UAAL as a Percentage of Covered Payroll	65%

Actuarial valuations of an ongoing plan reflect long-term perspective and involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. These calculations are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future. A schedule of funding progress is presented as required supplementary information following the notes to the financial statements. The schedule of funding progress represents multi-year trend information about whether the actuarial value of plan assets is increasing or decreasing relative to the AAL for benefits.

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employers and plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employers and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations. The actuarial methods and assumptions utilized in the valuation are shown on the following table.

Actuarial Methods and Assumptions

Actuarial Cost Method	Projected Unit Credit
UAAL Amortization Method	Level Dollar Amount
UAAL Amortization Period	30 Years
UAAL Amortization Approach	Open
Investment Return (Discount) Rate	4.5%
Healthcare Cost Trend Rate	8%, Decreasing To 5% in 2017
Admin Expense Trend (Inflation) Rate	4.0%

NOTE 11 – CAPITAL ASSETS

Summary of Changes in Capital Assets

	6/30/2014 Balance	Additions	Deletions/ Retirements	6/30/2015 Balance
Land	$ 84,000	$ 0	$ 0	$ 84,000
Buildings	581,619	0	0	581,619
Furniture, Equipment and Software	3,506,428	2,489	0	3,508,917
Less: Accumulated Depreciation	(1,888,086)	(364,983)	0	(2,253,069)
Total	**$2,283,961**	**($362,494)**	**$ 0**	**$1,921,467**

	6/30/2013 Balance	Additions	Deletions/ Retirements	6/30/2014 Balance
Land	$ 84,000	$ 0	$ 0	$ 84,000
Buildings	581,619	0	0	581,619
Furniture, Equipment and Software	3,479,053	27,375	0	3,506,428
Less: Accumulated Depreciation	(1,517,469)	(370,617)	0	(1,888,086)
Total	**$2,627,203**	**($343,242)**	**$ 0**	**$2,283,961**

NOTE 12 – RISK MANAGEMENT

MPERS is exposed to various risks of loss related to natural disasters, asset theft or damage, errors and omissions, torts, and employee injuries.

MPERS has purchased commercial insurance related to capital asset loss and damage. Ancillary coverage provided through the property policy includes coverage for accounts receivable, loss of money and securities, employee dishonesty, and forgery and alterations. MPERS carries a $2 million umbrella liability policy. MPERS has coverage through Missouri Highway and Transportation Commission's Self-Insurance Fund related to workers' compensation. MPERS' has also purchased an executive risk insurance package that includes directors and officers liability ($1 million aggregate coverage), employment practices liability ($1 million aggregate coverage) and fiduciary liability coverage ($5 million aggregate coverage). These coverages are inclusive of legal defense costs and each policy carries a $25,000 deductible. The State's Legal Expense Fund covers all state employees and officers, and MPERS has purchased surety bonds for the executive director and staff. Settlements have not exceeded coverages for each of the past three fiscal years.

MPERS has a disaster recovery plan that provides for continued computer operations at a remote location should the retirement office be unavailable for normal operations.

NOTE 13 – COMMITMENTS

As of June 30, 2015, MPERS has $330,297,313 unfunded commitments to purchase alternative investments.

Required Supplementary Information

SCHEDULE OF THE EMPLOYERS' NET PENSION LIABILITY

As of June 30,

	2015	2014	2013
Total Pension Liability	$ 3,715,845,651	$ 3,650,241,741	$ 3,583,975,559
Plan Fiduciary Net Position	2,009,367,134	1,957,456,213	1,685,732,710
Employers' Net Pension Liability	**$ 1,706,478,517**	**$ 1,692,785,528**	**$ 1,898,242,849**
Plan Fiduciary Net Position as a % of Total Pension Liability	54.08%	53.63%	47.04%
Covered Employee Payroll	$342,264,593	$336,590,797	$323,205,767
Employers' Net Pension Liability as a % of Employee Covered Payroll	498.58%	502.92%	587.32%

SCHEDULE OF CHANGES IN THE EMPLOYERS' NET PENSION LIABILITY

Year ended June 30,

	2015	2014	2013
Total Pension Liability			
Service Cost	$ 45,358,095	$ 44,739,603	$ 44,446,279
Interest on the Total Pension Liability	275,284,910	270,525,608	265,339,848
Difference Between Expected and Actual experience	(13,324,219)	(17,614,321)	(13,690,794)
Assumption Change	0	0	204,396,180
Benefit Payments	(236,905,323)	(227,958,108)	(220,623,394)
Refunds	(107,395)	(18,686)	(29,300)
Disability Premiums	(1,554,676)	(1,531,578)	(1,512,685)
Transfers to Other Retirement Systems	(3,147,482)	(1,876,336)	(629,246)
Net Change in Total Pension Liability	**65,603,910**	**66,266,182**	**277,696,888**
Total Pension Liability - Beginning	3,650,241,741	3,583,975,559	3,306,278,671
Total Pension Liability - Ending (a)	**$ 3,715,845,651**	**$3,650,241,741**	**$3,583,975,559**
Plan Fiduciary Net Position			
Contributions - Employer	$ 200,638,571	$ 183,353,841	$ 170,836,117
Contributions - Employee	3,294,162	2,260,563	1,139,450
Pension Plan Net Investment Income	92,645,571	319,445,780	198,141,088
Benefit Payments	(236,905,323)	(227,958,108)	(220,619,035)
Refunds	(107,395)	(18,686)	(29,300)
Disabilty Premiums	(1,554,676)	(1,531,578)	(1,512,685)
Pension Plan Administrative Expense	(4,066,944)	(3,736,355)	(2,997,225)
Net Transfers	(2,033,045)	(91,954)	(629,246)
Net Change in Plan Fiduciary Net Position	**51,910,921**	**271,723,503**	**144,329,164**
Plan Fiduciary Net Position - Beginning	**1,957,456,213**	**1,685,732,710**	**1,541,403,546**
Plan Fiduciary Net Position - Ending (b)	**$ 2,009,367,134**	**$1,957,456,213**	**$1,685,732,710**
Employers' Net Pension Liability - Ending (a) - (b)	**$ 1,706,478,517**	**$1,692,785,528**	**$1,898,242,849**

Note: These schedules are intended to present information for 10 years, but may be built prospectively. Additional years will be displayed as they become available.

Required Supplementary Information

SCHEDULE OF EMPLOYERS CONTRIBUTIONS

Last 10 Fiscal Years

	Actuarially Determined Contributions	Actual Contributions	Contribution Deficiency (Excess)	Covered Employee Payroll	Contributions as a Percentage of Employee Covered Payroll
2006	$111,271,679	$111,271,679	$0	$343,113,410	32.43
2007	121,243,361	121,243,361	0	372,140,457	32.58
2008	123,323,265	123,323,265	0	375,527,604	32.84
2009	122,613,975	122,613,975	0	379,140,306	32.34
2010	124,052,534	124,052,534	0	376,258,823	32.97
2011	149,952,750	149,952,750	0	363,345,651	41.27
2012	164,884,467	164,884,467	0	344,514,139	47.86
2013	170,836,117	170,836,117	0	329,863,134	51.79
2014	183,353,841	183,353,841	0	336,799,855	54.44
2015	200,638,571	200,638,571	0	342,211,446	58.63

SCHEDULE OF INVESTMENT RETURNS

Last 10 Fiscal Years

Fiscal Year Ended June 30	Annual Money-Weighted Rate of Return
2006	14.95%
2007	18.09%
2008	-2.41%
2009	-24.70%
2010	12.92%
2011	21.75%
2012	2.74%
2013	13.38%
2014	17.58%
2015	6.62%

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at the dates indicated. Additional information as of the latest actuarial valuation follows:

Valuation Date	June 30, 2015
Actuarial Cost Method	Entry Age
Amortized Method	Level Percentage of Payroll, Closed
Remaining Amortization Period	16 Years (single equivalent period)
Asset Valuation Method	3-Year Smoothed Market: 20% Corridor
Inflation	3.0% (price inflation)
Actuarial Assumptions:	
Investment Rate of Return	7.75%
Projected Salary Increase	3.5% to 11% (including 3.5% wage inflation)
Cost-of-Living Adjustments	2.4% Compound

Other Post-Employment Benefit (OPEB) Plan Schedule of Funding Progress for MoDOT and MSHP Medical and Life Insurance Plan

Year Ended June 30	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)
2008	$0	$1,178,303	$1,178,303	0%
2010[1]	0	1,036,681	1,036,681	0%
2012	0	1,048,333	1,048,333	0%
2014	0	857,676	857,676	0%

(1) New assumptions adopted

Actuarial valuations are performed biennially. The July 1, 2013 actuarial valuation was used for FY15 and FY14 financial statements, the July 1, 2011 actuarial valuation was used for FY12 and FY13 financial statements, the July 1, 2009 actuarial valuation was used for FY10 and FY11 financial statements, and the July 1, 2007 actuarial valuation was used for FY08 and FY09 financial statements. This reporting requirement is being implemented prospectively, as prior years' data is not available.

Because this plan is an internal service fund of MoDOT, assets have not been set aside. Therefore, there is no actuarial value of assets. This results in a calculated funded ratio of zero percent.

Notes to the OPEB Schedule of Funding Progress

The information presented in the required supplementary schedule was determined as part of the actuarial valuation at the date indicated. Additional information as of the latest actuarial valuation follows:

Valuation Date	July 1, 2013
Actuarial Cost Method	Projected Unit Credit
UAAL Amortization Method	Level Dollar Amount
UAAL Amortization Period	30 Years
UAAL Amortization Approach	Open
Investment Return (discount) Rate	4.5%
Healthcare Cost Trend Rate	8.0%, Decreasing to 5% after 2017
Admin Expense Trend (Inflation) Rate	4.0%

Supplementary Information

Schedules Of Administrative Expenses

For the Years Ended June 30, 2015 and 2014

	2015	2014
Personal Services:		
Salary Expense	$1,553,492	$1,208,775
Employee Benefit Expense	1,242,311	1,281,751
Total Personal Services	**$2,795,803**	**$2,490,526**
Professional Services:		
Actuarial Services	$ 104,286	$ 122,310
Audit Expense	61,855	34,500
Disability Program	8,256	11,648
Consultant Fees	65,693	76,626
IT Hosting and Support	298,953	212,764
Fiduciary Insurance	71,402	65,305
Other	4,252	13,588
Total Professional Services	**$ 614,697**	**$ 536,741**
Miscellaneous:		
Depreciation	$ 365,108	$ 370,617
Meetings/Travel/Education	99,847	117,751
Equipment/Supplies	51,068	79,091
Printing/Postage	39,882	64,334
Bank Service Charge	8,661	8,666
Building Expenses	35,025	39,977
Other	56,853	28,652
Total Miscellaneous	**$ 656,444**	**$ 709,088**
Total Administrative Expenses	**$4,066,944**	**$3,736,355**

Supplementary Information

Schedules Of Investment Expenses

For the Years Ended June 30, 2015 and 2014

	2015	2014
Investment Income Expenses:		
Management and Performance Fees		
Aberdeen Asset Management	$ 18,858	$ 11,662
ABRY Partners	984,251	306,214
Acadian Asset Management	535,561	617,808
Achievement Fund (formerly Peak 6)	284,767	467,797
AEW	241,330	286,333
Albourne	480,000	360,000
American Infrastructure MLP	394,012	226,672
Alyeska	303,385	0
Anchorage Capital	749,609	893,425
Apollo Real Estate	323,958	175,849
AQR Capital Management	386,446	340,179
Audax Group	19,509	35,487
Barclays Global Investors	48,730	184,450
Bernzott	245,051	166,582
Blue Trend	22,281	182,057
Brevan Howard	162,364	303,212
Bridgewater Associates	1,093,020	993,310
Capital Partners	194,634	178,105
CBRE	109,752	1,268,455
Cevian	306,461	952,542
Clifton	63,297	96,250
CarVal Investors (CVI)	(509,613)	201,632
Deephaven Capital Management	161	1,192
EIF Management	132,768	130,736
Energy & Mineral Group Midstream Resource	780,231	219,401
Enhanced Investment Technologies (INTECH)	444,946	458,918
GMO	351,989	256,033
Golub	148,341	193,455
Grove Street Advisors	1,375,000	1,500,000
Gryphon	322,850	164,260
GSO	484,580	676,890
Indus	774,448	0
ING Clarion	468,707	439,817
Kennedy	190,410	0
Koppenberg	43,247	0
KPS	73,833	8,476
Luxor	410,542	(54,478)
M&G	81,901	6,366
Metacapital	451,200	249,808
Millenium	705,347	0
Natural Gas Partners	589,653	389,032
Ned Davis	30,000	35,000
Northern Shipping	435,359	0
Och-Ziff Real Estate	813,947	722,212
OCP	288,301	197,424
Orion	252,835	0
Ospraie	68,231	(455,493)
PFM	(79,202)	339,366
Pinnacle Associates	300,228	160,825
Principal Global Investors	1,158,452	1,135,169
Ridgewood	328,350	300,000
RMK Timberland	76,058	119,973
Rothschild Asset Management	0	96,021
Schroders	0	5,528
Sciens	130,000	0
Shore	120,000	0
Silchester International Investors	731,662	689,854
Stark Investments (Shepard)	13,359	21,760
Stellium	64,244	545,002
Structured Portfolio Management (SPM)	0	28,316
Taconic	167,525	604,129
Tessera	257,571	142,186
Torchlight	568,847	0
Tortoise	399,925	444,850
Tristan	145,675	0
Turnbridge	74,722	0
Urdang	17,100	33,538
ValueAct	745,772	881,105
Vectis	264,106	168,750
Western Asset Management Company	0	41,578
Total Management and Performance Fees	**21,660,884**	**19,145,020**
Investment Custodial Fee	59,097	78,703
Performance Management	140,667	113,821
General Consultant (monitoring) Fee	318,552	312,000
Other Investment Expenses	617,945	480,718
Total Investment Income Expenses	**$ 22,797,145**	**$ 20,130,262**
Securities Lending Expenses:		
Borrower Rebates (Refunds)	$ (87,411)	$ (98,833)
Bank Fees	88,414	92,229
Total Securities Lending Expenses (Income)	**$ 1,003**	**$ (6,604)**

Schedules Of Consultant And Professional Expenses

For the Years Ended June 30, 2015 and 2014

	2015	2014
Actuarial Services	$ 104,286	$ 122,310
Audit Services	61,855	34,500
Disability Administrative Services	8,256	11,648
Legislative Consultant	30,000	30,035
Customer Service and Benefit Delivery	0	10,000
Insurance Consultant	6,000	6,000
Other Consultant Fees	29,693	30,591
Fiduciary Insurance	71,402	65,305
IT Hosting and Support	298,953	212,764
Other	4,252	13,588
Total Consultant and Professional Expenses	**$614,697**	**$536,741**

Notes

Funding the System

The primary objective of MPERS is to provide active and retired employees with adequate retirement benefits. The investment portfolio is constructed to generate a total return that, when added to employer contributions, is sufficient to meet benefit obligations. Following prudent standards for preservation of capital, the goal is to achieve the highest possible rate of return consistent with the Plan's tolerance for risk as determined by the Board of Trustees in its role as fiduciary.

Pension plans invest assets with a long-term perspective because pension costs are spread over the working careers of plan participants. While market uncertainty brings additional risk to the investment portfolio, it's important to keep in mind that pension plans are in the business of managing risk, not simply avoiding risk. The asset allocation approved by the Board of Trustees is designed to protect the fund against the uncertainty that remains in the global economy, and should perform well across various market environments, not just when the stock market rallies.

The Board of Trustees periodically completes a review of the current asset allocation to ensure the strategies being utilized are appropriate relative to the System's return objectives and tolerance for risk. With the help of outside consultants, each and every facet of the asset allocation process is reviewed.

Guiding Investment Principles

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

Our Investment Beliefs

1. Diversification is critical because the future is unknown.
2. Prudent asset management must first focus on understanding and balancing risk.
3. Flexibility in investment policy implementation is critical, because various asset classes will be in or out of favor at different points in the economic cycle.

Important Investment Events

September 1, 1955	Retirement System created through the passage of Senate Bill 66. System's assets invested conservatively through United Missouri Bank (UMB).
October 1, 1997	The Board hired Rothchild Asset Management. This represented the first time MPERS employed an investment manager other than UMB. Started to diversify investment managers by hiring 7 managers over the next 4 years in addition to UMB.
February 1, 2003	Hired Northern Trust as custodial bank.
December 1, 2003	Hired the first Chief Investment Officer (CIO) of the retirement system.
2005 - 2006	Portfolio restructured to diversify and take advantage of opportunities in alternative asset classes such as real estate, private equity, and hedge funds.
September 27, 2007	Hired the first Senior Investment Officer to assist CIO with investment portfolio.
September 2009	Board adopted a 15-year accelerated funding schedule for the retiree liability.
June 30, 2010	Board adopted further revisions to asset allocation to reduce risk in investment portfolio.
September 2011	Completed transition to revised asset allocation targets.
September 25, 2014	Board established the Rate Stabilization Reserve Fund to further reinforce funding, and protect against higher contribution rates in the future.

MPERS
Serving those who keep us safe.

MoDOT & Patrol Employees' Retirement System

Scott L. Simon
Executive Director

Pam Henry
Asst. Executive Director

October 5, 2015

To the Members of the MoDOT & Patrol Employees' Retirement System:

It is my pleasure to provide you with the investment section of this year's Comprehensive Annual Financial Report (CAFR). This section is a supplement to the comprehensive report and provides an overview of developments and performance within the investment portfolio.

Fiscal year 2015 marks the 60th anniversary of MPERS, and I am proud to be a part of the celebration. The system has plenty to celebrate, including the development and performance of the investment portfolio. Sixty years is a long time regardless of how you look at it, and you could easily point to any number of events as critical turning points that led us to where we are today. For the investment portfolio, it was the restructuring efforts that started roughly a dozen years ago that helped drive this year's strong performance.

