

# Michigan Public School Employees' Retirement System

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A Pension and Other Employee Benefit Trust Fund of the State of Michigan

## Summary Annual Report for Fiscal Year 2015



**Prepared by**  
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# About the Michigan Public School Employees' Retirement System

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This report is in compliance with Public Act 314 of 1965, as amended. The contents came from the complete Michigan Public School Employees' Retirement System 2015 Comprehensive Annual Financial Report (CAFR), an existing public data source available on our website at [www.michigan.gov/orsschools](http://www.michigan.gov/orsschools), and additional analysis performed after September 30, 2015.

The Michigan Public School Employees' Retirement System serves 207,651 retirees receiving monthly benefits, and 228,419 active members. Public school employees' pensions are protected by Michigan's Constitution. The System's net assets are held in trust to meet future benefit payments.

The State Treasurer is the investment fiduciary and custodian of all investments of the System pursuant to State law.

## Michigan Public School Employees' Retirement System Service Providers

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A service provider is any individual, third-party agent or consultant, or other entity that receives direct or indirect compensation for consulting, investment management, brokerage, or custody services related to the system's assets.

Accel	Bivium Capital Partners, LLC	Cowen Group
Advent	BlackRock Financial Management	Credit Suisse Securities, LLC
AEW Capital Management	Blackstone Alternative Asset Management	Credit Suisse/DLJ
Affinity	Blackstone Group	Crescent Capital
Apax	BMO Capital Markets	Czech Asset Management
Apollo Capital Management	BNP Paribas	DA Davidson & Co
Apollo Global Management	BNY ConvergeEx	Dalmore Capital Limited
Apollo Stonetower Fund Management, LLC	Brevan Howard Asset Management	Deutsche Bank
Arboretum	Bridgepoint	Devon Self Storage
Arclight Capital Partners	Brookfield Asset Management Inc	Dodge & Cox
Ardian	BTIG, Inc	Domain Capital Advisors
Ares	Capital Institutional Services	Drexel Hamilton
Attucks Asset Management	Capri Capital Partners	Edens Limited Partnership
Avanath Capital Management	Carlyle Investment Management	EDF Ventures
Avenue International	Castle Harlan	Encap
AXA (Ardian)	CCMP	EnTrust Capital
Axiom-Asia	Centerbridge Capital Partners	Fidelity Institutional Asset Management
Balfour Beatty Group	Cerberus	FIMI
Ballie Gifford International, LLC	CIM Investment Advisors	First Reserve Management
Bank of America/Merrill	Citco Fund Services	FirstMark Capital
Bank of Montreal	Citigroup Global Markets, Inc.	Fisher Investments Institutional Group
Bank of Nova Scotia	Clarion Partners	Five Star Realty Partners
Barclay's Capital	Clarkston Capital Partners, LLC	Flagship Ventures
BB&T Capital Markets	CMEA	Fortress Investment Group
BC European Capital	Cobalt Capital Partners	Fox Paine
Beacon Capital Partners	Coller Capital	Franklin Templeton Institutional
Bentall Kennedy	Columbia Management Investment Advisors	Freeman Spogli Equity Partners
Berkshire	CoStar Realty Information Inc.	FrontPoint Partners
BGC Partners		FTN Financial

## Michigan Public School Employees' Retirement System Service Providers, continued

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Gateway Capital	Management	Rhone Partners
GCM/Grosvenor	Lubert-Adler Management Company	Rialto Capital
Glencoe	Marathon Asset Management	Ridgewood Energy
Globespan	Matlin Patterson Global Advisors	Ridgewood Equity Partners
Goldman Sachs	Menlo Ventures	Riverside
Green Equity Investors	Merit Energy	RW Baird
Grosvenor Capital Management	Meritech	RW Pressprich & Co.
GSO	Merrill Lynch Pierce Fenner & Smith	Sanford C Bernstein & Co, Inc
GSO Capital Partners	Mesirow Financial Inc.	Scotia Capital
GW Capital, Inc	Metropolitan West	Seizert Capital Partners
H.I.G.	MFR Securities	Shamrock
Harbourvest Partners, LP	MFS Institutional Advisors, Inc	Silver Lake
Harvest Partners	Mischler Financial Group	Societe Generale
Heitman Capital Management	Morgan Stanley	Sprout
Henderson Global Investors	MPM	State Street Corporation
Hewitt Ennis Knupp	Multi-Bank Securities	State Street Global Advisors
Highbridge Capital	Napier Park Global Capital	Stifel Nicolaus & Co
Highbridge Principal Strategies	New Leaf Ventures	Stockbridge Capital Group
Hilltop Securities	Nordic Capital	Stonepeak Advisors LLC
Hopen Life Sciences Ventures	NorthPointe Capital	Sun Trust, Robinson, Humphrey
Huron	Oak Investment Partners	Susquehanna Intl Group
Insight Venture Partners	Oaktree	T Rowe Price Associates, Inc
Invesco Ltd	Ocqueoc	TCW
Jana Partners	One Liberty	The John Buck Company
JP Morgan Asset Management	Oppenheimer & Co.	The Shansby Group
JP Morgan Investment Management	Orchard Global Asset Management	TPG
Kayne Anderson	Orion Resource Partners	TPG Real Estate Advisors
KBS Realty Advisors	OTA Ltd Partnership	Transwestern Investment Management
Kelso	P Schoenfeld Asset Management	Trilantic
Kensington Realty Advisors	Paladin Realty Partners	True North Management Group
Kevin Miller Financial Services	Parallel Resource Partners	Turnbridge Capital Partners
Khosla	Parthenon	UBS
Kohlberg Kravis Roberts & Co	Peninsula	Unitas
L&B Realty Advisors	Permira	US Bancorp
Landmark Realty Advisors	Phoenix	Venator Real Estate
LaSalle Investment Management	PIMCO	Veritas Capital Partners
Lazard Asset Management	Piper Jaffray	Victory Capital Management
LGT Capital Partners	Principal Financial Group	Vista Equity Partners
Lightspeed Venture Partners	Proprium Capital Partners	Warburg Pincus
Lion Capital	Prudential Investment Management	Warwick Energy Group
Lloyds Banking Group	Public Pension Capital	Wayne Co
Lombard International Life Assurance Company	Questor	Wellington Management Company
Loomis Sayles & Co	Raymond James & Assoc	Wells Fargo Securities LLC
Los Angeles Capital Management	RBC Capital Markets	WestAm
Lowe Enterprises Investment	RBS Securities	Western National Group
	Renaissance Venture Capital	Woodcreek Capital Management

