

Michigan State Employees' Retirement System

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

Summary Annual Report for Fiscal Year 2015



Prepared by
The Office of Retirement Services
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About the Michigan State Employees' Retirement System

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

The Michigan State Employees' Retirement System serves 58,453 retirees receiving monthly benefits, and 18,010 active members. State employee 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 State Employees' Retirement System Service Providers

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 State Employees' Retirement System Service Providers, continued

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 of the system include employees of the State of Michigan and its noncentral agencies as listed below:

- Classified or unclassified state employees, including civil service employees, appointed officials in the executive branch, and employees of the legislature and judiciary branch.
- Employees who work for the Business Enterprise Program, Mackinac Island State Park, or Michigan State Bar and were hired before March 31, 1997.
- Employees hired before October 1, 1996, and employed by the American Legion, American Veterans, Disabled American Veterans, Marine Corps League, Military Order of the Purple Heart, Wayne County Clerk Recorders Court, Third Circuit Court, or 36th District Court.

Plan Membership and Retirement Allowances as of September 30, 2015	
Membership	FY 2015
Retirees and Beneficiaries Currently Receiving Benefits	
Regular Benefits	47,923
Survivor Benefits	7,063
Disability Benefits	3,467
Total	58,453
Current Employees	
Vested	13,469
Non-vested	326
Total	13,795
Inactive Employees	
Entitled to benefits and not yet receiving them	4,215
Total All Members	76,463
<i>Source: CAFR for the Fiscal Year ended September 30, 2015, p. 23.</i>	
Retirement Allowances	FY 2015
Average annual retirement allowance	\$ 21,463
Total annual retirement allowances being paid (in thousands)	\$ 1,254,602
<i>Source: Actuarial Valuation for the Fiscal Year ended September 30, 2015.</i>	

Benefit Structures

Employees who began state employment before March 31, 1997, and did not choose to transfer to the Defined Contribution (DC) plan under Public Act 487 of 1996, are in the Defined Benefit (DB) plan.

Effective March 31, 1997, Public Act 487 of 1996 closed the DB plan to new members. All new employees become participants in the DC plan.

On December 15, 2011, the Governor signed Public Act 264 of 2011 into law. This law added provisions for DB plan 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.

Assets & Liabilities*

System total assets as of September 30, 2015, were \$12.8 billion and were mostly comprised of cash, investments, and contributions due from employers.

Total liabilities as of September 30, 2015, were \$778.6 million and were comprised of warrants outstanding, accounts payable, and obligations under securities lending.

System assets exceeded its liabilities at the close of fiscal year 2015 by \$12 billion. Total net assets held in trust for pension and Other Post-Employment Benefits (OPEB) increased \$1.2 million between fiscal years 2014 and 2015 due primarily to an increase in investments.

Assets & Liabilities (in thousands) <i>(combined pension and healthcare)</i>			
Assets	FY 2015*		FY 2014**
Cash	\$	5,396	\$ 134,291
Receivables		171,440	154,064
Securities Lending Collateral		712,497	791,755
Investments		11,923,319	11,801,653
Total Assets	\$	12,812,652	\$ 12,881,763
Liabilities	FY 2015*		FY 2014**
Accounts Payable and Other Liabilities	\$	29,284	\$ 29,574
Obligations Under Securities Lending		712,391	819,365
Amounts Due From Other Funds		36,948	-
Total Liabilities		778,623	848,939
Net Assets	\$	12,034,029	\$ 12,032,824