The restructuring efforts were designed to help the portfolio produce consistent returns across a wide range of economic scenarios – not just when the stock market is rising. Looking back, fiscal year 2015 was an excellent test for the new portfolio, and I am pleased to report it passed with flying colors. In a year when the broad equity markets posted relatively flat returns of 0.71% and the average public fund generated a 2.82% return, MPERS' portfolio generated a 6.62% return and ranked among the best performing public funds in the country (based on fair values and time weighted rates of return). The performance pushed our investment balance to an all-time high, ending the fiscal year above the $2 billion mark for the first time.

The performance was truly a group effort, as every major asset class delivered positive returns for the year. The private equity portfolio continues to mature nicely, and led the way with a 14.43% return for the year followed by the real estate portfolio with a 12.48% return. The fixed income, hedge fund, real assets and global equity portfolios generated returns of 6.08%, 5.20%, 3.71%, and 2.19%, respectively. Longer-term, MPERS' performance now ranks in the top 6% of our peer universe across all time periods out to ten years. Perhaps even more impressive is the fact that MPERS' has generated those results while taking less risk than our peers, as our 10-year risk profile ranks in the bottom third of the peer universe (as measured by standard deviation of returns).

What are we doing to stand out from the crowd? I would highlight three primary points:

1) MPERS' governance policy. MPERS' Board of Trustees has set aside any personal goals or initiatives and established a governance policy that encourages innovation. MPERS' staff and consultants are allowed to think "outside the box" and move quickly when managing the portfolio. Having a "first mover advantage" is essential in times of volatile markets and was very critical as we managed through the various market movements in fiscal year 2015.
2) MPERS' asset allocation. Several years ago, the Board of Trustees recognized the risk of relying on the traditional stock and bond markets to drive portfolio returns, and approved a new asset allocation that utilizes a broader set of investment strategies. With roughly half of the portfolio invested in various alternative asset classes today (outside of traditional stocks and bonds), the portfolio has other sources of return to carry the load when equity markets struggle. That was

Office Location: 1913 William St., Jefferson City, MO 65109 • **Mailing Address:** Post Office Box 1930, Jefferson City, MO 65102-1930
Telephone Number: (573) 298-6080 • **Toll Free:** 1-800-270-1271 • **Fax:** (573) 522-6111
Website: www.mpers.org • **E-Mail:** mpers@mpers.org

especially evident in fiscal year 2015, where the traditional portfolio (stocks and bonds) generated a 2.8% return, while the alternative portfolio generated a strong 10.7% return.

3) <u>The Board's willingness to commit resources to the investment function.</u> As recent as 2003, MPERS did not have a single dedicated investment staff and candidly, our performance was struggling. Fortunately, the Board recognized the need to adequately resource the investment function and we now have four dedicated investment professionals working with some of the top consulting firms in the world. We have been fortunate to have zero turnover of our internal staff, and each and every staff member holds either a Chartered Alternative Investment Analyst (CAIA) or Chartered Financial Analyst (CFA) designation. Collectively, it is a very cohesive group that individually challenges each other to generate new ideas and find more effective techniques to manage the investment portfolio.

MPERS' performance in fiscal year 2015 was excellent from a relative return perspective, but we are also mindful that it fell short of our actuarial target of 7.75%. Fortunately, our three year return (the most important for determining contribution rates) stands well above that target at 12.45%. Rather than taking those gains and allowing contribution rates to drop, the Board of Trustees opted to keep contribution rates constant and establish a stabilization fund to offset years when experience falls short of our goals. I commend the Board for making this decision, as it demonstrates a true alignment of interest with our members.

As we look ahead to fiscal year 2016, the establishment of the stabilization fund looks very wise as the events that led to muted returns in the traditional stock and bond markets continue to be a headwind for performance. Equity valuations remain near the high end of historical ranges, cash rates are still at zero, and longer term government bonds are yielding between two and three percent. The markets have provided healthy returns since recovering from the financial crisis, but it remains to be seen if the global economy is strong enough to grow without another round of government support and stimulus. All of this reinforces the need to temper return expectations going forward, and maintain the innovative and forward-looking approach that served us so well over the past few years. Continuing to build on the key elements of MPERS' recent success, along with the continued support from our Board of Trustees, will be critical in managing through the period of low returns that potentially lies ahead.

Thank you for the opportunity to serve as your Chief Investment Officer, and I hope you enjoy this year's annual report.

Sincerely,

Larry Krummen, CFA

NEPC, LLC

Kevin M. Leonard
Partner

October 2015

The Board of Trustees
MoDOT & Patrol Employees' Retirement System
PO Box 1930
Jefferson City, MO 65102

Dear Board Members:

In our role as the general investment consultant, we assist the Board in several manners: determining and executing the overall asset allocation strategy of the Plan; advising on the investment policy of the Plan; facilitating investment manager searches (both traditional and alternative asset classes); conducting custodial service searches; providing ongoing performance evaluation for each individual investment manager and the overall investment portfolio; as well as providing pertinent education to the Board.

MPERS' objective is to provide service, disability, death and vested retirement benefits to members and their beneficiaries. To ensure a solid foundation for the future of the System, MPERS has developed an investment program designed to achieve the actuarially assumed rate of return over the long term, while prudently managing the risk of the portfolio. The pension fund is required to satisfy the need to pay accumulated/earned retirement benefits today, while at the same time be prepared for "uncertain" future benefits. This balancing of short-term versus long-term needs is a key tenant in the overall construction of the portfolio. To facilitate this balance, the Board has adopted a diversified asset allocation structure. Our goal is to diversify the System's assets within the traditional and non-traditional asset classes to reduce volatility, achieve above market returns, and to better protect the portfolio against difficult market conditions.

MPERS Fiscal Year 2015 Performance and Key Initiatives

For the fiscal-year-ending June 30, 2015, the MPERS Total Fund returned 6.6% on a net-of-fees basis. For the fiscal-year-ending June 30, 2015, relative to the peer group comparison (InvestorForce Public Fund Universe), MPERS ranked as the best performing Public Fund with its 6.6% return. Total fund performance for the fiscal year was driven by strong absolute returns of the Plan's Real Estate, Private Equity and Opportunistic Debt portfolios. On a relative basis, the Global Equity and Core Fixed Income managers outperformed their respective benchmarks.

During Fiscal Year 2015, key initiatives accomplished include:

- Conducted a comprehensive review of the Plan's asset allocation in concert with NEPC's 2015 Client Actions and Asset Class Assumptions.
  - As part of the review, NEPC and Staff evaluated the Plan's existing asset allocation and discussed any potential changes to its current structure.
    - Based on the review and discussions, NEPC and Staff recommended that no changes be made to the current investment target allocation as the existing asset allocation remains suitable.

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- Continued the expansion of MPERS' alternative investment program, which resulted in strong absolute returns for the fiscal year and a further diversification of MPERS' portfolio
  - A private market pacing plan was updated for the opportunistic debt, private equity, real assets, and real estate portfolios. Each pacing plan provided a recommended commitment amount for upcoming vintage years and allocations to specific strategy types.
  - New strategies/managers were hired within the opportunistic debt, private equity, real assets, and real estate portfolios

- Staff and NEPC, in concert with the Plan's actuary, conducted an Asset-Liability study in an effort to review asset and liability projections for the Plan. Additionally, a Liquidity study was conducted to evaluate the Plan's liquidity in different economic environments.
  - The results of the Asset-Liability study projected the Plan's funded status to increase significantly over the next decade however, the Plan's long term assumed rate of return of 7.75% is not projected to be met over the next 5-7 years due to lower expected returns across several asset classes. However, the current allocation is expected to meet the Plan's long-term target based on NEPC's longer-term assumptions.
  - The results of the Liquidity study reaffirmed that the Plan's liquidity remains healthy enough to support the current allocation to alternative investments but certain economic environments may change the liquidity profile of the Plan meaningfully.

As the asset allocation strategy evolves year after year, diversification and risk mitigation will continue to be the pillars of MPERS' asset allocation structure.

NEPC, LLC appreciates the opportunity to serve as your consultant. It is a pleasure to work with MPERS and we look forward to continuing our relationship for the benefit of the Board, Staff, and most importantly, the members of the System.

Sincerely,

Kevin M. Leonard
Partner

Investment Activity Overview

Summary of Investment Policy

The primary objective of the Missouri Department of Transportation and Highway Patrol Employees' Retirement System (MPERS) is to provide active and retired employees with the retirement benefits provided under Missouri law. The investment portfolio is constructed to generate a total return that, when added to employer contributions, is sufficient to meet these benefit obligations. Following prudent standards for preservation of capital, the goal is to achieve the highest possible rate of return consistent with the plan's tolerance for risk as determined by the Board of Trustees in its role as fiduciary.

Investment management is delegated to MPERS' staff and external asset managers. The managers operate within the guidelines, objectives and constraints set forth in their respective investment management agreement.

Fair Value of Investments

As of June 30, 2015, MPERS' investment portfolio had a total fair value of $2 billion, representing an increase of $86 million from fiscal year-end 2014. Over the course of the year, an additional $41 million was transferred out of the fund to meet benefit payments and other obligations. When viewed together, the net increase to the portfolio from investment activity equated to $127 million.

Investment Performance

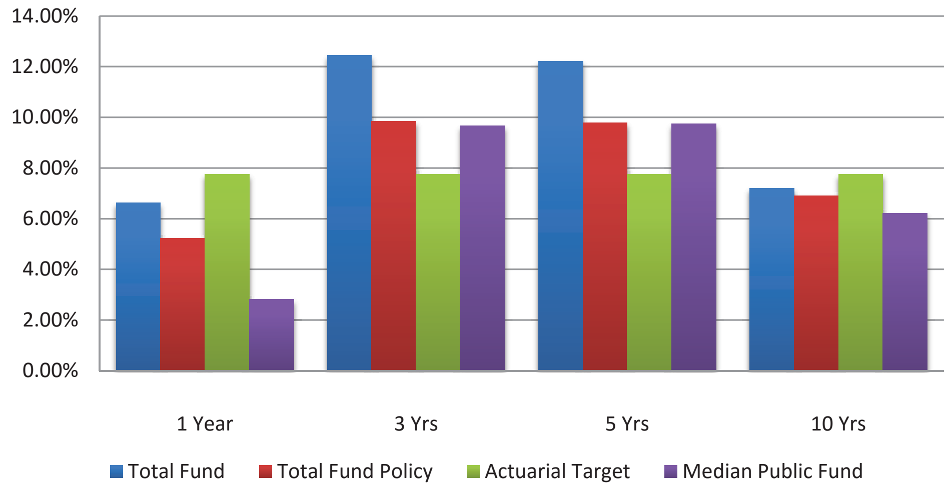
Fiscal year 2015 was another excellent year for MPERS' investment portfolio from a relative return perspective. The fund generated a 6.62% return for the year, net of all management fees and based on time-weighted rates of return and market valuations. Despite falling short of the 7.75% actuarial return target, MPERS' one year return was among the best performing public funds in the peer universe. Every major asset class delivered positive returns for the year, led by the private equity portfolio with a 14.43% return and the real estate portfolio with a 12.48% return. The fixed income, hedge fund, real assets, and global equity portfolios generated returns of 6.08%, 5.20%, 3.71%, and 2.19%, respectively. Additional information on the performance across the major asset classes (and their respective benchmarks) is listed in the following chart.

Investment Performance (Including Benchmarks)	**1-Year**	**3-Year**	**5-Year**	**10-Year**
Total Fund	**6.62%**	**12.45%**	**12.21%**	**7.20%**
Policy Benchmark	5.22	9.85	9.78	6.91
Global Equity	**2.19**	**15.68**	**14.17**	**7.57**
MSCI ACWI	0.71	13.01	11.93	6.41
Private Equity	**14.43**	**16.61**	**14.91**	**n/a**
S&P 500 + 300 bps	16.09	19.56	17.86	n/a
Fixed Income	**6.08**	**6.71**	**7.58**	**6.06**
Barclays US Universal	1.61	2.33	3.81	4.68
Real Estate	**12.48**	**15.97**	**15.84**	**6.34**
NFI-ODCE	13.65	11.93	13.28	5.63
Real Assets	**3.71**	**n/a**	**n/a**	**n/a**
CPI + 400 bps	4.11	n/a	n/a	n/a
Hedge Funds	**5.20**	**7.67**	**6.66**	**n/a**
HFRI Fund of Funds	3.95	6.27	4.10	n/a

When evaluating performance, the Board of Trustees looks at three primary performance objectives: a) to meet or exceed the actuarial assumed rate of return of 7.75%, b) to outperform a policy benchmark that represents the return that could be achieved by investing passively in the broad markets in the same percentages to MPERS' target asset allocation, and c) to rank at or above the median public fund investment return.

Historical returns versus the three primary performance goals are listed graphically in the following chart.

Investment Activity Overview



While MPERS' one year return fell slightly short of the actuarial target, MPERS' three and five year performance remains safely above the actuarial target. The ten year results have also improved, but remain slightly below the 7.75% target. The fund continues to perform well relative to policy benchmarks across all measurement periods. Performance relative to our public fund peer universe remains very strong as well. As of June 30, 2015, the portfolio ranked in the top 6% of the public fund peer universe for the one, three, five, and ten year periods.

Asset Allocation Overview

There were no revisions to MPERS' asset allocation targets in fiscal year 2015.

As of June 30, 2015, all of the sub-asset class allocations were within the acceptable ranges established by MPERS' investment policy. Any deviance relative to the target allocation represents a conscious decision based on our views of the market. The chart below lists the target and actual asset allocation as of June 30, 2015, followed by commentary on each of the underlying asset classes.

Asset Class	Ending FY14 Allocation	FY15 Target Allocation	Ending FY15 Allocation
Global Equity	**31.42%**	**30%**	**29.66%**
Private Equity	**18.34%**	**15%**	**18.74%**
Fixed Income	**22.05%**	**25%**	**22.35%**
Real Assets	**4.94%**	**5%**	**5.06%**
Real Estate	**12.27%**	**10%**	**11.30%**
Hedge Funds	**10.58%**	**15%**	**12.14%**
Cash	**0.40%**	**0%**	**0.75%**

Global Equity:

MPERS began the year with a 31.42% allocation to global equities, representing a modest overweight versus the targeted allocation of 30%. We maintained the overweight throughout most of fiscal year 2015, but made a number of re-balancing moves throughout the year to reflect the changing market conditions across geographic regions and strategies. One area of concern was our allocation to master limited partnerships (MLPs), which started the year at $70 million, or 3.6% of assets. MLPs traded lower throughout most of the year following the selloff in the broader commodity markets. As volatility increased in the sector, we liquidated a portion of the portfolio and ultimately reduced the allocation to $38 million invested or 1.9% of assets by the end of the year. We also reduced our exposure to emerging market equities back to a neutral position relative to the benchmark, as slowing growth in China and the falling commodity markets put additional pressure on those markets as well. The reduction to MLPs and emerging market equities was offset by higher allocations to U.S. and developed international markets. As the fiscal year came to an end, the combination of falling global growth and the Federal Reserve's talk of rising interest rates led to another rebalancing of the equity portfolio, and moved to a neutral weighting relative to policy benchmarks, ending the year with a 29.66% allocation to equities.

Despite continued low interest rates and the massive amount of liquidity in the market, equities struggled to generate any momentum throughout the year with the broad equity indices generating a 0.71% return. MPERS' portfolio performed well on a relative basis, generating a 2.19% return and outperforming the equity benchmark by 1.48%. That performance looks even better after factoring in the performance of MPERS' allocation to master limited partnerships (MLPs), which fell 14.4% during the year. The underperformance in MLPs was more than offset by the strong performance of MPERS' domestic and international equity portfolio, both of which outperformed by their respective benchmarks by wide margins.

Fixed Income:

We began fiscal year 2015 with a 22.05% allocation to fixed income relative to the 25% target, maintaining the view that income-oriented strategies in the real estate sector were more attractive than traditional fixed income. While we ended the year with a 22.35% allocation, essentially unchanged from the start of the year, we made a number of significant allocation shifts within the fixed income market. Our internal fixed income portfolio can be broken down in three primary sectors: a) inflation protection securities or bonds that do relatively better in rising rate environments, b) long duration securities that perform well when rates fall and provide diversification in cycles of falling economic growth, and c) core fixed income holdings that generating a steady portfolio yield. After a thorough analysis of our entire internal portfolio, we identified a number of holdings that had either dropped in yield or shortened to a duration that no longer served a valuable role in the portfolio. Throughout the year, we sold a number of the "in-between" securities and offset the trades by increasing exposure to the long duration portfolio, especially after the spike in rates sent yields in longer-term government debt above 4%.

The fixed income portfolio performed very well relative the benchmark throughout the year, generating a 6.08% return versus the index return of 1.61% (representing excess return of 4.47%). MPERS' internal fixed income portfolios continue to perform well across all measurement periods, but the majority of the outperformance came from MPERS' opportunistic debt portfolio which generated a 12.88% return for the year. The opportunistic debt sector remains attractive from a relative value perspective, and fiscal year 2015 was another active vintage year for new commitments in that space. The changing regulatory environment continues to put pressure on the balance sheets of traditional lenders, which limits their ability to create new loans. This has led to an opportunity for institutional investors to step in and "fill the void" left by traditional lenders. Throughout the fiscal year, we made a number of new commitments along this theme, with the expectation of increasing our targeted allocation to opportunistic debt to 7.5% of total assets.

Hedge Funds:

MPERS' remained considerably underweight the targeted hedge fund allocation of 15% throughout the year, starting the year with a 10.58% allocation and ending with a 12.14% allocation. We continue to favor opportunities in the real estate, real assets, and private equity portfolios relative to the hedge fund sector.