# Membership

Members include employees of:

- K-12 public school districts
- Intermediate school districts
- District libraries
- Public school academies/Charter schools
- Community colleges

In some instances, membership includes certain employees who began working for The following universities before January 1, 1996:

- Central Michigan University
- Eastern Michigan University
- Ferris State University
- Lake Superior State Universities
- Michigan Technological University
- Northern Michigan University
- Western Michigan University

Plan Membership and Retirement Allowances as of September 30, 2015	
Membership	FY 2015
Retirees and Beneficiaries Currently Receiving Benefits	
Regular Benefits	184,496
Survivor Benefits	16,960
Disability Benefits	6,195
<b>Total</b>	<b>207,651</b>
Current Employees	
Vested	106,671
Non-vested	104,303
<b>Total</b>	<b>210,974</b>
Inactive Employees	
Entitled to benefits and not yet receiving them	17,445
<b>Total All Members</b>	<b>436,070</b>
<i>Source: CAFR for the Fiscal Year ended September 30, 2015, p. 23.</i>	
Retirement Allowances	FY 2015
Average annual retirement allowance	\$ 22,003
Total annual retirement allowances being paid (in thousands)	\$ 4,568,852
<i>Source: Actuarial Valuation for the Fiscal Year ended September 30, 2015.</i>	

# Benefit Structures

Employees who began public school employment before January 1, 1990, and did not elect the Member Investment Plan (MIP) during the MIP enrollment periods are in the Basic Plan, a defined benefit plan.

Employees who elected MIP during enrollment periods, or first worked within the retirement system on or after January 1, 1990, but before July 1, 2010, are in the Member Investment Plan (MIP). MIP is also a defined benefit plan with different contribution and eligibility provisions.

On May 19, 2010, the Governor signed Public Act 75 of 2010 into law. As a result, any member of the Michigan Public School Employees' Retirement System who first worked after June 30, 2010, is a Pension Plus member. Pension Plus is a hybrid plan that contains a pension component with an employee contribution and a flexible and transferable defined contribution account.

On September 4, 2012, the Governor signed Public Act 300 of 2012 into law. This law added provisions for MIP and Basic members to increase, maintain, or stop their contributions to the pension fund. Those who stopped their contributions to the pension fund switched to a defined contribution plan for the remainder of their careers.

Employees who first work on or after September 4, 2012, choose between two retirement plans: the Pension Plus plan described above or a defined contribution plan. New employees are automatically enrolled as members in the Pension Plus plan as of their date of hire. They have 75 days from the last day of their first pay period, as reported to the Office of Retirement Services (ORS), to elect to opt out of the Pension Plus plan and become a qualified participant in the DC plan; if no election is made they will remain in the Pension Plus plan.

## Assets & Liabilities\*

System total assets as of September 30, 2015, were \$49.4 billion and were mostly comprised of cash, investments, and contributions due from employers.

Total liabilities as of September 30, 2015, were \$3 billion and were comprised of warrants outstanding, accounts payable, unearned revenue, and obligations under securities lending.