*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

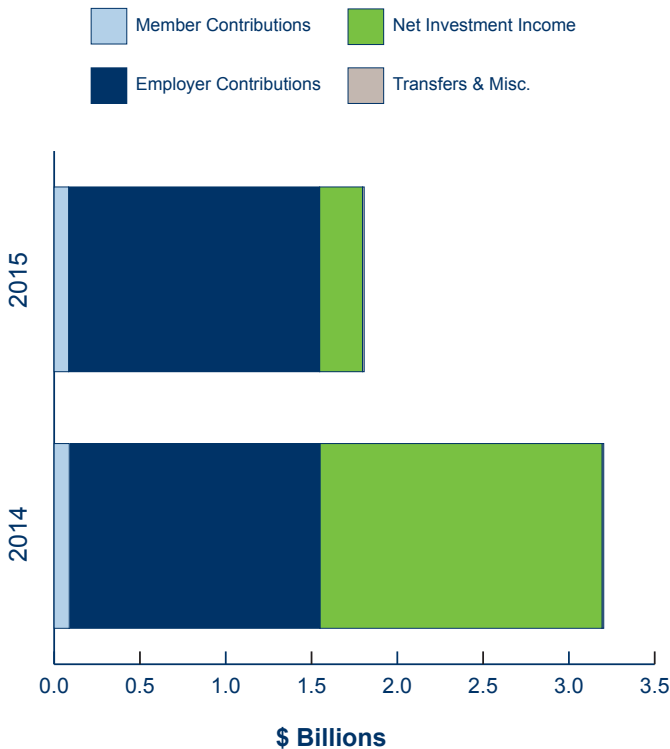
The reserves needed to finance pension and OPEB are accumulated through the collection of employer and employee contributions and through earnings on investments. Contributions and net investment income for fiscal year 2015 totaled approximately \$1.8 billion.

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.*

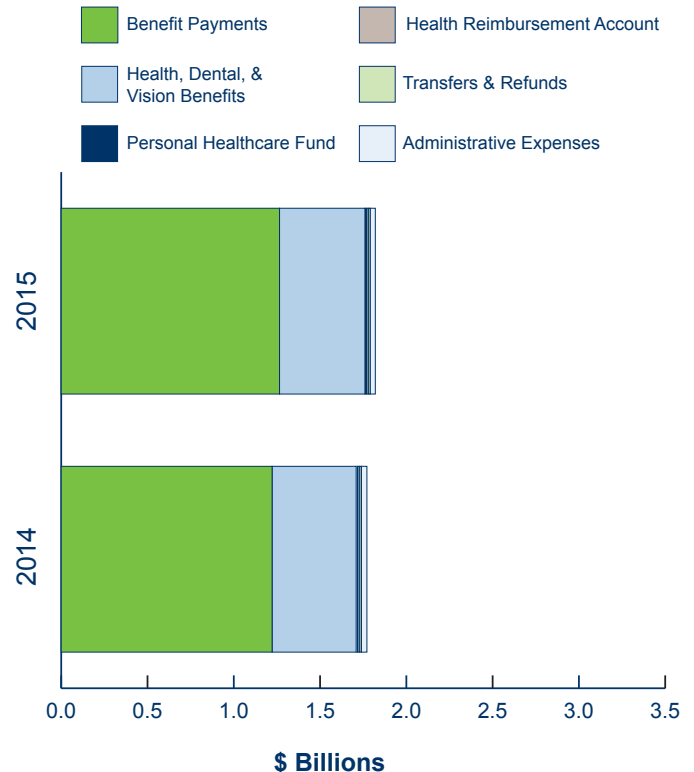
Additions & Deductions (in thousands) (combined pension and healthcare)			
Additions		FY 2015*	FY 2014**
Member Contributions	\$	84,376	\$ 87,969
Employer Contributions		1,463,148	1,460,984
Net Investment Income (loss)		250,622	1,644,891
Transfers and Misc. Income		167	102
Total Additions	\$	1,798,313	\$ 3,193,946
Deductions		FY 2015*	FY 2014**
Benefit Payments	\$	1,265,334	\$ 1,222,881
Health, Dental, & Vision Benefits		495,702	487,643
Personal Healthcare Fund		4,894	3,908
Health Reimbursement Account		34	18
Transfers & Refunds		162	175
Administrative Expenses		30,983***	32,467***
Total Deductions	\$	1,797,109	\$ 1,747,092
Beginning of Year Assets	\$	12,032,825	\$ 10,585,971
End of Year Net Assets	\$	12,034,029	\$ 12,032,825