We made a couple of minor changes to the manager lineup throughout the year, adding an additional equity market neutral strategy, a new commodity strategy, a new global multi-strategy strategy, and an Asia Pacific equity strategy. The hires were offset by liquidating investments from underperforming managers. Overall the portfolio generated a return of 5.20% during the year, which outperformed the benchmark return of 3.95% (representing 1.25% of excess return).

Real Assets:

The real assets portfolio generated a return of 3.71% versus a policy benchmark of 4.94% (representing 0.40% of underperformance). The underperformance was driven by MPERS' energy focused funds which make up roughly 50% of the real assets portfolio. We were very pleased with how the portfolio held together in a year when oil and gas markets saw prices plunge roughly 40% on the year.

Despite the difficult performance in the energy sector, the allocation to real assets increased from 4.59% to 5.06% throughout fiscal year 2015, versus a policy target of 5%. It was an active year for new commitments in the sector, as we added several new relationships to complement the exposure in the energy sector. New commitments include an investment in a mine financing fund, aircraft leasing fund, a seaborne shipping fund and a follow on fund to an existing energy exploration fund. Two of MPERS' best performing energy funds were also back in the market with their new funds, and we committed additional capital to their offerings as well. The new investments were offset by a reduction to the timber portfolio, which ended the year with an allocation of $7.5 million or 0.4% of assets. We continue to liquidate the majority of the timber portfolio, primarily by harvesting our remaining timber tracts (deeds) in Texas and Arkansas. Overall, we continue to see a lot of opportunities in the real assets sector, and expect the allocation will drift towards 7-7.5% of assets as the new strategies and investments are implemented.

Real Estate:

MPERS' real estate portfolio has a target allocation of 10% of assets, and includes a mix of public and private equity strategies, along with tactical exposures to public and private debt strategies. We continue to find excellent relative value opportunities in real estate debt strategies, as traditional lenders (primarily banks) have exited the sector following the financial crisis. The portfolio generated a 12.48% return in fiscal year 2015, which underperformed the benchmark return of 13.65% (representing 1.17% of underperformance). New commitments for the year include a follow-on commitments to three of MPERS' best performing private equity real estate managers. We continue to overweight real estate strategies on the view that core real estate will outperform traditional fixed income markets, and ended fiscal year 2015 with an 11.30% allocation.

MPERS' now has over a ten year track record within the real estate sector, and while performance has been strong on both an absolute and relative basis, we have seen mixed results with closed-end, blind pool investments in the value added and opportunistic real estate sectors. The typical "private equity" model of committing capital across each vintage year has simply not worked well over the trailing 10 year period. MPERS successful performance is primarily attributed to well-timed moves and the tactical positioning of the portfolio throughout the financial crisis (the decision to pull from private equity core real estate and allocate to public Real Estate Investment Trusts (REITs) and Commercial Mortgage Backed Securities (CMBS) have served MPERS particularly well). Going forward, we are focused on building deeper relationships with the managers and strategies that have performed the best over the past 10 years. Staff is focused on strategies that offer excellent transparency into the underlying investments, and preferably strategies that charge fees only on invested capital.

Private Equity:

MPERS' private equity allocation slightly increased from 18.34% of assets to 18.74% of assets during the course of fiscal year 2015, versus the target of 15%. The portfolio generated a 14.43% return for the year, trailing the "public equity plus" benchmark (S&P 500 + 3%) which generated a 16.09% return (1.66% of underperformance). This benchmark has been difficult to outperform in recent years given the strength of public equity markets and the relative immaturity of MPERS' private equity portfolio. The portfolio continues to mature and work its way through the J-curve, and we remain optimistic that relative performance will improve in the coming years. On an absolute return basis, the private equity portfolio was the best performing asset class in fiscal year 2015, as well as the trailing 3-year period.

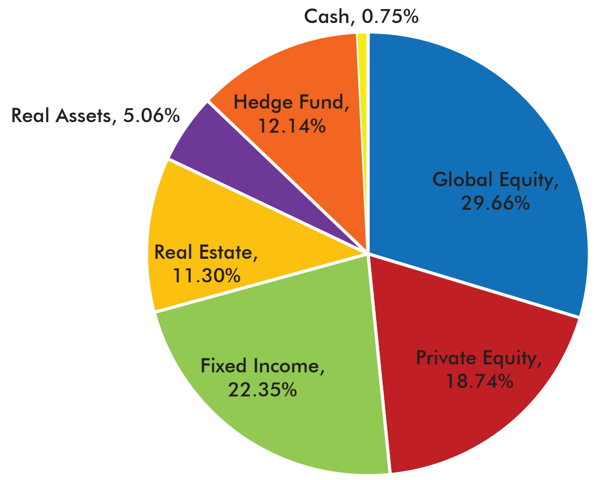
MPERS' continues to add resources and increase our knowledge of private equity and the underlying fund universe. MPERS now has a dedicated manager of private equity and hedge funds to focus on sourcing direct manager relationships versus allocating through a fund-of-funds platform. With the assistance of external consultants, we believe MPERS can successfully administer the private equity portfolio without the extra layer of fees associated with a fund-of-funds. Similar to the real assets program, we are focused on building deeper relationships with the managers and strategies that have performed well for us, strategies that offer excellent transparency into the underlying investments, and preferably strategies with attractive fee structures to mitigate the J-curve impact. Over the course of the year, we made allocations to two small/midcap buyout funds, a healthcare buyout strategy, and a Chinese debt strategy.

Looking Forward

After several strong years of returns following the financial crisis, the traditional stock and bond markets were only able to generated muted returns in fiscal year 2015. In this environment, MPERS' efforts to restructure and diversify the portfolio proved to be a very good decision. In a year when the broad equity markets posted relatively flat returns of 0.71% and the average public fund generated a 2.6% return, MPERS' portfolio generated a 6.62% return and ranked among the best performing public funds in the country. We also reached a new milestone in our fund balance, ending the fiscal year above the $2 billion mark for the first time.

As we look forward, equity and credit valuations remain at the high end of their historical ranges, and fiscal year 2016 will likely see the Federal Reserve raise cash rates for the first time since 2004. It remains to be seen if the economy is strong enough to grow without another round of quantitative easing or government stimulus. All of this reinforces the need to be realistic about return prospects going forward, and maintain the forward-looking approach that has served us well over the past few years. The need to think "outside the box" and look for unique opportunities with attractive entry points will be even more important in managing the period of low returns that potentially lies ahead.

Investment Summary



Amounts Reported by Management-Type Allocation

	06/30/2014				06/30/2015		
	Book Value	Fair Value	Acquisitions	Dispositions	Book Value	Fair Value	% of Fair Value
Global Equity	432,764,207	609,018,735	180,138,346	(146,386,107)	466,516,446	594,235,478	29.66%
Private Equity	306,482,066	355,403,063	73,521,100	(49,863,154)	330,140,012	375,442,842	18.74%
Fixed Income	384,875,937	427,312,960	171,282,242	(145,246,188)	410,911,991	447,873,258	22.35%
Real Estate	211,255,653	237,873,877	68,253,110	(75,519,271)	203,989,492	226,447,261	11.30%
Real Assets	72,339,959	95,835,897	38,378,681	(18,962,557)	91,756,083	101,447,940	5.06%
Hedge Funds	159,433,963	205,042,431	43,897,768	(13,119,453)	190,212,278	243,219,419	12.14%
Cash	7,749,332	7,749,416	400,343,622	(392,990,049)	15,102,905	15,103,031	0.75%
Total Investments	1,574,901,117	1,938,236,379	975,814,869	(842,086,779)	1,708,629,207	2,003,769,229	100.00%

Reconciliation to Statement of Plan Net Assets:

Less Accrued Investment Interest and Income	(4,264,812)
Less Investment Sales Receivable	(10,567,358)
Plus Investment Purchases Payable	2,292,650
Currency Adjustment	166,689
	$1,991,396,398

Largest Investment Holdings

Largest Equity Securities

(Non-Commingled Funds)

Security	Fair Value	% of Total
APPLE INC COM STK	2,847,148	0.142
REGENERON PHARMACEUTICALS INC COM	2,142,546	0.107
QORVO INC COM	1,914,038	0.096
ROYAL CARIBBEAN CRUISES COM STK	1,888,560	0.094
LAM RESH CORP COM	1,854,780	0.093
TOTAL SYS SVCS INC COM	1,658,269	0.083
MASIMO CORP COM STK	1,580,592	0.079
SYNOPSYS INC COM	1,514,435	0.076
FTI CONSULTING INC COM	1,472,268	0.073
SP PLUS CORP COM	1,462,160	0.073

Largest Fixed Income Securities

(Non-Commingled Funds)

Par Value	Security	Fair Value
$14,000,000	USA TREASURY NTS 1.125% TIPS 15/1/21 USD1000 01-15-2021	$16,015,298
18,937	MFB NT COLLECTIVE GOVERNMENT/CREDIT BOND INDEX FUND - LENDING	11,683,781
98,547,108	I/O GNMA 2013-H13 REMIC CL HI VAR RT DUE05-20-2063	10,819,388
10,000,000	PVTPL SLM STUD LN TR 2003-11 STUD LN BKDSECS 144A A-6 VAR RT DUE 12-15-25	9,986,980
10,000,000	FFCB DTD 2.93 04-27-2029	9,584,000
6,000,000	UNITED STATES TREAS BDS INDEX LINKED 1.75 DUE 01-15-2028 REG	7,675,640
7,034,454	SLM STUDENT LN TR PVTPL SER 2004-8A CL A5 FLT RT DUE 04-25-2024	7,041,312
5,750,000	TVA 6.235 BD DUE 07-15-2045 ONE-TIME OPTPUT PAY 7-15-2001 @ PAR LAST NOTF 1**PUT	6,748,775
54,627,568	I/O GNMA 2013-H13 REMIC CL JI VAR RT DUE06-20-2063 REG	6,094,388
5,748,379	FNMA REMIC TR 2013-56 CL-GM 2 08-25-2041	5,604,462
5,500,000	CMO CR SUISSE COML MTG TR SER 2006-C4 SER 2006-C4 CL-AJ DUE 09-15-2039 REG	5,583,496
7,140,000	CMO WACHOVIA BK COML MTG TR COML MTG PASS-TH DUE 12-15-2043 REG	5,488,604
121,031,322	I/O GNMA 2012-H05 REMIC PASS THRU CTF CLAI VAR RT 03-20-2062	5,476,788
5,326,096	GOAL CAP FLTG RT SER 2006-1 CL A-3 11-25-2026	5,290,262
5,000,000	CMO LB UBS COML MTG TR 2007 C7 MTG PASS THRU CTF CL CL B DUE 09-15-2045 REG	5,055,145
4,000,000	UNITED STATES TREAS BDS DTD 02/15/2006 4.5% DUE 02-15-2036 REG	5,029,376
5,000,000	CREDIT SUISSE FIRST BOSTON MTG SECS CORP2005-C4 MTG PASSTHRU CTF CL B 15 AUG 38	4,996,225
5,000,000	FFCB 3.89% DUE 06-01-2043	4,896,850
5,000,000	FEDERAL HOME LN BKS CONS BD 3 11-15-2027	4,823,850
5,000,000	NORTHSTAR ED FIN INC DEL SER 2007-1 CL A-4 01-29-2046 BEO	4,821,010

Space and cost restrictions make it impractical to print the entire investment portfolio in this report. However, a portfolio listing is available for review in the office of the executive director of MPERS.

Schedule of Investment Expenses

	Fair Value of Assets Under Management at 6/30/2015	Fees Accrued During FY15
Management and Performance Fees:		
Cash	$ 15,102,920	$ 0
Cash/S&P 500 Futures	107,966,685	0
Internal Fixed Income	238,618,374	0
Internal US Tips	25,104,034	0
NT Gov Credit	11,683,805	0
Recoverable Taxes	439,903	0
Aberdeen Asset Management	25,437,546	18,858
ABRY Partners	9,326,299	984,251
Acadian Asset Management	65,279,076	535,561
Achievement Fund (formerly Peak 6)	24,918,120	284,767
AEW	7,568,724	241,330
Albourne	0	480,000
American Infrastructure MLP	22,315,618	394,012
Alyeska	15,701,726	303,385
Anchorage Capital	11,325,345	749,609
Apollo Real Estate	13,399,009	323,958
AQR Capital Management	898,484	386,446
Audax Group	827,180	19,509
Barclays Global Investors	0	48,730
Bernzott	31,103,727	245,051
Blue Trend	9,910,461	22,281
Brevan Howard	15,576,966	162,364
Bridgewater Associates	18,704,631	1,093,020
Capital Partners	5,301,439	194,634
CBRE	18,732,284	109,752
Cevian	12,750,371	306,461
Clifton	0	63,297
Colony Capital	2,798,500	0
CarVal Investors (CVI)	21,398,898	(509,613)
Deephaven Capital Management	0	161
EIF Management	8,398,091	132,768
Energy & Mineral Group Midstream Resource	23,289,430	780,231
Enhanced Investment Technologies (INTECH)	94,493,041	444,946
GMO	31,181,000	351,989
Golub	25,300,549	148,341
Grove Street Advisors	342,533,902	1,375,000
Gryphon	50,431,379	322,850
GSO	10,689,867	484,580
Indus	12,384,910	774,448
ING Clarion	64,649,494	468,707
Kennedy	22,170,225	190,410
Koppenberg	10,010,334	43,247
KPS	1,027,212	73,833
Luxor	16,602,329	410,542
M&G	8,810,985	81,901
Metacapital	11,145,953	451,200
Millenium	16,646,749	705,347
Natural Gas Partners	25,844,688	589,653
Ned Davis	0	30,000
Northern Shipping	13,575,442	435,359
Och-Ziff Real Estate	14,084,396	813,947
OCP	11,644,717	288,301
Orion	1,256,614	252,835
Ospraie	2,050,050	68,231
PFM	13,053,767	(79,202)
Pinnacle Associates	38,076,840	300,228
Principal Global Investors	123,521,157	1,158,452
Ridgewood	3,944,786	328,350
RMK Timberland	7,585,725	76,058
Sciens	6,221,415	130,000
Shore	408,075	120,000
Shoreline	3,080,210	0
Silchester International Investors	114,480,784	731,662
Stark Investments (Shepard)	502,021	13,359
Stellium	13,874,753	64,244
Taconic	18,177,434	167,525
Tessera	10,707,687	257,571
Torchlight	15,420,024	568,847
Tortoise	38,081,173	399,925
Tristan	6,973,515	145,675
Turnbridge	1,651,623	74,722
Urdang	1,530,091	17,100
ValueAct	13,469,044	745,772
Vectis	10,224,692	264,106
Total Management and Performance Fees	**$1,991,396,298**	**$ 21,660,884**
Other Investment Expenses:		
Investment Custodial Fee		59,097
Performance Management		140,667
General Consultant (monitoring) Fee		318,552
Other Investment Expenses		617,945
Total Investment Income Expenses		**$ 22,797,145**
Securities Lending Expenses:		
Borrower Rebates (Refunds)		$ (87,411)
Bank Fees		88,414
Total Securities Lending Expenses (Income)		**$ 1,003**

Schedule of Brokerage Commissions

Brokerage Firm	Total Commission	Number of Shares	Commission Rate
KNIGHT EQUITY MARKETS LP	$ 25,749	1,630,775	0.0158
J.P. MORGAN	15,254	954,400	0.0160
UBS	13,788	966,631	0.0143
WEEDEN AND & CO	12,382	525,459	0.0236
JEFFERIES & COMPANY	11,892	566,774	0.0210
ROSENBLATT SECURITIES LLC 501	10,264	383,293	0.0268
INSTINET	9,263	377,540	0.0245
JONESTRADING INST SERV	8,846	3,946,887	0.0022
BNY ESI SECURITIES CO.	8,563	233,079	0.0367
CREDIT SUISSE AG, NEW YORK BRANCH	8,364	9,740,159	0.0009
SG COWEN AND COMPANY	8,047	334,275	0.0241
GUZMAN AND COMPANY	6,968	272,242	0.0256
WM SMITH AND COMPANY	6,697	250,819	0.0267
DEUTSCHE BANK SECURITIES INC	6,242	575,552	0.0108
BERNSTEIN, SANFORD C. & CO	5,346	187,133	0.0286
CITIGROUP GLOBAL MARKETS INC.	5,056	5,234,475	0.0010
CAP INSTITUTIONAL SERVICES INC	4,753	166,447	0.0286
CITATION GROUP	4,338	120,305	0.0361
WELLS FARGO BANK	3,214	403,888	0.0080
BAYPOINT TRADING LLC	2,980	94,198	0.0316
CANTOR FITZGERALD & CO	2,636	5,471,948	0.0005
GOLDMAN SACHS & COMPANY	2,635	289,777	0.0091
KNIGHT DIRECT LLC	2,287	457,088	0.0050
STIFEL NICOLAUS & CO, INC	2,258	52,183,896	0.0000
MERRILL LYNCH	2,222	3,201,667	0.0007
SIDOTI & COMPANY LLC	2,006	61,042	0.0329
RAYMOND JAMES AND ASSOCIATES	1,624	401,025	0.0040
STEPHENS INC	1,438	41,524	0.0346
MORGAN STANLEY & CO	1,307	6,942,485	0.0002
KEEFE BRUYETTE AND WOODS INC.	1,264	38,590	0.0328
ROBERT W. BAIRD & COMPANY INC	1,068	30,157	0.0354
CLSA AUSTRALIA PTY LTD	1,008	268,346	0.0038
BARCLAYS BANK	1,002	1,261,235	0.0008
OTHER (46 firms less than $1,000 each)	14,735	235,047,909	0.0001
Total	**$ 215,496**	**332,661,020**	
Average Commission Rates			**0.0006**

Notes

Contributions to the System

In the initial negotiations, it was agreed the new retirement system would be funded by contributions from both the employees of MoDOT & the Highway Patrol, as well as the employers themselves. The initial contribution rate for employees and employers was legislatively set at 4%. In the late 1970s, legislation was passed transforming MPERS to a non-contributory plan for members. All employee contributions, plus interest, were refunded.