System assets exceeded its liabilities at the close of Fiscal Year 2015 by \$46.5 billion. Total net assets held in trust for pension and Other Post-Employment Benefits (OPEB) decreased \$0.8 billion from the previous year.\*\*

<b>Assets &amp; Liabilities (in thousands)</b> <i>(combined pension and healthcare)</i>			
<b>Assets</b>	<b>FY 2015*</b>		<b>FY 2014**</b>
Cash	\$	163,639	\$ 246,675
Receivables		410,520	370,268
Securities Lending Collateral		2,720,434	3,149,098
Investments		46,140,381	47,060,268
<b>Total Assets</b>	<b>\$</b>	<b>49,434,974</b>	<b>\$ 50,826,309</b>
<b>Liabilities</b>	<b>FY 2015*</b>		<b>FY 2014**</b>
Accounts Payable and Other Liabilities	\$	249,282	\$ 259,986
Obligations Under Securities Lending		2,720,029	3,258,914
<b>Total Liabilities</b>	<b>\$</b>	<b>2,969,311</b>	<b>\$ 3,518,899</b>
<b>Net Assets</b>	<b>\$</b>	<b>46,465,663</b>	<b>\$ 47,307,410</b>

\*Source: CAFR for the Fiscal Year ended September 30, 2015, p. 20.  
\*\*Source: CAFR for the Fiscal Year ended September 30, 2014, p. 20.

\* Liabilities in this context are exclusive of Unfunded Accrued Actuarial Liabilities (UAAL) for pension and health.

\*\* Source: CAFR for the Fiscal Year ended September 30, 2015, p. 17.

# Revenue and Expenditures

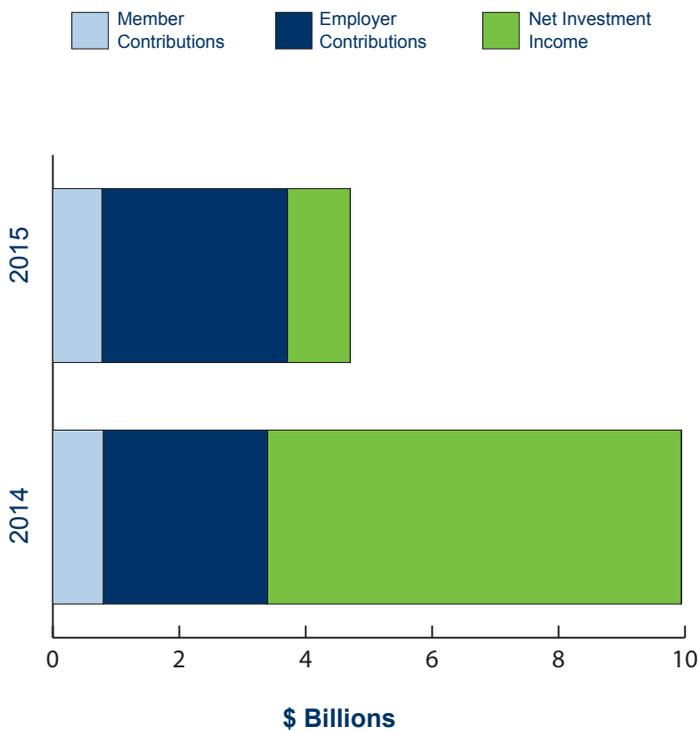
The reserves needed to finance pension and OPEB are accumulated through the collection of employer and employee contributions and through earnings on investments. Contributions and net investment income for fiscal year 2015 totaled approximately \$4.7 billion.

The primary expenses of the System include the payment of pension benefits to members and beneficiaries, payment for health, dental and vision benefits, refund of contributions to former members, and the cost of administering the System.\*

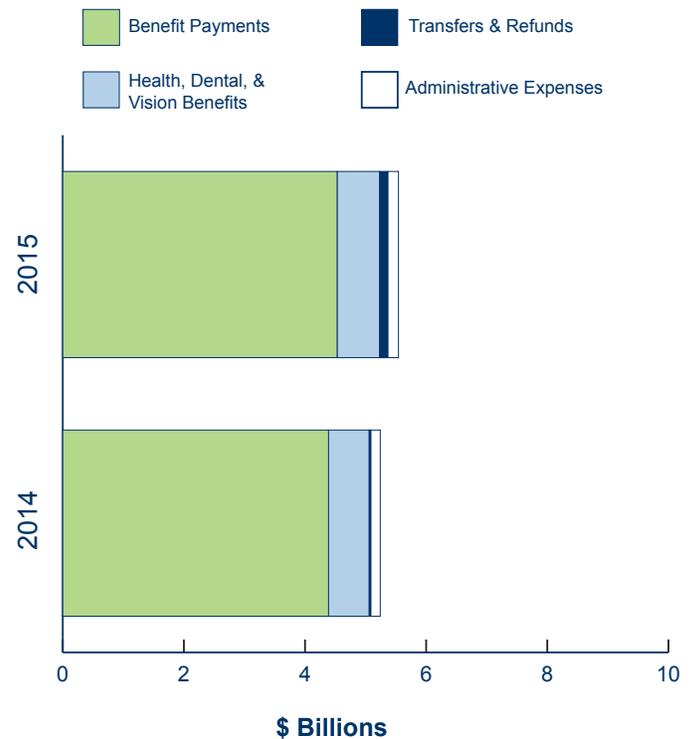
Additions & Deductions (in thousands) (combined pension and healthcare)		
Additions	FY 2015*	FY 2014**
Member Contributions	\$ 777,354	\$ 796,288
Employer Contributions	2,937,242	2,600,545
Net Investment Income (loss)	989,727	6,543,513
Transfers and Misc. Income	646	2,793
<b>Total Additions</b>	<b>\$ 4,704,969</b>	<b>\$ 9,943,138</b>
Deductions	FY 2015*	FY 2014**
Benefit Payments	\$ 4,530,916	\$ 4,388,329
Health, Dental, & Vision Benefits	700,904	669,240
Transfers & Refunds	136,998	28,910
Administrative Expenses	177,898	157,335***
<b>Total Deductions</b>	<b>\$ 5,546,716</b>	<b>\$ 5,243,813</b>
<b>Beginning of Year Net Assets</b>	<b>\$ 47,307,410</b>	<b>\$ 42,608,084</b>
<b>End of Year Net Assets</b>	<b>\$ 46,465,663</b>	<b>\$ 47,307,410</b>