* Source: CAFR for the Fiscal Year ended September 30, 2015, p. 21
 ** Source: CAFR for the Fiscal Year ended September 30, 2014, p. 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

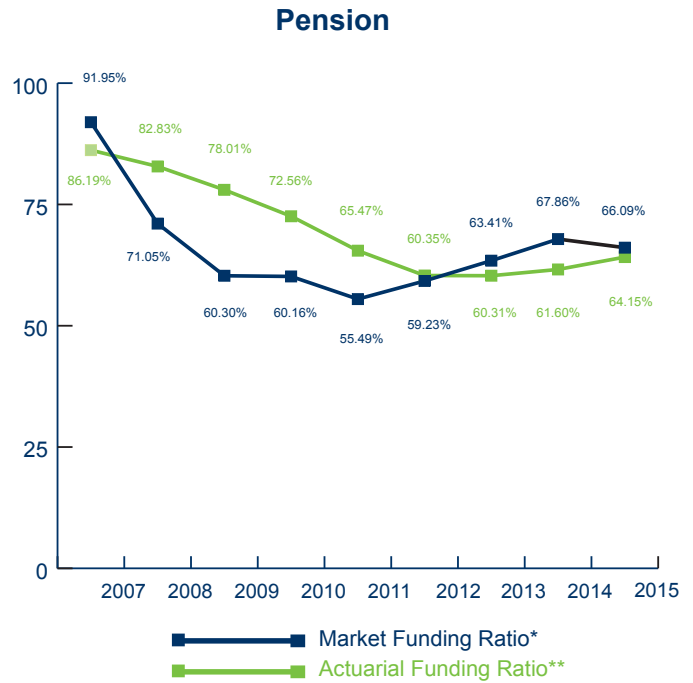


* Source: CAFR for the Fiscal Year ended September 30, 2015, p. 18.

Market Funded Ratios & Actuarial Funded Ratios

Pension

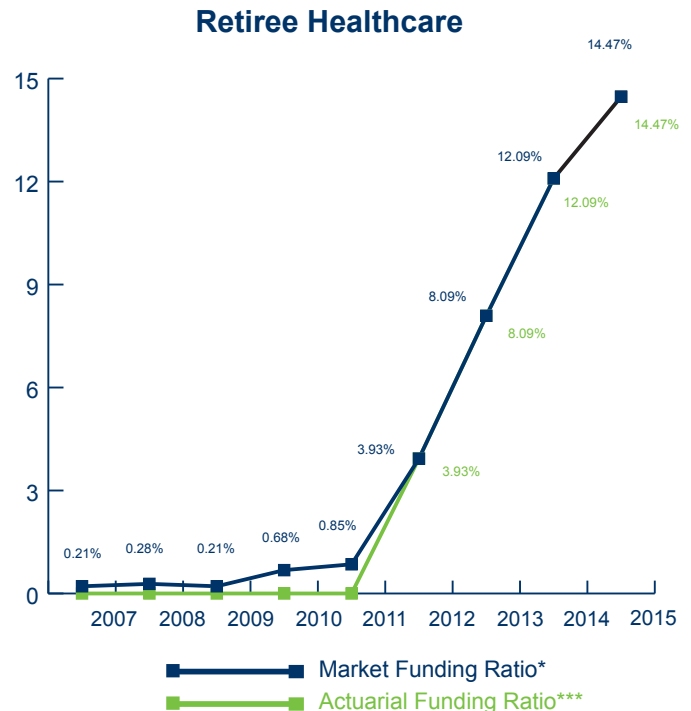
The market funding ratio is based only on the market value of assets at fiscal year end. The actuarial funding ratio incorporates a 5-year “smoothing” period that reduces volatility. The actuarial funding ratio is the common metric used by all pension plans nationwide. This smoothing process is used 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. While there were some assets set aside, these 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.