Today, the Closed Plan and Year 2000 Plan remain non-contributory for employees. However, effective January 1, 2011, pension reform legislation was enacted to create the 2011 Tier, which brought back employee contributions (still 4%, the original rate set back in 1955) for anyone hired by the state in a benefit-eligible position (for the first time) on or after January 1, 2011.

Important Contribution Events

September 1, 1955	Employee and employer rate equal to 4% of employee's first $7,500 of pay.
November 1, 1965	Raised to first $10,000 of pay.
October 13, 1969	Raised to first $15,000 of pay.
August 13, 1972	Employee and employer rate changed to 5.1% of pay (no salary limit).
August 13, 1976	Employee contribution eliminated - employee contributions and interest returned at retirement.
September 29, 1979	Contribution and interest returned to those who were still living and retired prior to 8/13/1976.
February 14, 1980	Contributions and interest returned to active members.
May 12, 1981	Contributions returned to vested members who left state employment prior to 9/1/1976.
January 1, 2011	Contributory 2011 Tier became effective for new hires - employee contribution rate is 4% of pay.

Actuary's Certification Letter

GRS

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 16, 2015

The Retirement Board
Missouri Department of Transportation
and Highway Patrol Employees' Retirement System
1913 William Street
Jefferson City, Missouri 65102-1930

Ladies and Gentlemen:

This report was prepared at the request of the Board and is intended for use by the Retirement System and those designated or approved by the Board. This report may be provided to parties other than the System only in its entirety and only with the permission of the Board. This report should not be relied on for any purpose other than the purpose described.

The basic financial objective of the Missouri Department of Transportation and Highway Patrol Employees' Retirement System (MPERS) 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

(2) when combined with present assets and future investment returns, will be sufficient to meet the present and future financial obligations of MPERS.

In order to measure progress toward this fundamental objective, MPERS has annual actuarial valuations performed. The valuations (i) measure present financial position, and (ii) establish contribution rates that provide for the current cost and level percent-of-payroll amortization of unfunded actuarial liabilities over a reasonable period. An actuarial valuation was performed based upon benefit conditions, data and assumptions as of June 30, 2015. This valuation indicates that contribution rates for the period beginning July 1, 2016 that are at least equal to the calculated contributions rates will meet the Board's financial objective. The calculated contribution rates are 58.00% of payroll for the 6,114 Non-Uniformed employees and 58.00% of payroll for the 1,244 Uniformed patrol employees.

The plan administrative staff provides the actuary with data for the actuarial valuation. The actuary relies on the data after reviewing it for internal and year to year consistency. Member data was not otherwise audited by the actuary. The actuary summarizes and tabulates population data in order to analyze longer term trends. We are not responsible for the accuracy or completeness of the data provided by MPERS.

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Gabriel, Roeder, Smith & Company was responsible for the following schedules found in the Actuarial Section:

- Summary of Actuarial Assumptions and Methods
  - Probabilities of Separation From Active Employment
  - Individual Salary Increases
  - Joint Life Retirement Values
  - Probabilities of Retirement for Members
  - Probabilities of Disability for Members
- Summary of Member Data Included in Valuations
- Active Members by Attained Age and Years of Service
- Schedule of Active Member Valuation Data
- Solvency Test
- Derivation of Financial Experience
- Schedule of Retirees and Beneficiaries Added and Removed
- Summary of Plan Provisions
- Legislative Changes

Gabriel, Roeder, Smith & Company was responsible for the following schedules found in the Financial Section:

- Schedule of Changes in the Employer's Net Pension Liability
- Schedule of Employer's Net Pension Liability
- Schedule of Employer Contributions
- Schedule of the Actuarially Determined Contributions

Actuarial valuations are based upon assumptions regarding future activity in specific risk areas including the rates of investment return and payroll growth, eligibility for the various classes of benefits, and longevity among retired lives. These assumptions are adopted by the Board. The assumptions and the methods comply with the requirements of the Governmental Accounting Standards Board. Each actuarial valuation takes into account all prior differences between actual and assumed experience in each risk area and adjusts the contribution rates as needed. Actuarial methods and assumptions were adopted by the Board pursuant to the June 30, 2012 Experience Study. Gabriel, Roeder, Smith & Company has produced the following reports as of June 30, 2015:

- Annual Actuarial Valuation Report
- GASB Nos. 67 and 68 Valuation Report

In order to gain a full understanding of the condition of this plan, these reports should be read in their entirety.

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To the best of our knowledge, the report is complete and accurate and was made in accordance with standards of practice promulgated by the Actuarial Standards Board. The actuarial assumptions used for the valuation produce results which, individually and in the aggregate, are reasonable.

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 has been prepared by actuaries who have substantial experience valuing public employee retirement systems. Heidi Barry is a Member of the American Academy of Actuaries (MAAA) and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

The signing actuaries are independent of the plan sponsor.

Based upon the valuation results, it is our opinion that the Missouri Department of Transportation and Highway Patrol Employees' Retirement System continues to operate in accordance with actuarial principles of level percent-of-payroll financing. It is important to the well-being of the System that it continues to receive contributions at the actuarially determined levels. It is also important to continue to monitor both the total funded status and the funded status of the retiree liabilities to ensure that the funding policy is consistent with the expected life span of the respective unfunded obligation.

Respectfully submitted,

Heidi G Barry

Heidi G. Barry, ASA, MAAA

Kenneth G. Alberts

Kenneth G. Alberts

Summary of Actuarial Methods and Assumptions

Valuation Date:	June 30, 2015
Actuarial Cost Method:	Entry Age
Amortized Method:	Closed, level percent of payroll
Remaining Amortization Period:	16 years (single equivalent period)
Asset Valuation Method:	3-year smoothing
Actuarial Assumptions:	
Investment Rate of Return:	7.75%
Projected Salary Increase:	3.50% to 11.00%
Cost-of-Living Adjustments:	2.40% Compound
Includes Wage Inflation at:	3.50%

An actuarial valuation is based upon an actuarial cost method, an asset valuation method, and actuarial assumptions. These methods and assumptions are chosen by the Board of Trustees after consultation with the Actuary and other advisors.

The actuarial cost method is called the Entry Age Actuarial Cost Method. This method is consistent with the Board's level percent of payroll funding objective. With this method, the level percent of payroll is determined that will fund a member's retirement benefit over the member's entire working lifetime, from date of hire (Entry Age) to date of exit from the active member population. Differences in the past between assumed and actual experience become part of unfunded actuarial accrued liabilities and are amortized with level percent of payroll contributions. This cost method was first used in the **June 30, 1999** valuation.

The asset valuation method is a three-year smoothed market value method in which assumed investment return is recognized immediately each year and differences between actual and assumed investment return are phased-in over a closed three-year period. This asset valuation method is intended to give recognition to the long term accuracy of market values while filtering out and dampening short term market swings. This method was first used in the **June 30, 1999** valuation.

The actuarial assumptions used in producing the valuation fall into two broad classes: economic assumptions, and demographic assumptions. Economic assumptions refer to long term rates of investment return, wage growth, covered population growth, and inflation. Demographic assumptions refer to retirement rates, turnover rates, disability rates, merit and seniority pay increases, and mortality rates. The current assumptions are based upon a 2007-2012 study of experience of the MPERS. The assumptions are reviewed from time to time to keep them reasonably current with expected experience.

Economic Assumptions

The investment return rate used in making the valuation was 7.75% per year, compounded annually (net after administrative expenses). This rate of return is not the assumed real rate of return. The real rate of return over wage inflation is defined to be the portion of investment return which is more than the wage inflation rate. Considering wage inflation recognition of 3.50%, the 7.75% rate translates to an assumed real rate of return over wage inflation of 4.25%. This rate was first used for the **June 30, 2013** valuation.

Pay increase assumptions for individual active members are shown on the Salary Increase Assumptions table. Part of the assumption for each age is for a merit and/or seniority increase, and the other 3.50% recognizes wage inflation. These rates were first used for the **June 30, 2013** valuation.

Summary of Actuarial Methods and Assumptions

Price Inflation is assumed to be 3.00%. This results in a 2.4% annual COLA assumption. It is assumed that the 2.4% COLA will always be paid.

The Active Member Group size is assumed to remain constant at its present level.

The active member payroll all members is assumed to increase 3.50% annually.

Non Economic Assumptions

The mortality table used to measure retired life mortality was the RP-2000 Combined Healthy Mortality Tables projected 16 years and set back 1 year for males and females. Related values are shown on Joint Life Retirement Values table. This table was first used for the **June 30, 2013** valuation. Disabled pension mortality was based on PBGC Disabled Mortality tables. The healthy mortality tables include a margin for mortality improvement. The margin is in the 16-year projection. The disabled mortality tables do not include a margin for mortality improvement.

The probabilities of retirement for members eligible to retire are shown on the Rates of Retirement table. The rates for full retirement were first used in the **June 30, 2013** valuation. The rates for reduced retirement were first used in the **June 30, 2013** valuation. Upon retirement, members are assumed to pick the BackDROP period that when combined with the remaining annuity produces the highest liability.

The probabilities of disability for members eligible to retire are shown on Rates of Disability table. The rates for disability were first used in the **June 30, 2013** valuation.

The probabilities of withdrawal from service, death in service and disability are shown for sample ages on the Probabilities of Separation tables. The death-in-service and disability rates were first used in the **June 30, 2013** valuation. The withdrawal rates were first used in the **June 30, 2013** valuation.

The data about persons now covered and about present assets was furnished by the System's administrative staff. Although examined for general reasonableness, the data was not audited by the Actuary. Data was furnished as of May 31 and assumed to be statistically equivalent to June 30.

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

Probabilities of Separation From Active Employment Less Than 5 Years of Service

Service	MoDOT, Civilian Patrol and MPERS Male	MoDOT, Civilian Patrol and MPERS Female	Uniformed Patrol Male	Uniformed Patrol Female
0-1	30.00%	20.00%	10.00%	10.00%
1-2	16.00	14.00	7.00	7.00
2-3	9.00	11.00	3.25	3.25
3-4	7.00	9.00	3.00	3.00
4-5	5.50	5.00	2.75	2.75

Probabilities of Separation From Active Employment More Than 5 Years of Service

Age	MoDOT, Civilian Patrol and MPERS Male	MoDOT, Civilian Patrol and MPERS Female	Uniformed Patrol Male	Uniformed Patrol Female
25	5.75%	5.10%	2.70%	2.70%
30	5.12	5.10	2.70	2.70
35	4.12	4.59	1.91	1.91
40	3.21	3.74	1.13	1.13
45	2.41	2.89	0.79	0.79
50	1.76	2.04	0.46	0.46
55	1.29	1.19	0.23	0.23
60	1.04	0.34	0.17	0.17

Salary Increase Assumptions
For an Individual Member

Age Based Salary Scale

	MoDOT, Civilian Patrol and MPERS			Uniformed Patrol		
Age	Merit & Seniority	Base (Economic)	Increase Next Year	Merit & Seniority	Base (Economic)	Increase Next Year
20	4.40%	3.50%	7.90%	6.00%	3.50%	9.50%
25	3.18	3.50	6.68	4.25	3.50	7.75
30	2.59	3.50	6.09	2.48	3.50	5.98
35	2.09	3.50	5.59	1.54	3.50	5.04
40	1.44	3.50	4.94	1.09	3.50	4.59
45	0.68	3.50	4.18	0.71	3.50	4.21
50	0.12	3.50	3.62	0.45	3.50	3.95
55	0.00	3.50	3.50	0.29	3.50	3.79
60	0.00	3.50	3.50	0.23	3.50	3.73

Service Based Salary Scale

MoDOT, Civilian Patrol and MPERS % Merit Increases in Salaries Next Year*		Uniformed Patrol % Merit Increases in Salaries Next Year*	
Service Index	Rate	Service Index	Rate
1	8.0%	1	10.0%
2	7.0%	2	10.0%
3	4.5%		
4	4.0%		

**For Non-Uniformed members with 4 or less years of service and Uniformed members with 2 or less years of service, the service based table overwrites the age based table above.*

Joint Life Retirement Values
(7.75% Interest)

Sample Attained Ages	Present Value of $1 Monthly for Life: Men	Women	Percent Dying Next Year: Men	Women	Future Life Expectancy (years): Men	Women
50	$147.46	$147.37	.1516%	.1159%	33.34	35.39
55	142.23	142.00	.2313%	.2064%	28.61	30.63
60	135.19	134.87	.4593%	.4099%	24.03	26.02
65	126.18	125.80	.9002%	.7955%	19.69	21.67
70	115.18	114.73	1.5803%	1.3715%	15.71	17.66
75	101.84	101.56	2.6618%	2.2752%	12.07	14.01
80	86.45	86.42	4.8531%	3.7094%	8.86	10.73

The present values shown above are for illustrative purposes only and include a 50% survivor benefit but do not include the value of future post-retirement increases. Males are assumed to be 3 years older than their spouses.

Percent of Eligible Active Members Retiring Next Year (Rates of Retirement)

Closed and Year 2000 Plans

	MoDOT, Civilian Patrol and MPERS				Uniformed Patrol	
	Male		Female		Male	Female
Age	Normal	Early	Normal	Early	Normal	Normal
50	30.00%	0.00%	25.00%	0.00 %	35.00%	35.00%
55	27.00	3.00	32.00	3.00	20.00	20.00
60	19.00	8.00	22.00	6.00	100.00	100.00
65	35.00	0.00	35.00	0.00	100.00	100.00
70	40.00	0.00	50.00	0.00	100.00	100.00

Year 2000 Plan – 2011 Tier

	MoDOT, Civilian Patrol and MPERS Normal		Uniformed Patrol	
Age	Age & Service	Rule of 90	Early	Normal
55	0.00%	30.00%	0.00%	30.00%
60	0.00	30.00	0.00	30.00
65	0.00	30.00	10.00	30.00
70	100.00	100.00	0.00	100.00

Percent of Members Becoming Disabled at the Indicated Age (Rates of Disability)

	MoDOT, Civilian Patrol and MPERS		Uniformed Patrol	
Age	Male	Female	Male	Female
25	0.04%	0.07%	0.01%	0.01%
30	0.09	0.08	0.02	0.02
35	0.13	0.13	0.02	0.02
40	0.17	0.17	0.05	0.05
45	0.23	0.36	0.09	0.09
50	0.33	0.55	0.19	0.19
55	0.62	0.74	0.35	0.35
60	1.12	0.90	0.58	0.58

Summary of Funding and Contributions

Schedule of Funding Progress

Year Ended June 30	Actuarial Asset Value	Accrued Liability – Entry Age	Unfunded Accrued Liability (UAAL)	Funded Ratio	Actuarial Covered Payroll(1)	UAAL as a Percentage of Covered Payroll
2006	$1,521,142,953	$2,740,437,837	$1,219,294,884	55.51%	$341,227,890	357.33%
2007(2)	1,685,807,004	2,897,267,409	1,211,460,405	58.19%	365,012,472	331.90%
2008	1,783,902,280	3,019,633,781	1,235,731,501	59.08%	375,600,448	329.00%
2009	1,471,496,660	3,113,393,645	1,641,896,985	47.26%	379,590,273	432.54%
2010(2)	1,375,844,573	3,258,866,925	1,883,022,352	42.22%	378,063,006	498.07%
2011	1,427,290,718	3,297,589,869	1,870,299,151	43.28%	362,654,376	515.72%
2012(2)	1,531,033,613	3,306,278,671	1,775,245,058	46.31%	341,637,559	519.63%
2013(2)	1,657,402,393	3,583,975,559	1,926,573,166	46.24%	329,481,506	584.73%
2014	1,795,264,291	3,650,241,741	1,854,977,450	49.18%	336,590,797	551.11%
2015	1,967,001,509	3,715,845,651	1,748,844,142	52.94%	342,264,593	510.96%

(1) Values are estimated from contribution rate and amount.
(2) New assumptions and/or methods adopted.

See Note 5 of Notes to the Financial Statement in the Financial Section for Funding policy information.

Member and Employer Contribution Rates

Year Ended June 30	Employer Contributions All Benefit Structures		Member Contributions
	Uniformed Patrol Group	Non-Uniformed Group	2011 Tier All Groups
2006	44.27%	30.49%	4.00%
2007	44.28%	31.10%	4.00%
2008	42.64%	31.04%	4.00%
2009	40.22%	30.72%	4.00%
2010(2)	39.95%	31.40%	4.00%
2011	49.53%	39.46%	4.00%
2012(2)	58.63%	45.45%	4.00%
2013(2)	55.03%	50.92%	4.00%
2014	55.23%	54.25%	4.00%
2015	58.19%	58.76%	4.00%

See Required Supplementary Information, Schedule of Employers' Contributions for more information.