\* Source: CAFR for the Fiscal Year ended September 30, 2015, pg. 21  
 \*\* Source: CAFR for the Fiscal Year ended September 30, 2014, pg. 21  
 \*\*\* Reflects participation in federal programs that provide a federal subsidy for eligible healthcare claims, producing a net overall savings to the System.

## Revenue



## Expenditures

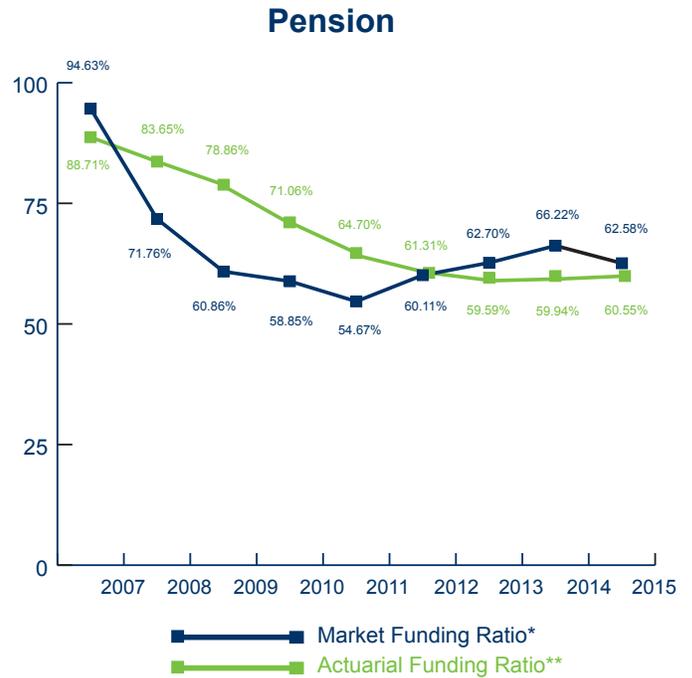


\* Source: CAFR for the Fiscal Year ended September 30, 2015, p. 18.

# Market Funded Ratios & Actuarial Funded Ratios

## Pension

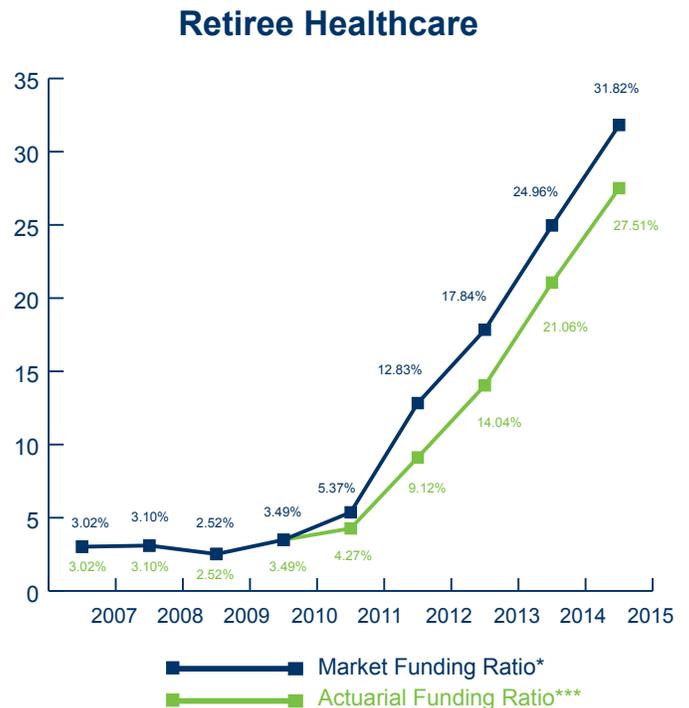
The market funding ratio is based only on the market value of assets at fiscal year end. The actuarial funding ratio incorporates a 5-year “smoothing” period that reduces volatility. The actuarial funding ratio is the common metric used by all pension plans nationwide. This smoothing process is used by almost every retirement system in the country; it helps avoid volatility in the pension systems’ funding requirements. As the economy improves, the funding ratio will also improve.



## Retiree Healthcare

Starting in 2012, the System began pre-funding retiree healthcare costs, which significantly decreased the liability and increased the asset levels. Pre-funding is a best practice that invests assets and allows investment returns to help fund the plan.