**Source: SERS 2015 Annual Actuarial Valuation Report

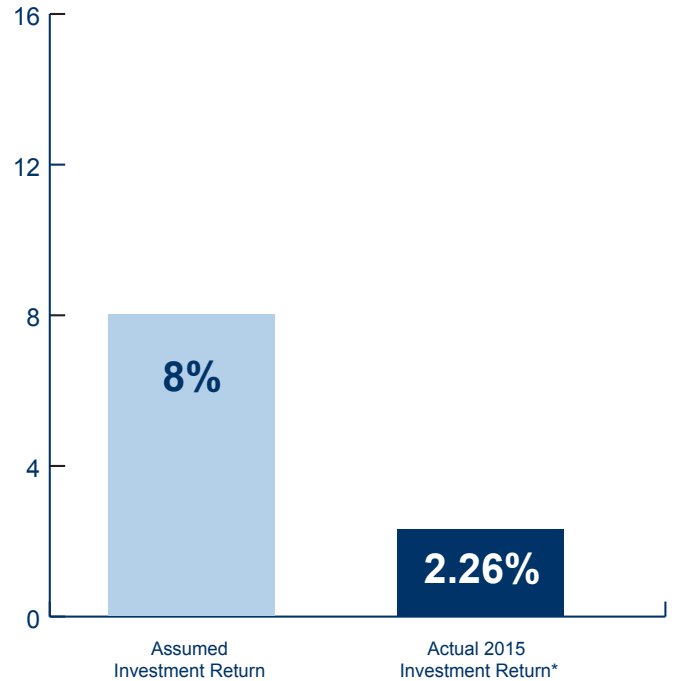
***Source: SERS 2015 Retiree Health Benefits Annual Actuarial Valuation Report

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.

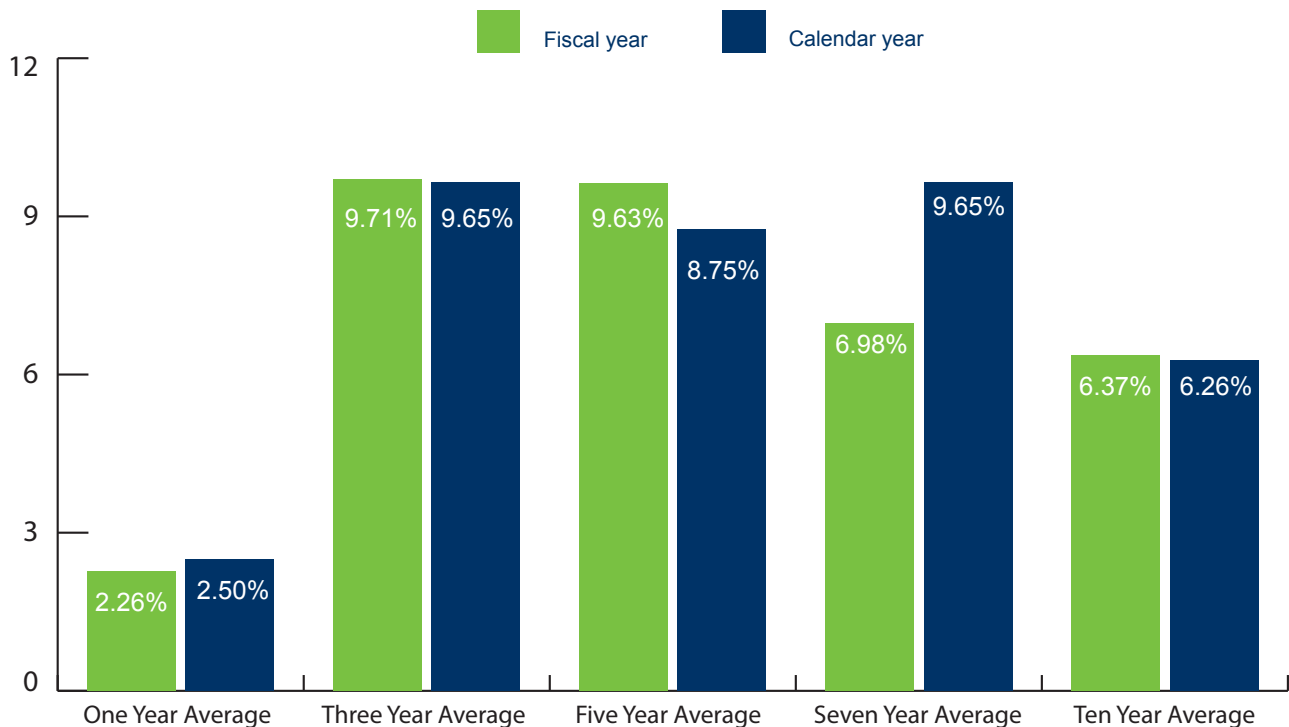
Contribution rates are determined by actuaries based in part on an assumed investment return each year. When investments do not exceed the assumed rates of return, as they did in 2015, this results in a loss for the System. The actual rate of investment return in FY 2015 was 2.26 percent*, which is less 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. 53