Summary of Member Data Included In Valuations

	Non-Uniformed				
	Civilian Patrol	MoDOT and MPERS	Non-Uniformed Total	Uniformed Patrol	Grand Total
Active Members					
Closed Plan	381	2,082	2,463	623	3,086
Year 2000 Plan (also closed)	472	1,896	2,368	396	2,764
Year 2000 Plan - 2011 Tier (open)	262	1,021	1,283	225	1,508
Total Active Members	1,115	4,999	6,114	1,244	7,358
Total Active Members Prior Year	1,127	5,026	6,153	1,237	7,390
Retiree - Regular Pensioners					
Closed Plan	465	3,596	4,061	890	4,951
Year 2000 Plan (also closed)	501	2,968	3,469	3	3,472
Year 2000 Plan - 2011 Tier (open)	0	0	0	0	0
Total Regular Pensioners	966	6,564	7,530	893	8,423
Self Insured Disability Pensioners	4	52	56	3	59
Fully Insured Disability Pensioners	12	89	101	5	106
Terminated Vested Members	244	1,882	2,126	162	2,288
Total	**2,341**	**13,586**	**15,927**	**2,307**	**18,234**
Active Member Valuation Payroll	$44,500,074	$207,314,457	$251,814,531	$82,586,449	$334,400,980
Active Member Valuation Payroll Prior Year	$43,858,728	$211,776,834	$255,635,562	$76,450,127	$332,085,689
Unfunded Actuarial Accrued Liability	N/A	N/A	$1,307,624,238	$441,219,904	$1,748,844,142

Member data for actuarial valuation is as of May 31, 2015

Active Members By Attained Age and Years of Service

MoDOT and MPERS

Closed Plan

Attained Age	0-4	5-9	10-14	15-19	20-24	25-29	30+	No.	Valuation Payroll
	Counted by Complete Years of Service to Valuation Date							Totals	
Under 20	-	-	-	-	-	-	-	0	$ 0
20-24	-	-	-	-	-	-	-	0	0
25-29	-	-	-	-	-	-	-	0	0
30-34	-	-	-	3	-	-	-	3	134,809
35-39	-	-	3	130	1	-	-	134	5,793,970
40-44	-	-	3	207	102	1	-	313	15,577,794
45-49	-	3	4	168	249	84	8	516	25,680,781
50-54	-	1	1	152	156	190	89	589	29,381,382
55-59	-	-	1	118	116	88	60	383	18,399,608
60-64	-	-	-	43	38	17	27	125	5,749,626
65-69	-	-	-	3	4	4	5	16	931,942
70+	-	-	-	-	1	-	2	3	158,659
Totals	**0**	**4**	**12**	**824**	**667**	**384**	**191**	**2,082**	**$101,808,571**

Average Age	**49.9 years**
Average Service	**22.1 years**
Average Pay	**$48,899**

Year 2000 Plan

Attained Age	0-4	5-9	10-14	15-19	20-24	25-29	30+	No.	Valuation Payroll
	Counted by Complete Years of Service to Valuation Date							Totals	
Under 20	-	-	-	-	-	-	-	0	$ 0
20-24	-	1	-	-	-	-	-	1	32,968
25-29	13	80	-	-	-	-	-	93	3,489,170
30-34	14	184	96	-	-	-	-	294	11,804,990
35-39	22	131	212	3	-	-	-	368	15,260,986
40-44	19	115	160	6	-	-	-	300	11,789,681
45-49	14	113	133	7	-	-	-	267	10,033,888
50-54	8	98	140	11	-	1	-	258	9,749,278
55-59	12	78	111	7	1	-	-	209	7,745,790
60-64	3	37	51	2	-	-	-	93	3,469,491
65-69	1	5	5	-	-	-	-	11	394,074
70+	-	1	1	-	-	-	-	2	65,040
Totals	**106**	**843**	**909**	**36**	**1**	**1**	**0**	**1,896**	**$73,835,356**

Average Age	**43.6 years**
Average Service	**9.9 years**
Average Pay	**$38,943**

Member data for actuarial valuation is as of May 31, 2015.

Active Members By Attained Age and Years of Service

MoDOT and MPERS

Year 2000 Plan - 2011 Tier

Attained Age	Counted by Complete Years of Service to Valuation Date 0-4	5-9	10-14	15-19	20-24	25-29	30+	Totals No.	Valuation Payroll
Under 20	3	-	-	-	-	-	-	3	$ 53,525
20-24	148	-	-	-	-	-	-	148	4,282,075
25-29	256	-	-	-	-	-	-	256	8,501,096
30-34	162	-	-	-	-	-	-	162	5,058,629
35-39	122	-	-	-	-	-	-	122	3,565,084
40-44	87	-	-	-	-	-	-	87	2,702,280
45-49	98	-	-	-	-	-	-	98	2,933,913
50-54	73	-	-	-	-	-	-	73	2,237,563
55-59	57	-	-	-	-	-	-	57	1,791,071
60-64	11	-	-	-	-	-	-	11	406,188
65-69	3	-	-	-	-	-	-	3	110,544
70+	1	-	-	-	-	-	-	1	28,562
Totals	**1,021**	**0**	**0**	**0**	**0**	**0**	**0**	**1,021**	**$31,670,530**

Average Age	**35.4 years**
Average Service	**1.4 years**
Average Pay	**$31,019**

Member data for actuarial valuation is as of May 31, 2015.

Active Members By Attained Age and Years of Service

Uniformed Patrol

Closed Plan

Attained Age	Counted by Complete Years of Service to Valuation Date 0-4	5-9	10-14	15-19	20-24	25-29	30+	Totals No.	Valuation Payroll
Under 20	-	-	-	-	-	-	-	0	$ 0
20-24	-	-	-	-	-	-	-	0	0
25-29	-	-	-	-	-	-	-	0	0
30-34	-	-	-	-	-	-	-	0	0
35-39	-	-	-	27	-	-	-	27	2,004,241
40-44	-	-	2	119	47	-	-	168	12,841,028
45-49	1	-	-	68	124	40	-	233	18,665,616
50-54	-	-	-	15	32	85	20	152	12,362,144
55-59	-	-	-	3	3	24	12	42	3,524,695
60-64	-	-	-	-	-	-	1	1	79,781
65-69	-	-	-	-	-	-	-	0	0
70+	-	-	-	-	-	-	-	0	0
Totals	**1**	**0**	**2**	**232**	**206**	**149**	**33**	**623**	**$49,477,505**

Average Age **47.2 years**
Average Service **22.0 years**
Average Pay **$79,418**

Year 2000 Plan

Attained Age	Counted by Complete Years of Service to Valuation Date 0-4	5-9	10-14	15-19	20-24	25-29	30+	Totals No.	Valuation Payroll
Under 20	-	-	-	-	-	-	-	0	$ 0
20-24	-	-	-	-	-	-	-	0	0
25-29	5	52	-	-	-	-	-	57	2,977,906
30-34	1	95	27	-	-	-	-	123	6,871,725
35-39	1	26	103	1	-	-	-	131	8,155,229
40-44	-	19	44	1	-	-	-	64	3,786,935
45-49	-	5	11	-	-	-	-	16	914,833
50-54	-	1	3	-	-	-	-	4	233,711
55-59	-	-	-	-	1	-	-	1	69,728
60-64	-	-	-	-	-	-	-	0	0
65-69	-	-	-	-	-	-	-	0	0
70+	-	-	-	-	-	-	-	0	0
Totals	**7**	**198**	**188**	**2**	**1**	**0**	**0**	**396**	**$23,010,067**

Average Age **35.3 years**
Average Service **9.7 years**
Average Pay **$58,106**

Member data for actuarial valuation is as of May 31, 2015.

Active Members By Attained Age and Years of Service

Uniformed Patrol

Year 2000 Plan - 2011 Tier

Attained Age	Counted by Complete Years of Service to Valuation Date 0-4	5-9	10-14	15-19	20-24	25-29	30+	Totals No.	Valuation Payroll
Under 20	-	-	-	-	-	-	-	0	$ 0
20-24	36	-	-	-	-	-	-	36	1,475,550
25-29	132	-	-	-	-	-	-	132	6,052,849
30-34	35	-	-	-	-	-	-	35	1,610,681
35-39	16	-	-	-	-	-	-	16	687,636
40-44	4	-	-	-	-	-	-	4	184,447
45-49	2	-	-	-	-	-	-	2	87,714
50-54	-	-	-	-	-	-	-	0	0
55-59	-	-	-	-	-	-	-	0	0
60-64	-	-	-	-	-	-	-	0	0
65-69	-	-	-	-	-	-	-	0	0
70+	-	-	-	-	-	-	-	0	0
Totals	**225**	**0**	**0**	**0**	**0**	**0**	**0**	**225**	**$10,098,877**

Average Age	**28.1 years**
Average Service	**2.4 years**
Average Pay	**$44,884**

Member data for actuarial valuation is as of May 31, 2015.

Active Members By Attained Age and Years of Service

Civilian Patrol

Closed Plan

Attained Age	0-4	5-9	10-14	15-19	20-24	25-29	30+	No.	Valuation Payroll
	Counted by Complete Years of Service to Valuation Date							Totals	
Under 20	-	-	-	-	-	-	-	0	$ 0
20-24	-	-	-	-	-	-	-	0	0
25-29	-	-	-	-	-	-	-	0	0
30-34	-	-	-	-	-	-	-	0	0
35-39	-	-	1	20	2	-	-	23	1,023,622
40-44	-	-	1	31	12	-	-	44	1,967,565
45-49	-	-	1	36	29	17	2	85	4,055,202
50-54	1	1	1	23	36	23	22	107	5,016,361
55-59	-	-	-	24	17	22	14	77	3,482,723
60-64	-	-	-	14	7	8	8	37	1,702,263
65-69	-	-	-	1	4	1	1	7	244,209
70+	-	-	-	1	-	-	-	1	36,678
Totals	**1**	**1**	**4**	**150**	**107**	**71**	**47**	**381**	**$17,528,623**

Average Age	**51.1 years**
Average Service	**22.4 years**
Average Pay	**$46,007**

Year 2000 Plan

Attained Age	0-4	5-9	10-14	15-19	20-24	25-29	30+	No.	Valuation Payroll
	Counted by Complete Years of Service to Valuation Date							Totals	
Under 20	-	-	-	-	-	-	-	0	$ 0
20-24	-	-	-	-	-	-	-	0	0
25-29	6	22	-	-	-	-	-	28	1,142,145
30-34	8	59	19	-	-	-	-	86	3,575,452
35-39	4	37	44	-	-	-	-	85	3,784,048
40-44	1	28	29	1	-	-	-	59	2,387,666
45-49	7	29	28	3	1	-	-	68	2,669,941
50-54	7	24	27	5	-	-	-	63	2,436,268
55-59	3	21	21	2	-	-	-	47	1,716,926
60-64	2	9	13	2	-	-	-	26	858,581
65-69	1	1	6	-	-	-	-	8	258,034
70+	-	1	1	-	-	-	-	2	59,028
Totals	**39**	**231**	**188**	**13**	**1**	**0**	**0**	**472**	**$18,888,089**

Average Age	**43.5 years**
Average Service	**9.3 years**
Average Pay	**$40,017**

Member data for actuarial valuation is as of May 31, 2015.

Active Members By Attained Age and Years of Service

Civilian Patrol

Year 2000 Plan - 2011 Tier

Attained Age	Counted by Complete Years of Service to Valuation Date 0-4	5-9	10-14	15-19	20-24	25-29	30+	Totals No.	Totals Valuation Payroll
Under 20	-	-	-	-	-	-	-	0	$ 0
20-24	23	-	-	-	-	-	-	23	615,082
25-29	84	-	-	-	-	-	-	84	2,771,780
30-34	33	-	-	-	-	-	-	33	1,092,257
35-39	22	-	-	-	-	-	-	22	648,472
40-44	23	-	-	-	-	-	-	23	725,262
45-49	28	-	-	-	-	-	-	28	857,330
50-54	18	-	-	-	-	-	-	18	510,578
55-59	18	-	-	-	-	-	-	18	489,678
60-64	11	-	-	-	-	-	-	11	317,802
65-69	1	-	-	-	-	-	-	1	25,320
70+	1	-	-	-	-	-	-	1	29,801
Totals	**262**	**0**	**0**	**0**	**0**	**0**	**0**	**262**	**$8,083,362**

Average Age	**37.0 years**
Average Service	**2.0 years**
Average Pay	**$30,853**

Member data for actuarial valuation is as of May 31, 2015.

Schedule of Active Member Valuation Data

Actuarial Valuation for June 30,	Number of Participating Employers	Number of Active Members	Covered Payroll	Average Pay	Percent Change in Average Pay from Prior Year
2006	3	9,033	$348,614,699	$38,593	2.6%
2007	3	8,640	360,842,421	41,764	8.2%
2008	3	8,599	369,424,653	42,961	2.9%
2009	3	8,784	377,652,245	42,993	0.1%
2010	3	8,457	369,911,252	43,740	1.7%
2011	3	8,231	361,639,001	43,936	0.4%
2012	3	7,458	329,293,168	44,153	0.5%
2013	3	7,319	323,205,767	44,160	0.0%
2014	3	7,390	332,085,689	44,937	1.8%
2015	3	7,358	334,400,980	45,447	1.1%
				Ten-Year Average	**1.9%**

Member data for actuarial valuation is as of May 31, 2015.

Solvency Test

The MPERS funding objective is to meet long term benefit promises through contributions that remain approximately level from year to year as a percent of member payroll. If the contributions to the System are level in concept and soundly executed, the System will ***pay all promised benefits when due – the ultimate test of financial soundness.***

A solvency test is one means of checking a system's progress under its funding program. In a solvency test for a non-contributory plan, the plan's present assets (cash and investments) are compared with: 1) The liabilities for future benefits to present retired lives and 2) The liabilities for service already rendered by members. In a system that has been following the discipline of level percent of payroll financing, the liabilities for future benefits to present retired lives (liability 1) will be fully covered by present assets (except in rare circumstances). In addition, the liabilities for service already rendered by members (liability 2) will be partially covered by the remainder of present assets. The larger the funded portion of liability 2, the stronger the condition of the system. The schedule below illustrates the history of liability 2 of the System.

Valuation Date June 30	(1) Member Contributions	(2) Retirees and Beneficiaries	(3) Active and Inactive Members	Present Valuation Assets	Portion of Present Values Covered by Present Assets			
					(1)	(2)	(3)	Total
	-------------------------	*Millions*	-------------------------					
1999	0	$1,132	$ 921	$1,243	100%	100%	12%	61%
2000	0	1,238	951	1,423	100%	100%	19%	65%
2001	0	1,375	926	1,521	100%	100%	16%	66%
2002*	0	1,470	888	1,451	100%	99%	0%	62%
2003	0	1,555	863	1,364	100%	88%	0%	56%
2004	0	1,626	867	1,332	100%	82%	0%	53%
2005	0	1,669	958	1,417	100%	85%	0%	54%
2006	0	1,734	1,007	1,521	100%	88%	0%	56%
2007	0	1,810	1,087	1,686	100%	93%	0%	58%
2008	0	1,873	1,147	1,784	100%	95%	0%	59%
2009	0	1,947	1,166	1,471	100%	76%	0%	47%
2010*	0	2,034	1,225	1,376	100%	68%	0%	42%
2011	0	2,045	1,253	1,427	100%	70%	0%	43%
2012*	0	2,133	1,173	1,531	100%	72%	0%	46%
2013*	1	2,333	1,250	1,657	100%	71%	0%	46%
2014	2	2,384	1,264	1,795	100%	75%	0%	49%
2015	3	2,444	1,269	1,967	100%	80%	0%	53%

** New assumptions and/or methods adopted.*

Derivation of Financial Experience

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.

UAAL Beginning of Year (at July 1)	$1,854,977,450
Normal Cost	49,001,406
Contributions	(205,047,170)
Interest	137,713,979
Net Change in LTD Assets	-
Expected UAAL Before Any Changes	1,836,645,665
Effect of Changes in Assumptions & Methods	-
Effect of Interest Adjustment	-
Expected UAAL After Changes	1,836,645,665
End of Year UAAL (at June 30)	1,748,844,142
Gain/(Loss) for Year	$87,801,523
Gain/(Loss) as a percent of actuarial accrued liabilities at start of year ($3,650.2 million)	2.4%

Valuation Date June 30	Experience Gain (Loss) as % of Beginning Accrued Liability
1999	(7.7)%
2000	(0.1)%
2001	(9.3)%
2002	(4.5)%
2003	(5.2)%
2004	(2.9)%
2005	(1.5)%
2006	1.4%
2007	1.1%
2008	(0.2)%
2009	(12.6)%
2010	(3.8)%
2011	2.2%
2012	3.2%
2013	2.1%
2014	2.1%
2015	**2.4%**

Schedule of Retirees and Beneficiaries Added and Removed

Valuation Date	Added to Rolls: Number	Added to Rolls: Annual Allowances	Removed from Rolls: Number	Removed from Rolls: Annual Allowances	Rolls End of Year: Number	Rolls End of Year: Annual Allowances	Average Annual Allowances	% Increase in Annual Allowance	% Increase in Average Annual Allowance
FY2015									
Retirees	406	$4,669,565	188	$2,712,395	6,583	$183,337,549	$27,850	2.61%	-0.79%
Beneficiaries	113	1,290,336	139	900,991	1,874	$32,080,172	17,119	2.65%	4.07%
Disabilities	21	0	30	22,387	164	$903,386	5,508	-3.43%	1.87%
FY2014									
Retirees	307	$4,434,888	176	$2,317,420	6,365	$178,670,075	$28,071	3.54%	1.41%
Beneficiaries	112	1,163,441	126	863,108	1,900	$31,253,184	16,449	3.91%	4.68%
Disabilities	19	6,760	25	19,831	173	$935,492	5,407	3.41%	6.40%
FY2013									
Retirees	395	$5,001,943	174	$2,761,791	6,234	$172,564,478	$27,681	4.56%	0.85%
Beneficiaries	130	1,349,835	96	717,434	1,914	$30,077,515	15,714	6.79%	5.00%
Disabilities	27	0	23	6,788	179	$904,683	5,082	-1.88%	-3.00%
FY2012									
Retirees	413	$5,988,784	171	$2,119,116	6,013	$165,042,751	$27,448	4.10%	-0.09%
Beneficiaries	130	1,206,259	105	610,931	1,880	$28,166,374	14,966	5.20%	3.69%
Disabilities	34	0	25	16,712	175	$922,027	5,239	0.39%	-5.31%
FY2011									
Retirees	311	$3,955,409	146	$2,406,006	5,771	$158,543,113	$27,472	0.74%	-2.14%
Beneficiaries	102	891,718	109	710,880	1,855	26,772,995	14,433	-1.17%	-0.79%
Disabilities	38	0	14	10,399	166	918,403	5,533	1.69%	-13.00%
FY2010									
Retirees	272	$3,218,890	137	$3,252,182	5,606	$157,380,575	$28,074	3.29%	0.80%
Beneficiaries	103	930,442	104	625,292	1,862	27,089,491	14,549	5.79%	5.85%
Disabilities	21	0	25	73,638	142	903,107	6,360	-40.95%	-39.29%
FY2009									
Retirees	292	$4,125,644	178	$2,136,578	5,471	$152,372,034	$27,851	4.49%	2.31%
Beneficiaries	138	1,134,755	108	622,167	1,863	25,606,266	13,745	7.80%	6.07%
Disabilities	19	0	28	71,381	146	1,529,412	10,475	-11.67%	-6.23%
FY2008									
Retirees	331	$3,940,198	151	$1,202,185	5,357	$145,826,691	$27,222	4.97%	1.45%
Beneficiaries	113	763,176	92	437,560	1,833	23,753,030	12,959	6.59%	5.37%
Disabilities	21	54,465	32	57,913	155	1,731,521	11,171	-22.63%	-17.14%
FY2007									
Retirees	310	$3,052,533	157	$1,373,300	5,177	$138,917,326	$26,834	4.87%	1.77%
Beneficiaries	131	51,253	112	617,163	1,812	22,283,555	12,298	8.09%	6.96%
Disabilities	36	0	24	116,307	166	2,237,892	13,481	38.31%	28.31%
FY2006									
Retirees	252	$3,005,557	166	$1,477,199	5,024	$132,465,613	$26,367	3.89%	1.74%
Beneficiaries	106	715,154	75	381,966	1,793	20,615,839	11,498	7.09%	5.24%
Disabilities	22	170,138	22	106,561	154	1,618,075	10,507	9.70%	8.99%