Before 2012, the system was funded on a pay-as-you-go basis, so market and actuarial funded ratio were the same. Beginning in 2011, active member contributions required by Public Act 75 of 2010 were counted in the market value, but not the actuarial value. Over time, as pre-funding and member contributions ramp up, the funding ratio will improve significantly.



\*Calculated on Market Value of Assets.

\*\*MPERS 2015 Annual Actuarial Valuation Report

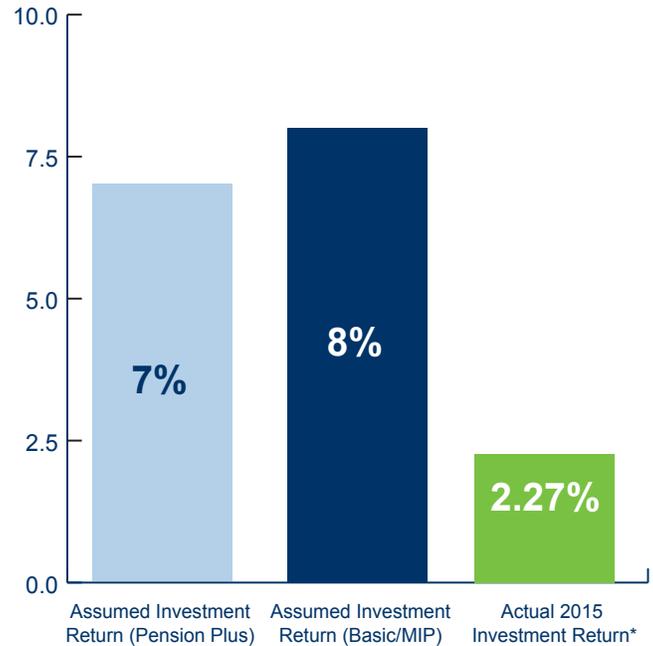
\*\*\*MPERS 2015 Retiree Health Benefits Annual Valuation Report

# Discount Rates and Actual Investment Return

The State Treasurer administers all of the System's investments in accordance with the Public Employee Retirement System Investment Act, Public Act 314 of 1965. The main objective is maximizing the rate of return while meeting the actuarial assumptions through maintaining a diverse portfolio, eliminating unnecessary risks, and investing prudently.

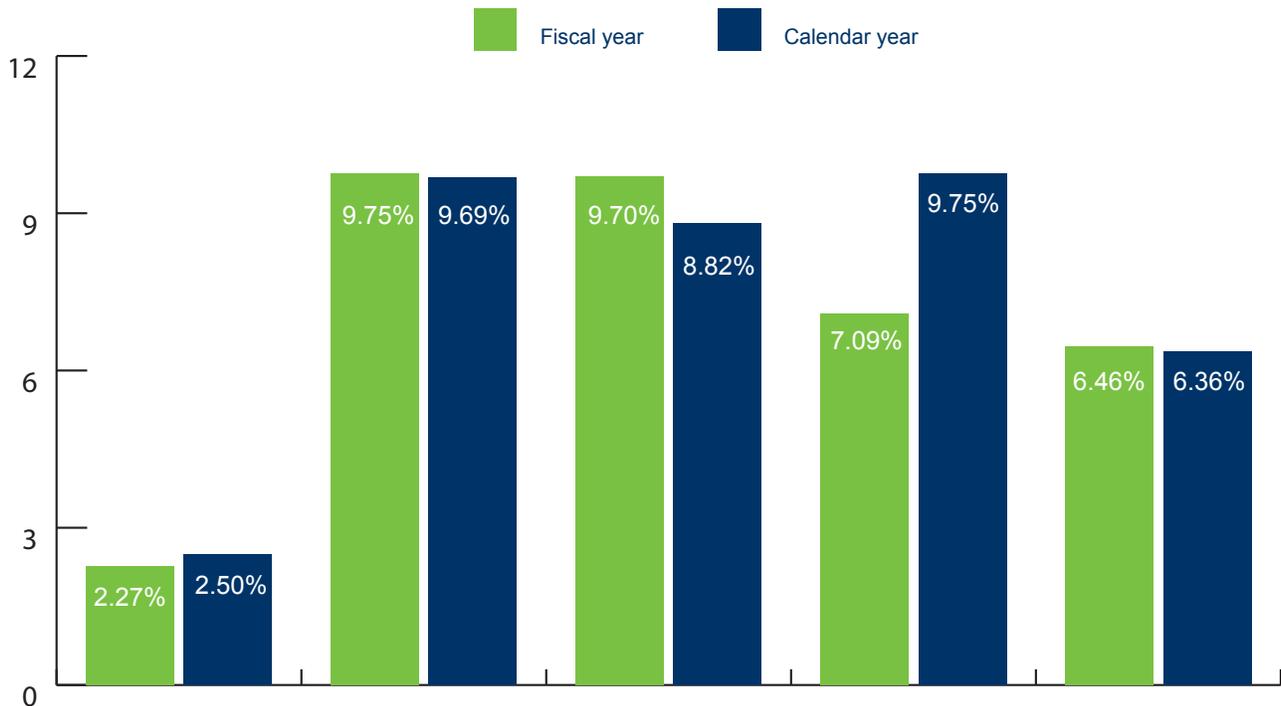
Contribution rates are determined by actuaries based in part on an assumed investment return each year. These assumptions are different for the Basic Plan/Member Investment Plan (MIP) and Pension Plus plan: 8 percent and 7 percent, respectively. When investments do not exceed the assumed rates of return, as they did in 2015, this results in a loss for the System. The actual rate of investment return in FY 2015 was 2.27 percent\*, which is less than the assumed rate of return.

## Investment Return Assumed and Actual for Fiscal Year 2015



\* Source: CAFR for the Fiscal Year ended September 30, 2015, p. 59

## Historical Investment Returns as of Fiscal Year 2015



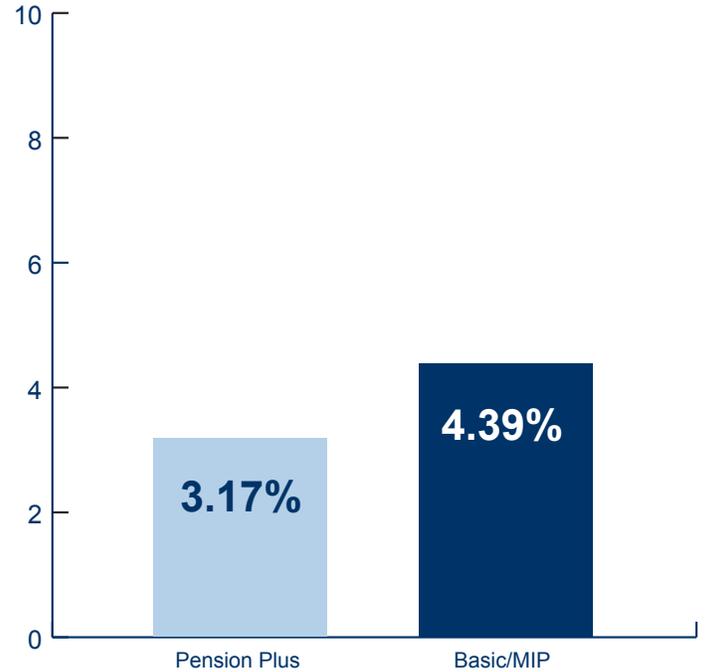
\* These figures are shown net of fees. Information shown in the CAFR is shown gross of fees.

# Member and Employer Contributions

## Definition of Normal Cost

Normal Cost is the actual cost of the retirement benefit a member earns each year, and is set using the assumed rate of investment return in addition to other actuarial assumptions. All Pension Plus members, all MIP members, and some Basic members contribute toward the cost of their retirement benefits. After member contributions are accounted for, the employer pays the remainder of the Normal Cost as shown here.

## Employer Pension Normal Cost Contribution Rates for Fiscal Year 2016\*



\* Based on 2012 Actuarial Valuation and provisions of P.A. 300 of 2013.

Member and Employer Pension Contributions	
Member Contributions	Based on FY 2015 Actuarial Valuation
Weighted Average	
Basic/MIP	4.65%
Pension Plus	4.83%
Employer Contributions	Based on FY 2015 Actuarial Valuation
Computed Normal Cost of benefits expressed as a percentage of valuation payroll	
Basic/MIP	3.07%
Pension Plus	3.75%
UAAL contribution rate expressed as a percentage of valuation payroll	
Basic/MIP	22.18%*
Pension Plus	22.18%*
Valuation Payroll	
For Normal Cost	\$ 8,864,012,151
For Unfunded Actuarial Accrued Liabilities (UAAL)	\$ 9,136,370,130

\*The statutory limit of 20.96% for employer UAAL contributions will lower the percentage charged to reporting units.

## Receipt of Employer Contributions

Each school district or reporting entity is required to contribute the full actuarial funding contributions amount to fund pension benefits. Differences between the Annual Required Contribution (ARC) and the actual contributions are the result of a timing difference between when the actuarial valuation is completed and the contributions are made.