**New disabilities are covered / paid by the Standard Insurance Co.*
Data of this chart is as of June 30, 2015.

Summary of Plan Provisions *

Comparison of the Closed Plan, the Year 2000 Plan, and the Year 2000 Plan - 2011 Tier
For the Year Ended June 30, 2015

Plan Provision	Closed Plan	Year 2000 Plan	Year 2000 Plan - 2011 Tier
Membership Eligibility	• Members who work in a position normally requiring at least 1,040 hours of work a year.	• 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. • Members who left state employment prior to becoming vested and return to work on or after July 1, 2000, in a position normally requiring at least 1,040 hours of work a year.	• 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. • Members who have never worked for a state agency covered by MPERS or MOSERS prior to January 1, 2011.
Normal Retirement Eligibility	• Age 65 & active with 4 years of service. • Age 65 with 5 years of service. • Age 60 with 15 years of service. • "Rule of 80"/minimum age 48. <u>Uniformed Members Only:</u> • Age 55 & active with 4 years of service. • Age 55 with 5 years of service. • "Rule of 80"/minimum age 48. • Age 60 & active – mandatory, no minimum service.	• Age 62 with 5 years of service. • "Rule of 80"/minimum age 48. <u>Uniformed Members Only:</u> • "Rule of 80"/minimum age 48. • Age 60 & active - mandatory with 5 years of service.	• Age 67 with 10 years of service. • "Rule of 90"/minimum age 55. <u>Uniformed Members Only:</u> • Age 55 & active with 10 years of creditable service. • Age 60 & active - mandatory, no minimum service.
Early (Reduced) Retirement Eligibility	• Age 55 with 10 years creditable service.	• Age 57 with 5 years creditable service.	• Age 62 & active with 10 years of creditable service. (active only)
Benefit Life Benefit	1.6% x FAP** x service (Base benefit is increased by 33 1/3% for uniformed patrol members only.)	1.7% x FAP** x service	1.7% x FAP** x service
Temporary Benefit	Not available.	0.8% x FAP** x service Until age 62, only if retiring under "Rule of 80". <u>Uniformed Members Only:</u> Until age 62, if retiring under "Rule of 80" or at mandatory age 60.	0.8% x FAP** x service Until age 62, only if retiring under "Rule of 90". <u>Uniformed Members Only:</u> Until age 62, if retiring under either normal retirement eligibility provision.
Vesting	5 years of service.	5 years of service.	10 years of service.
COLA (Cost-of-Living Allowance)	• If hired before August 28, 1997, annual COLA is a minimum of 4%, maximum 5%, based on 80% of the increase in the CPI-U over the previous year, up to a maximum of 65% of original benefit. • After 65% cap is reached, annual COLA increase will be equal to 80% of the change in the CPI-U, with a maximum of 5%. • If hired on or after August 28, 1997, annual COLA is equal to 80% of the change in the CPI-U with a maximum rate of 5%.	• Annual COLA is equal to 80% of the change in the CPI-U with a maximum rate of 5%.	• Annual COLA is equal to 80% of the change in the CPI-U with a maximum rate of 5%.

Summary of Plan Provisions *

Comparison of the Closed Plan, the Year 2000 Plan, and the Year 2000 Plan - 2011 Tier
For the Year Ended June 30, 2015

Plan Provision	Closed Plan	Year 2000 Plan	Year 2000 Plan - 2011 Tier
Survivor Benefit (Death before retirement) Non Duty-Related Death	• Survivor benefit to eligible spouse calculated using the Joint & 100% survivor option or 80% of the member's life income annuity paid to eligible children under age 21. • If at least 3, but less than 5, years of service the survivor benefit is calculated using 25% of the member's base benefit calculated as if the member retired on their date of death.	• Survivor benefit to eligible spouse calculated using the Joint & 100% survivor option or 80% of the member's life income annuity paid to eligible children under age 21.	• Survivor benefit to eligible spouse calculated using the Joint & 100% survivor option or 80% of the member's life income annuity paid to eligible children under age 21.
Duty-Related Death	• Survivor benefit to eligible spouse or children no less than 50% of final average pay (no minimum service requirement).	• Survivor benefit to eligible spouse or children no less than 50% of final average pay (no minimum service requirement).	• Survivor benefit to eligible spouse or children no less than 50% of final average pay (no minimum service requirement).
Optional Forms of Payment	Payment options include: • Life Income Annuity • Unreduced Joint & 50% Survivor • Joint & 100% Survivor • 60 or 120 Guaranteed Payments • BackDROP	Payment options include: • Life Income Annuity • Joint & 50% Survivor • Joint & 100% Survivor • 120 or 180 Guaranteed Payments • BackDROP	Payment options include: • Life Income Annuity • Joint & 50% Survivor • Joint & 100% Survivor • 120 or 180 Guaranteed Payments
Disability	Long-Term Disability and Work-Related Disability	Long-Term Disability and Work-Related Disability	Long-Term Disability and Work-Related Disability
Employee Contributions	Non-contributory	Non-contributory	4% of Gross Pay

**This summary describes the plan provisions of the Revised Statutes of Missouri (RSMo), as amended, that governed the programs, which MPERS 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. The Year 2000 Plan was effective July 1, 2000 and the Year 2000 Plan – 2011 Tier was effective January 1, 2011. A complete summary is available at the MPERS office.*

***Final Average Pay – average of highest 36 consecutive months of pay.*

See Note 2 of Notes to the Financial Statements for more information.

Legislative Changes

During the 2015 Legislative Session, no MPERS-related bills were signed into law.

Notes

Significant Actions by the Board of Trustees

September 2015, marks the 60th Anniversary of MPERS. The last 60 years has lead us on an amazing journey.

MPERS is a traditional defined benefit pension plan providing lifetime retirement benefits to eligible members. The monthly retirement and survivor benefits are a valuable source of retirement income for the members we serve. The average monthly benefit of a new retiree is approximately $2,000 per month. Given the increasing cost of living, this amount alone will not provide a life of luxury for retirees; however, it may provide a basic foundation for members to retire with dignity.

Since 1955, the Legislature has passed several benefit enhancements, such as cost-of-living adjustments and survivor benefits. A complete History of MPERS can be found on our website (www.mpers.org). We also witnessed the ups and downs of the stock market, most recently the financial crisis that occurred during the "Great Recession" (December 2007 - June 2009).

Through professional plan administration, the Board and MPERS staff have worked diligently to create a strategic plan to aggressively address any funding issues. Obstacles and uncertainty typically lead to opportunities, and MPERS' portfolio has the governance model and structure in place to capitalize on whatever the future holds. The restructuring that started in 2004 has already proved beneficial to the members of the System, as evidenced by the strong performance over the past ten years.

Important Board Events

September 1, 1955	Retirement System created through the passage of Senate Bill 66. System's assets invested conservatively through United Missouri Bank (UMB).
October 1, 1997	The Board hired Rothchild Asset Management. This represented the first time MPERS employed an investment manager other than UMB. Started to diversify investment managers by hiring 7 managers over the next 4 years in addition to UMB.
October 1, 2001	Transferred 5 employees from MoDOT payroll to MPERS payroll to operate the System.
June 14, 2002	MPERS purchased its office building at 1913 William Street.
February 1, 2003	Hired Northern Trust as custodial bank.
July 1, 2004	Contracted with Standard Insurance Company for handling the long-term and work-related disability claims.
2005 - 2006	Portfolio restructured to diversify and take advantage of opportunities in alternative asset classes such as real estate, private equity, and hedge funds.
September 28, 2006	Board adopted a permanent funding policy. (Total contribution based on normal cost plus a 29-year amortization period for unfunded liabilities. The financing period is a closed period starting July 1, 2007.)
September 17, 2009	Board adopted a temporary accelerated funding policy to address the underfunding situation (15-year amortization period for unfunded retiree liabilities and 30-year amortization period for other unfunded liabilities.)
June 30, 2010	Board adopted further revisions to asset allocation to reduce risk in investment portfolio.
September 25, 2014	Board established the Rate Stabilization Reserve Fund to further reinforce funding, and protect against higher contribution rates in the future.

STATISTICAL SUMMARY

Changes in Net Position

The chart on page 74 details a 10-year history of the additions (revenues) and deductions (expenses) of MPERS.

The chart on page 75 details a 10-year history of benefit payments by type.

Plan Membership

Overall, MPERS' membership increased by 229. Retired members and their beneficiaries increased by 183, terminated-vested members increased by 78, and active members decreased by 42.

The charts beginning on page 76 detail the number of retired members by type of benefit and the average monthly benefit payments.

Other charts and graphs in this section detail demographic information concerning our members and employers.

All non-accounting data in this section was derived from internal sources and the annual actuarial valuation reports. Member data may differ between some schedules since the valuations are performed using data as of May 31 each year.

Changes in Net Position

MoDOT and Patrol Employees' Retirement System
Changes in Net Position, Last Ten Fiscal Years

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Additions										
Employer Contributions	$111,271,679	$121,264,532	$123,335,151	$122,599,301	$124,052,534	$150,022,169	$164,880,140	$170,836,117	$183,353,841	$200,638,571
Employee Contributions (1)	0	0	0	0	0	45,361	202,843	503,550	1,282,379	2,086,000
Transfers from Other Systems (2)	0	0	0	0	0	17,609,276	264,954	1,727,834	1,784,382	1,114,437
Other Contributions	271,038	529,926	1,192,527	444,000	424,172	453,984	908,898	635,900	978,184	1,208,162
Net Investment Income	212,206,238	283,549,424	(42,915,886)	(426,265,311)	166,307,054	279,612,052	42,091,564	198,139,438	319,445,655	92,645,423
Other Income	41,542	31,580	31,546	33,571	33,145	33,141	13,760	1,650	125	148
Total Additions to Fiduciary Net Position	323,790,497	405,375,462	81,643,338	(303,188,439)	290,816,905	447,775,983	208,362,159	371,844,489	506,844,566	297,692,741
Deductions										
Benefit Payments	164,997,406	175,970,479	185,801,362	192,013,250	196,721,274	202,153,768	219,704,320	224,518,100	231,384,708	241,714,876
Administrative Expenses	1,927,594	2,120,764	2,371,215	2,339,501	2,512,181	2,658,849	2,934,969	2,997,225	3,736,355	4,066,944
Total Deductions from Fiduciary Net Position	166,925,000	178,091,243	188,172,577	194,352,751	199,233,455	204,812,617	222,639,289	227,515,325	235,121,063	245,781,820
Change in Net Position	**$156,865,497**	**$227,284,219**	**$(106,529,239)**	**$(497,541,190)**	**$91,583,450**	**$242,963,366**	**$(14,277,130)**	**$144,329,164**	**$271,723,503**	**$51,910,921**

(1) Employee contributions began January 1, 2011 for members in the Year 2000 Plan - 2011 Tier.

(2) 2004 transfer from MOSERS for Highway Satety employees and 2011 transfer from MOSERS for Water Patrol employees.

Benefit Payments By Type

MoDOT and Patrol Employees' Retirement System
Benefit Payments by Type, Last Ten Fiscal Years

Type of Benefit	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Age and Service Benefits:										
Retiree and Survivor Annuity Payments	$151,647,091	$159,145,368	$167,654,271	$175,588,494	$183,103,253	$188,171,369	$195,964,396	$205,617,640	$212,840,210	$218,827,986
BackDROP Payments	9,721,059	13,177,432	14,631,932	12,859,452	10,358,181	10,792,932	18,138,891	13,426,923	13,438,730	16,366,338
Disability Benefits:										
Long-Term Disability	386,026	288,908	223,501	179,239	137,624	101,875	85,240	79,964	79,184	76,061
Work-Related Disability	747,723	703,159	728,507	692,043	664,469	648,320	668,821	691,227	774,541	716,047
Normal Disability	244,208	220,490	207,417	186,349	163,485	167,427	166,140	138,281	121,872	108,891
Insured Disability	1,796,299	1,905,122	1,835,734	1,847,673	1,759,262	1,696,845	1,592,517	1,512,685	1,531,578	1,554,676
Death Benefits	455,000	530,000	520,000	660,000	535,000	575,000	675,000	665,000	703,571	810,000
Service Transfer Payments(2)	0	0	0	0	0	0	2,410,526	2,357,080	1,876,336	3,147,482
Employee Contribution Refunds (1)	0	0	0	0	0	0	2,789	29,300	18,686	107,395
Total Benefits	**$164,997,406**	**$175,970,479**	**$185,801,362**	**$192,013,250**	**$196,721,274**	**$202,153,768**	**$219,704,320**	**$224,518,100**	**$231,384,708**	**$241,714,876**

(1) Employee contributions began January 1, 2011 for members in the Year 2000 Plan - 2011 Tier.
(2) Reciprocal transfer legislation enacted effective August 28, 2011.

Schedule of Retired Members By Type of Benefit

All Members*

Amount of Monthly Benefit	Retirement Normal	Retirement Early	Disability Normal	Disability Work-Related	Disability Long-Term	Survivor	Total Recipients
1 - 200	29	82	3	28	77	102	321
201 - 400	165	186	3	0	6	183	543
401 - 600	169	144	1	0	7	183	504
601 - 800	168	96	1	1	1	194	461
801 - 1000	182	53	3	1	1	172	412
1001 - 1200	255	26	1	2	0	134	418
1201 - 1400	334	16	0	1	1	138	490
1401 - 1600	415	8	2	2	0	105	532
1601 - 1800	397	4	0	4	0	89	494
1801 - 2000	393	3	0	5	0	81	482
2001 - 2200	355	2	0	3	0	72	432
2201 - 2400	309	2	0	4	0	67	382
2401 - 2600	317	0	0	0	0	46	363
2601 - 2800	308	1	0	2	0	55	366
2801 - 3000	283	0	0	1	0	51	335
> 3000	1,880	1	0	3	0	202	2,086
TOTALS	**5,959**	**624**	**14**	**57**	**93**	**1,874**	**8,621**

* This chart includes nine retirement system staff retirees

MoDOT

Amount of Monthly Benefit	Retirement Normal	Retirement Early	Disability Normal	Disability Work-Related	Disability Long-Term	Survivor	Total Recipients
1 - 200	20	64	3	23	65	94	269
201 - 400	120	151	3	0	5	167	446
401 - 600	118	121	1	0	5	161	406
601 - 800	119	84	1	1	1	171	377
801 - 1000	136	46	3	1	1	151	338
1001 - 1200	205	22	1	2	0	117	347
1201 - 1400	288	14	0	1	1	122	426
1401 - 1600	350	8	2	2	0	78	440
1601 - 1800	342	4	0	4	0	77	427
1801 - 2000	335	3	0	5	0	69	412
2001 - 2200	296	2	0	2	0	58	358
2201 - 2400	268	2	0	2	0	45	317
2401 - 2600	267	0	0	0	0	31	298
2601 - 2800	271	1	0	2	0	32	306
2801 - 3000	242	0	0	1	0	35	278
> 3000	1,121	1	0	2	0	155	1,279
TOTALS	**4,498**	**523**	**14**	**48**	**78**	**1,563**	**6,724**

Schedule of Retired Members By Type of Benefit

Uniformed Patrol

Amount of Monthly Benefit	Retirement Normal	Retirement Early	Disability Normal	Disability Work-Related	Disability Long-Term	Survivor	Total Recipients
1 - 200	1	0	0	4	1	1	7
201 - 400	3	0	0	0	0	4	7
401 - 600	10	0	0	0	0	4	14
601 - 800	11	0	0	0	0	3	14
801 - 1000	7	0	0	0	0	9	16
1001 - 1200	6	0	0	0	0	2	8
1201 - 1400	3	0	0	0	0	5	8
1401 - 1600	1	0	0	0	0	14	15
1601 - 1800	2	0	0	0	0	5	7
1801 - 2000	4	0	0	0	0	5	9
2001 - 2200	2	0	0	1	0	11	14
2201 - 2400	3	0	0	1	0	19	23
2401 - 2600	4	0	0	0	0	14	18
2601 - 2800	3	0	0	0	0	22	25
2801 - 3000	2	0	0	0	0	15	17
> 3000	658	0	0	1	0	43	702
TOTALS	**720**	**0**	**0**	**7**	**1**	**176**	**904**