# 2015 Pension Plan Expenditures

<b>Pension Plan Expenses for Fiscal Year Ended September 30, 2015*</b>		
<b>Administrative and Other Expenses</b>	<b>Dollars</b>	<b>% of Total</b>
<i>These expenditures are the administrative costs of running the retirement system, and are paid by DTMB-Office of Retirement Services and DTMB-Financial Services through an annual appropriation.</i>		
<b>Personnel Services</b>		
Staff Salaries	\$ 1,579,943	0.02824%
Retirement and Social Security	4,315,994	0.07715%
Other Fringe Benefits	1,443,089	0.02579%
<b>Total</b>	<b>\$ 7,339,026</b>	<b>0.13118%</b>
<b>Professional Services</b>		
Accounting	\$ 1,494,566	0.02671%
Actuarial	502,347	0.00898%
Attorney General	417,589	0.00746%
Audit	211,000	0.00377%
Consulting	68,539	0.00123%
Medical	365,117	0.00653%
<b>Total</b>	<b>\$ 3,059,158</b>	<b>0.05468%</b>
<b>Building and Equipment</b>		
Building Rentals	\$ 882,681	0.01578%
Equipment Purchase, Maintenance, and Rentals	410,357	0.00734%
<b>Total</b>	<b>\$ 1,293,038</b>	<b>0.02311%</b>
<b>Miscellaneous</b>		
Travel and Board Meetings (Excluding Travel and Education for Board Members)	\$ 41,199	0.00074%
Office Supplies	53,758	0.00096%
Postage, Telephone, and Other	1,976,512	0.03533%
Printing	289,019	0.00517%
Technological Support	10,431,919	0.18647%
<b>Subtotal</b>	<b>\$ 12,792,407</b>	<b>0.22866%</b>
Travel and Education for Board Members	3,696	0.00007%
<b>Total</b>	<b>\$ 12,796,103</b>	<b>0.22873%</b>
<b>Total Administrative and Other Expenses</b>	<b>\$ 24,487,325</b>	<b>0.43770%</b>
<b>Health and Dental Fees</b>	<b>Dollars</b>	<b>% of Total</b>
<i>These expenditures are for self-insurance of the health and dental plans, and are paid from the retirement system's trust fund.</i>		
Staff Salaries	2,356,859	0.04213%
Health Fees	146,197,278	2.61323%
Dental Fees	4,194,532	0.07498%
Vision Fees	662,302	0.01184%
<b>Total Health and Dental Fees</b>	<b>\$ 153,410,971</b>	<b>2.74218%</b>
<b>Investment Expenses</b>	<b>Dollars</b>	<b>% of Total</b>
<i>These expenditures are related to the Department of Treasury (Bureau of Investments) for managing the retirement system's assets, and are paid from the retirement system's trust fund.</i>		
Real Estate Operating Expenses	\$ 938,775	0.01678%
Securities Lending Expenses	22,846,270	0.40837%
<b>Other Investment Expenses</b>		
ORS-Investment Expenses	13,820,958	0.24705%
Custody Fees	1,000,223	0.01788%
Management Fees	118,618,256	2.12027%
Research Fees	2,992,631	0.05349%
<b>Total Investment Expenses</b>	<b>\$ 160,217,113</b>	<b>2.86383%</b>
<b>Benefits Paid to Members</b>	<b>Dollars</b>	<b>% of Total</b>
<i>These are the projected retirement benefits paid to members of the retirement system.</i>		
Retirement Benefits	\$ 4,530,915,849	80.98879%
Health Benefits	617,492,428	11.03750%
Dental/Vision Benefits	83,411,124	1.49095%
Refunds of Member Contributions	136,997,257	2.40053%
<b>Total Payments to Members</b>	<b>\$ 5,368,816,658</b>	<b>94.07480%</b>
<b>Soft Dollar Expenses</b>	<b>Dollars</b>	<b>% of Total</b>
<i>These expenditures are for research provided by the retirement system's service providers and are incorporated into the brokerage fees and commissions.</i>		
<b>Bass Trading Int'l Group (BTIG)</b>		
Macro Mavens Newsletter	\$ 27,576	0.00049%
Welling on Wall Street	5,909	0.00011%
<b>Total Soft Dollar Expenditures</b>	<b>\$ 33,485</b>	<b>0.00060%</b>

\*Source: CAFR for the Fiscal Year ended September 30, 2015 p. 52-55.

# 2016 Budget for Pension Plan Expenditures

<b>Budget for Pension Plan Expenses for Fiscal Year Ending September 30, 2016</b>		
<b>Administrative and Other Expenses</b>	<b>Dollars</b>	<b>% of Total</b>
<i>These expenditures are the administrative costs of running the retirement system, and are paid by DTMB-Office of Retirement Services and DTMB-Financial Services through an annual appropriation.</i>		
<b>Personnel Services</b>		
Staff Salaries	\$ 2,064,552	0.03491%
Retirement and Social Security	4,287,085	0.07249%
Other Fringe Benefits	1,479,471	0.02502%
<b>Total</b>	<b>\$ 7,831,108</b>	<b>0.13242%</b>
<b>Professional Services</b>		
Accounting	\$ 1,737,732	0.02938%
Actuarial	460,000	0.00778%
Attorney General	346,648	0.00586%
Audit	211,000	0.00357%
Consulting	68,000	0.00115%
Medical	366,000	0.00619%
<b>Total</b>	<b>\$ 3,189,380</b>	<b>0.05393%</b>
<b>Building and Equipment</b>		
Building Rentals	\$ 909,996	0.01539%
Equipment Purchase, Maintenance, and Rentals	367,331	0.00621%
<b>Total</b>	<b>\$ 1,277,327</b>	<b>0.02160%</b>
<b>Miscellaneous</b>		
Travel and Board Meetings (Excluding Travel and Education for Board Members)	\$ 43,272	0.00073%
Office Supplies	55,717	0.00094%
Postage, Telephone, and Other	2,101,299	0.03553%
Printing	277,499	0.00469%
Technological Support	10,884,054	0.18404%
<b>Subtotal</b>	<b>\$ 13,361,841</b>	<b>0.22594%</b>
Travel and Education for Board Members	4,800	0.00008%
<b>Total Administrative and Other Expenses</b>	<b>\$ \$25,664,456</b>	<b>0.43397%</b>
<b>Health, Dental &amp; Vision Fees</b>	<b>Dollars</b>	<b>% of Total</b>
<i>These expenditures are for self-insurance of the health, dental, and vision plans, and are paid from the retirement system's trust fund.</i>		
Staff Salaries	\$ 3,079,769	0.05208%
Health Fees	147,476,832	2.49373%
Dental Fees	4,786,052	0.08455%
Vision Fees	794,408	0.01343%
<b>Total Health, Dental &amp; Vision Fees</b>	<b>\$ 156,137,061</b>	<b>2.64017%</b>
<b>Investment Expenses</b>	<b>Dollars</b>	<b>% of Total</b>
<i>These expenditures are related to the Department of Treasury (Bureau of Investments) for managing the retirement system's assets, and are paid from the retirement system's trust fund.</i>		
Real Estate Operating Expenses	\$ 985,950	0.01667%
Securities Lending Expenses	23,988,300	0.40563%
<b>Other Investment Expenses</b>		
ORS-Investment Expenses	14,512,050	0.24539%
Custody Fees	1,050,000	0.01775%
Management Fees	124,548,900	2.10604%
Research Fees	3,142,650	0.05314%
<b>Total Investment Expenses</b>	<b>\$ 168,227,850</b>	<b>2.84462%</b>
<b>Benefits Paid to Members</b>	<b>Dollars</b>	<b>% of Total</b>
<i>These are the projected retirement benefits paid to members of the retirement system.</i>		
Retirement Benefits	\$ 4,662,796,844	78.84466%
Health Benefits	794,369,544	13.43224%
Dental/Vision Benefits	81,375,740	1.37601%
Refunds of Member Contributions	25,298,192	0.42777%
<b>Total Payments to Members</b>	<b>\$ 5,563,840,320</b>	<b>94.08068%</b>
<b>Soft Dollar Expenses</b>	<b>Dollars</b>	<b>% of Total</b>
<i>These expenditures are for research provided by the retirement system's service providers and are incorporated into the brokerage fees and commissions.</i>		
<b>Bass Trading Int'l Group (BTIG)</b>		
Macro Mavens Newsletter	\$ 27,576	0.00047%
Welling on Wall Street	5,909	0.00010%
<b>Total Soft Dollar Expenditures</b>	<b>\$ 33,485</b>	<b>0.00057%</b>

# Actuarial Assumptions

Actuarial valuations for both the pension and OPEB plans 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. Amounts determined regarding the funded status of the plan and the annual required contributions (ARC) are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future.

<b>Actuarial Assumptions for Fiscal Year Ending September 30, 2016</b>	
Valuation Date	9/30/2014
Actuarial Cost Method	Entry Age, Normal
Amortization Method - OPEB	Level Percent of Payroll, Closed
Remaining Amortization Period - OPEB	22 Years
Asset Valuation Method - OPEB	Market
<b>Actuarial Assumptions FY 2015</b>	
Wage Inflation Rate	3.5%
Investment Rate of Return - Pension	
MIP and Basic Plan	8.0%
Pension Plus Plan	7.0%
Investment Rate of Return - OPEB	8.0%
Projected Salary Increases	3.5 - 12.3%
Cost-of-Living Pension Adjustments	3% Annual Non-Compounded for MIP Members
Healthcare Cost Trend Rate	7.5% Year 1 graded to 3.5% Year 12
Mortality - Pension & OPEB	RP-2000 Combined Healthy Life Mortality Table, adjusted for mortality improvements to 2020 using projection scale. AA (for men, 140% of the table rates for 0-79, 133% of the table rates for ages 80-84 and 121.8% of the table rates for ages over 84 were used and for women, 96% of the table rates were used.)
<b>Other Assumptions OPEB Only<sup>2</sup> FY 2015</b>	
Opt out Assumption	21% of eligible participants hired before 7/1/2008 and 30% of those hired after 6/30/2008 are assumed to opt out of the retiree health plan
Survivor Coverage	80% of male retirees and 67% of female retirees are assumed to have coverage continuing after the retiree's death
Coverage Election at Retirement	75% of male and 60% of female future retirees are assumed to elect coverage for 1 or more dependents
<p><sup>1</sup> Based on the provision of GASB Statement Nos. 25, 43 and 45 when the actuarial accrued liability for a defined benefit pension plan is underfunded or overfunded, the difference should be amortized over a period not to exceed thirty years for the fiscal periods beginning on or after June 15, 2006.</p> <p><sup>2</sup> Applies to individuals hired before September 4, 2012.</p>	
<p>Source: CAFR for the Fiscal Year ended September 30, 2015, p. 37.</p>	

## **Office Closures**

May 30 – Memorial Day  
July 4 – Independence Day  
September 5 – Labor Day

Our website is available seven days a week, even when our office is closed: [www.michigan.gov/orsschools](http://www.michigan.gov/orsschools)

### **Office of Retirement Services (ORS)**

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**Kerrie Vanden Bosch**

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