Civilian Patrol

Amount of Monthly Benefit	Retirement Normal	Retirement Early	Disability Normal	Disability Work-Related	Disability Long-Term	Survivor	Total Recipients
1 - 200	7	18	0	1	11	7	44
201 - 400	42	35	0	0	1	12	90
401 - 600	41	23	0	0	2	18	84
601 - 800	38	12	0	0	0	20	70
801 - 1000	39	7	0	0	0	12	58
1001 - 1200	44	4	0	0	0	15	63
1201 - 1400	42	2	0	0	0	11	55
1401 - 1600	64	0	0	0	0	13	77
1601 - 1800	53	0	0	0	0	7	60
1801 - 2000	53	0	0	0	0	7	60
2001 - 2200	57	0	0	0	0	3	60
2201 - 2400	38	0	0	1	0	3	42
2401 - 2600	46	0	0	0	0	1	47
2601 - 2800	34	0	0	0	0	1	35
2801 - 3000	39	0	0	0	0	1	40
> 3000	95	0	0	0	0	4	99
TOTALS	**732**	**101**	**0**	**2**	**14**	**135**	**984**

Schedule of Average Monthly Benefit Payments

MoDOT

By Years of Service

Retired In Fiscal Year		0 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41+
2006	**Average Benefit**	**$394**	**700**	**1,014**	**1,389**	**2,267**	**2,195**	**2,948**	**3,743**
2006	Average FAP	$3,213	2,350	2,763	2,957	3,420	3,262	4,093	4,086
2006	**Current Retirees**	**12**	**14**	**15**	**22**	**54**	**29**	**10**	**7**
2007	**Average Benefit**	**$295**	**583**	**907**	**1,330**	**2,382**	**2,576**	**2,838**	**3,498**
2007	Average FAP	$2,120	2,414	2,331	2,887	3,359	3,636	4,044	4,031
2007	**Current Retirees**	**21**	**24**	**18**	**28**	**64**	**36**	**14**	**6**
2008	**Average Benefit**	**$287**	**524**	**1,023**	**1,494**	**2,420**	**2,820**	**2,207**	**3,535**
2008	Average FAP	$2,262	2,402	2,991	3,392	3,435	3,917	3,513	4,463
2008	**Current Retirees**	**27**	**28**	**25**	**35**	**57**	**50**	**18**	**5**
2009	**Average Benefit**	**$324**	**672**	**1,070**	**1,626**	**2,404**	**2,717**	**3,059**	**3,594**
2009	Average FAP	$2,545	2,926	3,364	3,468	3,523	3,672	3,920	4,539
2009	**Current Retirees**	**28**	**17**	**14**	**39**	**42**	**44**	**16**	**5**
2010	**Average Benefit**	**$300**	**590**	**1,206**	**1,691**	**2,540**	**2,998**	**2,774**	**3,417**
2010	Average FAP	$2,388	2,535	3,356	3,511	3,643	3,953	4,015	4,008
2010	**Current Retirees**	**26**	**24**	**16**	**38**	**60**	**41**	**3**	**3**
2011	**Average Benefit**	**$327**	**600**	**1,014**	**1,845**	**2,878**	**3,207**	**3,149**	**4,085**
2011	Average FAP	$2,663	2,659	3,135	3,577	3,939	3,932	3,863	4,167
2011	**Current Retirees**	**21**	**35**	**23**	**43**	**65**	**35**	**6**	**3**
2012	**Average Benefit**	**$408**	**520**	**1,049**	**1,712**	**2,939**	**3,333**	**2,657**	**0**
2012	Average FAP	$2,945	2,769	3,432	3,509	4,226	4,272	3,785	0
2012	**Current Retirees**	**36**	**23**	**39**	**61**	**106**	**56**	**4**	**0**
2013	**Average Benefit**	**$294**	**579**	**1,163**	**1,797**	**2,971**	**3,086**	**4,692**	**2,458**
2013	Average FAP	$2,627	2,932	3,538	3,814	4,341	3,982	5,516	2,802
2013	**Current Retirees**	**34**	**36**	**45**	**68**	**99**	**27**	**2**	**1**
2014	**Average Benefit**	**$298**	**638**	**1,135**	**1,936**	**3,081**	**3,551**	**2,396**	**0**
2014	Average FAP	$2,449	3,032	3,416	3,851	4,508	4,606	3,781	0
2014	**Current Retirees**	**27**	**27**	**22**	**43**	**75**	**14**	**2**	**0**
2015	**Average Benefit**	**$311**	**605**	**1,021**	**1,734**	**2,886**	**3,437**	**3,399**	**0**
2015	Average FAP	$2,622	3,033	3,422	3,605	4,333	4,659	4,286	0
2015	**Current Retirees**	**54**	**60**	**40**	**50**	**79**	**19**	**2**	**0**

FAP = Final Average Pay

Schedule of Average Monthly Benefit Payments

Uniformed Patrol

By Years of Service

Retired In Fiscal Year		0-10	11-15	16-20	21-25	26-30	31-35	36-40	41+
2006	**Average Benefit**	**$0**	**0**	**1,716**	**0**	**4,240**	**5,124**	**5,710**	**0**
2006	Average FAP	$0	0	3,007	0	4,884	5,214	5,004	0
2006	**Current Retirees**	**0**	**0**	**2**	**0**	**6**	**10**	**1**	**0**
2007	**Average Benefit**	**$697**	**884**	**1,168**	**0**	**4,315**	**5,613**	**6,252**	**0**
2007	Average FAP	$2,292	2,260	2,475	0	5,287	5,761	5,436	0
2007	**Current Retirees**	**1**	**3**	**1**	**0**	**5**	**12**	**4**	**0**
2008	**Average Benefit**	**$567**	**0**	**2,173**	**0**	**5,029**	**5,144**	**5,761**	**0**
2008	Average FAP	$1,898	0	3,969	0	6,098	5,253	5,575	0
2008	**Current Retirees**	**1**	**0**	**1**	**0**	**5**	**10**	**3**	**0**
2009	**Average Benefit**	**$0**	**843**	**0**	**2,388**	**4,961**	**5,145**	**5,627**	**7,033**
2009	Average FAP	$0	2,557	0	3,711	6,140	5,832	5,565	5,974
2009	**Current Retirees**	**0**	**1**	**0**	**2**	**6**	**16**	**6**	**1**
2010	**Average Benefit**	**$0**	**1,027**	**1,406**	**0**	**4,587**	**6,199**	**6,664**	**0**
2010	Average FAP	$0	2,749	3,072	0	5,625	6,668	7,201	0
2010	**Current Retirees**	**0**	**3**	**1**	**0**	**7**	**8**	**2**	**0**
2011	**Average Benefit**	**$574**	**1,044**	**0**	**2,617**	**4,604**	**5,837**	**7,060**	**0**
2011	Average FAP	$2,245	3,051	0	4,595	6,107	6,366	6,746	0
2011	**Current Retirees**	**1**	**2**	**0**	**2**	**9**	**8**	**1**	**0**
2012	**Average Benefit**	**$0**	**655**	**0**	**2,899**	**4,479**	**5,642**	**0**	**0**
2012	Average FAP	$0	2,463	0	4,521	6,012	6,439	0	0
2012	**Current Retirees**	**0**	**1**	**0**	**2**	**9**	**17**	**0**	**0**
2013	**Average Benefit**	**$542**	**0**	**1,503**	**3,817**	**4,679**	**5,400**	**7,151**	**0**
2013	Average FAP	$2,316	0	3,917	6,507	6,473	6,505	7,510	0
2013	**Current Retirees**	**1**	**0**	**2**	**2**	**9**	**8**	**1**	**0**
2014	**Average Benefit**	**$423**	**0**	**0**	**3,373**	**4,594**	**5,642**	**6,362**	**0**
2014	Average FAP	$2,503	0	0	6,070	6,528	6,580	6,237	0
2014	**Current Retirees**	**5**	**0**	**0**	**1**	**24**	**11**	**1**	**0**
2015	**Average Benefit**	**$677**	**1,378**	**0**	**3,573**	**4,588**	**5,705**	**0**	**0**
2015	Average FAP	$3,119	4,458	0	6,736	6,655	6,951	0	0
2015	**Current Retirees**	**1**	**1**	**0**	**2**	**20**	**10**	**0**	**0**

FAP = Final Average Pay

Schedule of Average Monthly Benefit Payments

Civilian Patrol

By Years of Service

Retired In Fiscal Year		0-10	11-15	16-20	21-25	26-30	31-35	36-40	41+
2006	**Average Benefit**	**$186**	**546**	**768**	**1,199**	**2,660**	**2,411**	**2,268**	**0**
2006	Average FAP	$2,080	2,066	2,003	2,537	3,343	3,439	3,235	0
2006	**Current Retirees**	**4**	**5**	**2**	**11**	**7**	**12**	**2**	**0**
2007	**Average Benefit**	**$314**	**551**	**654**	**1,091**	**2,407**	**2,191**	**1,781**	**0**
2007	Average FAP	$1,853	1,924	2,082	2,491	3,600	3,023	2,868	0
2007	**Current Retirees**	**5**	**5**	**5**	**6**	**8**	**13**	**2**	**0**
2008	**Average Benefit**	**$262**	**634**	**900**	**1,200**	**1,665**	**2,689**	**4,119**	**0**
2008	Average FAP	$2,186	2,736	2,551	2,658	2,753	3,796	4,151	0
2008	**Current Retirees**	**6**	**6**	**7**	**5**	**8**	**11**	**1**	**0**
2009	**Average Benefit**	**$227**	**373**	**645**	**0**	**2,603**	**2,474**	**1,843**	**2,487**
2009	Average FAP	$2,090	1,874	2,135	0	3,690	3,369	2,865	2,679
2009	**Current Retirees**	**4**	**6**	**3**	**0**	**11**	**8**	**3**	**2**
2010	**Average Benefit**	**$278**	**466**	**1,122**	**1,241**	**2,897**	**2,365**	**4,519**	**0**
2010	Average FAP	$2,285	2,124	3,091	2,654	4,106	3,188	5,179	0
2010	**Current Retirees**	**8**	**3**	**5**	**8**	**5**	**3**	**2**	**0**
2011	**Average Benefit**	**$323**	**538**	**842**	**1,870**	**2,760**	**2,902**	**0**	**0**
2011	Average FAP	$2,526	2,343	2,469	3,495	4,034	3,843	0	0
2011	**Current Retirees**	**4**	**8**	**6**	**12**	**14**	**8**	**0**	**0**
2012	**Average Benefit**	**$279**	**501**	**1,177**	**1,601**	**2,469**	**2,851**	**0**	**0**
2012	Average FAP	$2,133	2,289	3,501	3,115	3,690	3,458	0	0
2012	**Current Retirees**	**7**	**6**	**4**	**8**	**16**	**6**	**0**	**0**
2013	**Average Benefit**	**$318**	**511**	**952**	**1,698**	**2,380**	**2,836**	**0**	**0**
2013	Average FAP	$2,723	2,551	2,888	3,498	3,359	4,003	0	0
2013	**Current Retirees**	**13**	**9**	**7**	**10**	**9**	**6**	**0**	**0**
2014	**Average Benefit**	**$294**	**544**	**835**	**1,755**	**2,335**	**2,511**	**0**	**0**
2014	Average FAP	$2,319	2,803	2,511	3,580	3,792	3,105	0	0
2014	**Current Retirees**	**9**	**12**	**7**	**7**	**13**	**3**	**0**	**0**
2015	**Average Benefit**	**$292**	**562**	**906**	**1,720**	**2,171**	**3,533**	**0**	**0**
2015	Average FAP	$2,342	2,568	2,981	3,504	3,716	4,911	0	0
2015	**Current Retirees**	**12**	**12**	**9**	**12**	**14**	**6**	**0**	**0**

FAP = Final Average Pay

Schedule of Average Monthly Benefit Payments

MPERS

By Years of Service

Retired In Fiscal Year		0-10	11-15	16-20	21-25	26-30	31-35	36-40	41+
2006	**Average Benefit**	**$0**	**0**	**0**	**0**	**0**	**3,589**	**0**	**0**
2006	Average FAP	$0	0	0	0	0	4,178	0	0
2006	**Current Retirees**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**
2007	**Average Benefit**	**$0**	**0**	**1,247**	**0**	**0**	**0**	**0**	**0**
2007	Average FAP	$0	0	3,081	0	0	0	0	0
2007	**Current Retirees**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**
2009	**Average Benefit**	**$0**	**0**	**0**	**0**	**0**	**3,040**	**0**	**8,392**
2009	Average FAP	$0	0	0	0	0	5,922	0	9,989
2009	**Current Retirees**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**
2012	**Average Benefit**	**$0**	**0**	**0**	**0**	**4,754**	**0**	**0**	**0**
2012	Average FAP	$0	0	0	0	7,087	0	0	0
2012	**Current Retirees**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**
2013	**Average Benefit**	**$0**	**0**	**0**	**0**	**0**	**9,761**	**0**	**0**
2013	Average FAP	$0	0	0	0	0	11,108	0	0
2013	**Current Retirees**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**
2015	**Average Benefit**	**$0**	**0**	**0**	**0**	**0**	**4,231**	**0**	**0**
2015	Average FAP	$0	0	0	0	0	4,764	0	0
2015	**Current Retirees**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**

Note: There were no retirements during the years not shown above.
FAP = Final Average Pay

Active Member Data

Schedule of Participating Employers

	MoDOT		Patrol		MPERS		Total	
	Employees	%	Employees	%	Employees	%	Employees	%
2006	6,839	75.91	2,159	23.96	12	0.13	9,010	100
2007	6,459	74.76	2,168	25.10	12	0.14	8,639	100
2008	6,376	74.30	2,192	25.55	13	0.15	8,581	100
2009	6,601	74.90	2,199	24.95	13	0.15	8,813	100
2010	6,164	73.21	2,243	26.64	13	0.15	8,420	100
2011	5,796	71.03	2,350	28.80	14	0.17	8,160	100
2012	5,093	68.42	2,337	31.39	14	0.19	7,444	100
2013	4,985	67.95	2,336	31.84	15	0.21	7,336	100
2014	5,041	67.98	2,357	31.79	17	0.23	7,415	100
2015	4,993	67.72	2,364	32.06	16	0.22	7,373	100

Data for this chart is as of June 30, 2015.

Active Member Data
For the Year Ended June 30, 2015

By Age

Closed Plan

Age	Total	MoDOT	Civilian Patrol	Uniformed Patrol	MPERS
< 21	0	0	0	0	0
21 - 25	0	0	0	0	0
26 - 30	0	0	0	0	0
36 - 40	270	183	26	61	0
41 - 45	655	387	57	208	3
46 - 50	865	556	103	204	2
51 - 55	767	541	102	124	0
56 - 60	388	297	65	25	1
61 - 65	85	64	21	0	0
66+	11	8	3	0	0
Total	**3,064**	**2,056**	**379**	**622**	**7**
Average Age		**49**	**50**	**46**	**45**

Year 2000 Plan

Age	Total	MoDOT	Civilian Patrol	Uniformed Patrol	MPERS
< 21	0	0	0	0	0
21 - 25	11	7	3	1	0
26 - 30	308	160	50	98	0
31 - 35	564	341	92	130	1
36 - 40	506	330	70	105	1
41 - 45	403	289	64	48	2
46 - 50	329	246	68	14	1
51 - 55	342	278	63	1	0
56 - 60	210	173	36	1	0
61 - 65	71	53	18	0	0
66+	11	4	7	0	0
Total	**2,755**	**1,881**	**471**	**398**	**5**
Average Age		**43**	**43**	**34**	**41**

Year 2000 Plan - 2011 Tier

Age	Total	MoDOT	Civilian Patrol	Uniformed Patrol	MPERS
< 21	29	28	1	0	0
21 - 25	364	226	51	87	0
26 - 30	396	220	74	101	1
31 - 35	209	158	27	23	1
36 - 40	140	112	19	9	0
41 - 45	128	95	27	5	1
46 - 50	107	79	27	1	0
51 - 55	106	88	17	0	1
56 - 60	56	40	16	0	0
61 - 65	14	6	8	0	0
66+	5	4	1	0	0
Total	**1,554**	**1,056**	**268**	**226**	**4**
Average Age		**34**	**36**	**27**	**38**

Active Member Data
For the Year Ended June 30, 2015

By Years of Service

Closed Plan

Years of Service	Total	MoDOT	Civilian Patrol	Uniformed Patrol	MPERS
< 01	1	0	1	0	0
01 - 05	1	0	0	1	0
06 - 10	8	6	1	1	0
11 - 15	285	221	33	30	1
16 - 20	1,183	750	156	274	3
21 - 25	901	608	90	201	2
26 - 30	509	356	62	90	1
31 - 35	130	80	29	21	0
36 - 40	37	28	5	4	0
41 - 45	9	7	2	0	0
46+	0	0	0	0	0
Total	**3,064**	**2,056**	**379**	**622**	**7**
Average Service		**22**	**22**	**21**	**20**

Year 2000 Plan

Years of Service	Total	MoDOT	Civilian Patrol	Uniformed Patrol	MPERS
< 01	41	30	11	0	0
01 - 05	295	156	87	52	0
06 - 10	1,351	939	208	200	4
11 - 15	1,045	741	159	144	1
16 - 20	18	12	6	0	0
21 - 25	4	3	0	1	0
26 - 30	0	0	0	0	0
31 - 35	1	0	0	1	0
36 - 40	0	0	0	0	0
41 - 45	0	0	0	0	0
46+	0	0	0	0	0
Total	**2,755**	**1,881**	**471**	**398**	**5**
Average Service		**9**	**9**	**9**	**9**

Year 2000 Plan - 2011 Tier

Years of Service	Total	MoDOT	Civilian Patrol	Uniformed Patrol	MPERS
< 01	577	474	75	28	0
01 - 05	977	582	193	198	4
06 - 10	0	0	0	0	0
11 - 15	0	0	0	0	0
16 - 20	0	0	0	0	0
21 - 25	0	0	0	0	0
26 - 30	0	0	0	0	0
31 - 35	0	0	0	0	0
36 - 40	0	0	0	0	0
41 - 45	0	0	0	0	0
46+	0	0	0	0	0
Total	**1,554**	**1,056**	**268**	**226**	**4**
Average Service		**1**	**1**	**2**	**2**

Terminated Vested Member Data
For the Year Ended June 30, 2015

By Age

Closed Plan

Age	Total	MoDOT	Civilian Patrol	Uniformed Patrol	MPERS
< 21	0	0	0	0	0
21 - 25	0	0	0	0	0
26 - 30	0	0	0	0	0
31 - 35	18	16	2	0	0
36 - 40	122	96	17	8	1
41 - 45	343	256	32	55	0
46 - 50	411	323	38	50	0
51 - 55	447	371	54	22	0
56 - 60	191	171	20	0	0
61 - 65	30	27	3	0	0
66+	2	2	0	0	0
Total	**1,564**	**1,262**	**166**	**135**	**1**
Average Age	**0**	**49**	**48**	**46**	**38**

Year 2000 Plan

Age	Total	MoDOT	Civilian Patrol	Uniformed Patrol	MPERS
< 21	0	0	0	0	0
21 - 25	0	0	0	0	0
26 - 30	49	38	7	4	0
31 - 35	163	132	24	6	1
36 - 40	181	155	14	12	0
41 - 45	136	117	16	3	0
46 - 50	90	84	5	1	0
51 - 55	79	68	10	1	0
56 - 60	32	30	2	0	0
61 - 65	5	5	0	0	0
66+	1	1	0	0	0
Total	**736**	**630**	**78**	**27**	**1**
Average Age	**0**	**41**	**39**	**37**	**33**

Year 2000 Plan - 2011 Tier

Age	Total	MoDOT	Civilian Patrol	Uniformed Patrol	MPERS
< 21	0	0	0	0	0
21 - 25	0	0	0	0	0
26 - 30	0	0	0	0	0
31 - 35	0	0	0	0	0
36 - 40	0	0	0	0	0
41 - 45	0	0	0	0	0
46 - 50	0	0	0	0	0
51 - 55	0	0	0	0	0
56 - 60	0	0	0	0	0
61 - 65	0	0	0	0	0
66+	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**
Average Age	**0**	**0**	**0**	**0**	**0**

Terminated Vested Member Data

For the Year Ended June 30, 2015

By Years of Service

Closed Plan

Years of Service	Total	MoDOT	Civilian Patrol	Uniformed Patrol	MPERS
< 01	2	2	0	0	0
42009	204	155	25	24	0
42165	669	523	69	76	1
42323	418	341	49	28	0
16 - 20	199	177	15	7	0
21 - 25	68	60	8	0	0
26 - 30	4	4	0	0	0
31 - 35	0	0	0	0	0
36 - 40	0	0	0	0	0
41 - 45	0	0	0	0	0
46+	0	0	0	0	0
Total	**1,564**	**1,262**	**166**	**135**	**1**
Average Service		**11**	**10**	**9**	**8**

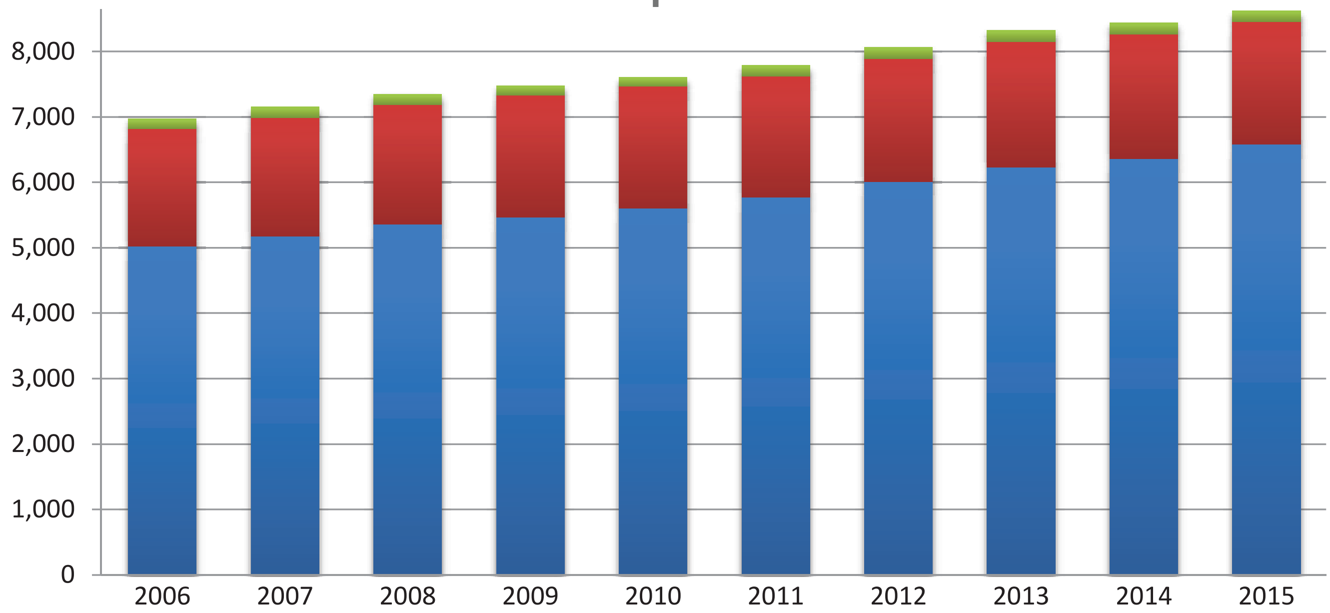
Year 2000 Plan

Years of Service	Total	MoDOT	Civilian Patrol	Uniformed Patrol	MPERS
< 01	3	2	1	0	0
42009	166	137	24	4	1
42165	479	417	43	19	0
42323	86	72	10	4	0
16 - 20	2	2	0	0	0
21 - 25	0	0	0	0	0
26 - 30	0	0	0	0	0
31 - 35	0	0	0	0	0
36 - 40	0	0	0	0	0
41 - 45	0	0	0	0	0
46+	0	0	0	0	0
Total	**736**	**630**	**78**	**27**	**1**
Average Service		**8**	**7**	**8**	**5**

Year 2000 Plan - 2011 Tier

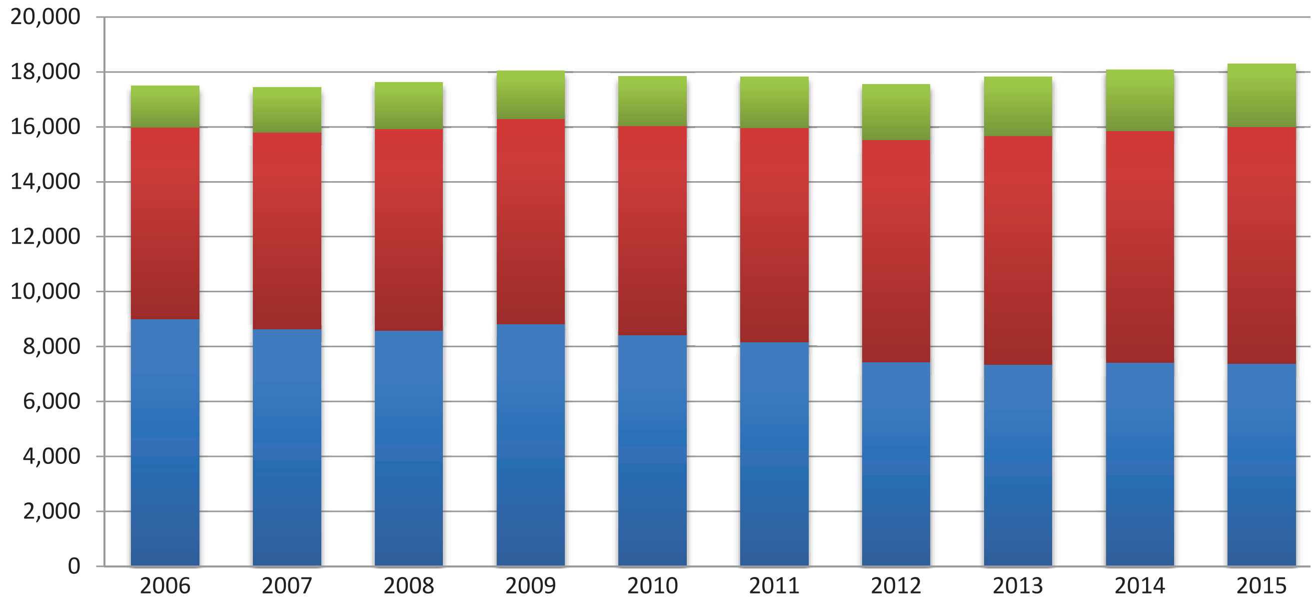
Years of Service	Total	MoDOT	Civilian Patrol	Uniformed Patrol	MPERS
< 01	0	0	0	0	0
42009	0	0	0	0	0
42165	0	0	0	0	0
42323	0	0	0	0	0
16 - 20	0	0	0	0	0
21 - 25	0	0	0	0	0
26 - 30	0	0	0	0	0
31 - 35	0	0	0	0	0
36 - 40	0	0	0	0	0
41 - 45	0	0	0	0	0
46+	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**
Average Service		**0**	**0**	**0**	**0**

Benefit Recipients



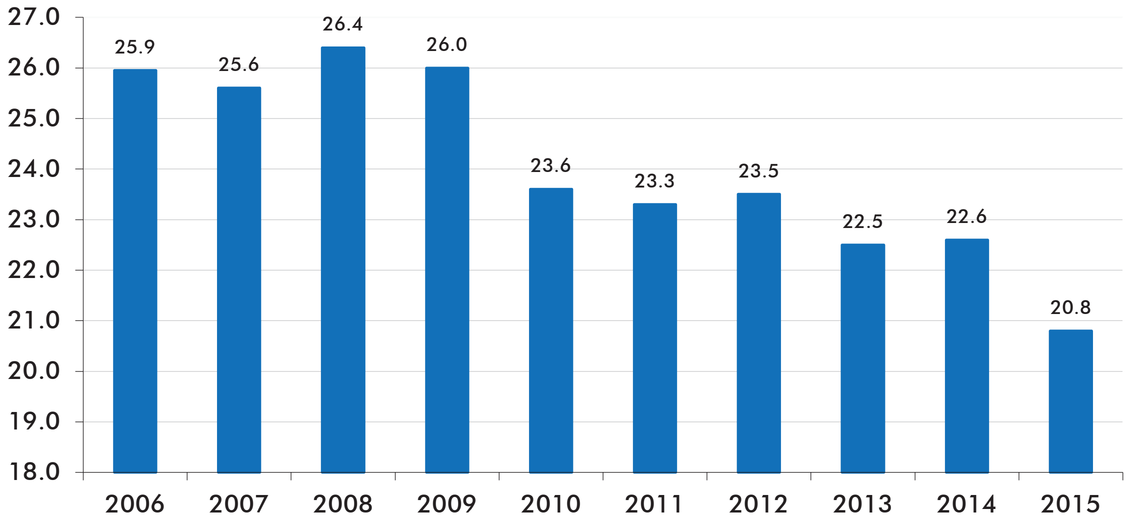
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Disabilities	154	166	155	146	142	166	175	178	173	164
Survivors	1,793	1,812	1,833	1,863	1,862	1,855	1,880	1,914	1,900	1,874
Retirees	5,024	5,177	5,357	5,471	5,606	5,771	6,013	6,234	6,365	6,583

Membership Distribution

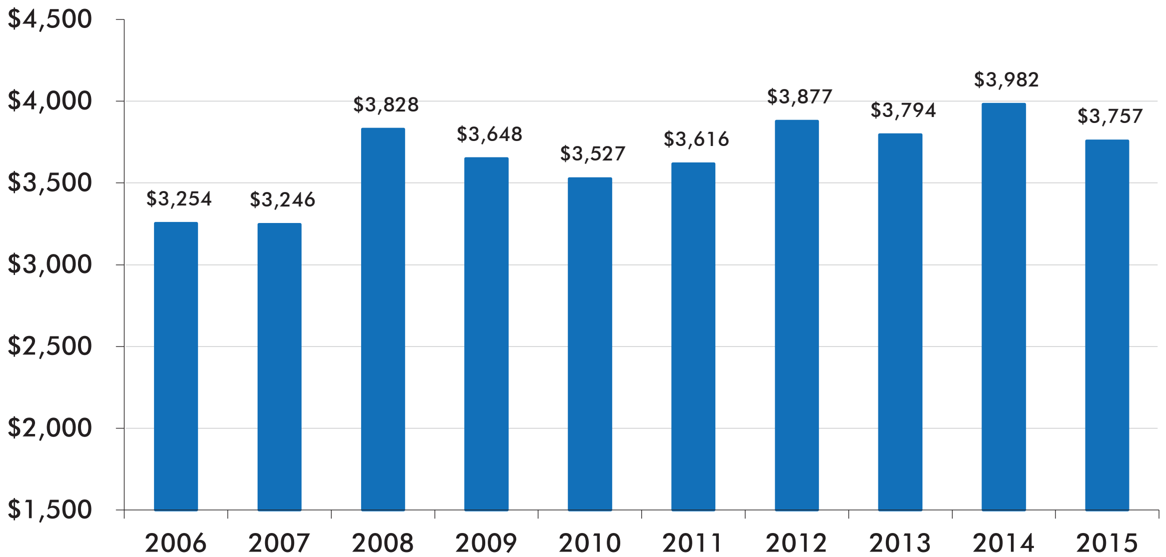


	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Term Vested Members	1,502	1,634	1,689	1,737	1,799	1,864	2,038	2,153	2,222	2,300
Benefit Recipients	6971	7,155	7,345	7,480	7,610	7,792	8,068	8,326	8,438	8,621
Active Members	9,010	8,639	8,581	8,813	8,420	8,160	7,444	7,336	7,415	7,373

Average Years of Service for New Retirees



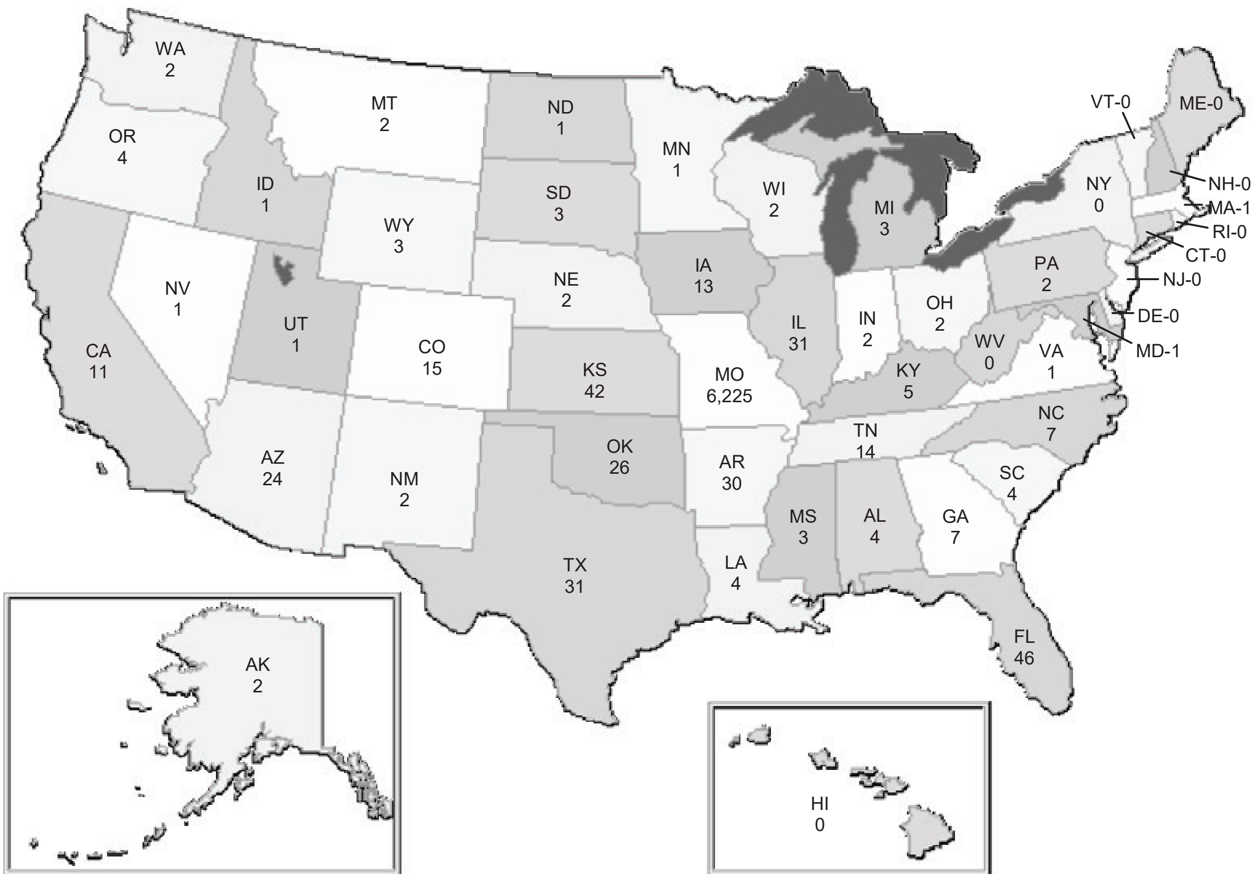
Final Average Pay for New Retirees



Location of MPERS Retirees

For the Year Ended June 30, 2015

This map represents the demographic distribution of retirees by state.



1 Retiree resides in England
1 Retiree resides in India

Notes

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