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.

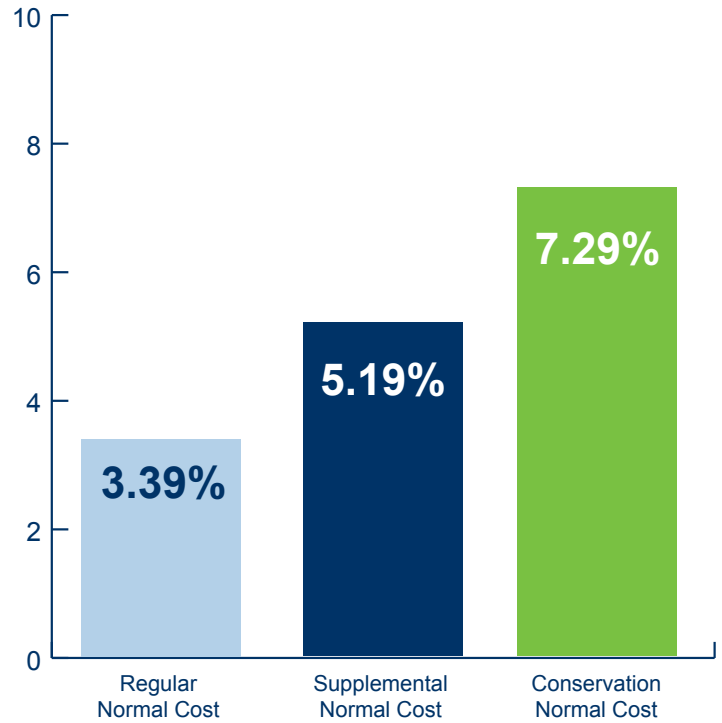
Member and Employer Contributions

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. 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*



Member and Employer Pension Contributions	
Member Contributions	Based on FY 2015 Actuarial Valuation
Weighted Average	4%
Employer Contributions	Based on FY 2015 Actuarial Valuation
Computed Normal Cost of benefits expressed as a percentage of valuation payroll	3.38%
UAAL contribution rate expressed as a percentage of valuation payroll	66.81%*
Valuation Payroll	
For Defined Benefit employees	\$ 909,820,011**
Payroll associated with Defined Contribution employees	\$ 1,939,737,741
Total payroll used to collect UAAL	\$ 2,849,557,752
* If calculating this rate with the total payroll used to collect UAAL, the rate would be 21.33%. This is a better indication of how the contribution rate will be charged.	
**UAAL costs are spread over the payroll associated with both DB and DC employees.	

Receipt of Employer Contributions

The statute requires the employer to contribute to finance the benefits of plan members. These employer contributions are determined annually by the System's actuary and are based upon level-dollar value funding principles so the contribution rates do not have to increase over time. 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

Pension Plan Expenses for Fiscal Year Ended September 30, 2015*		
Administrative and Other Expenses	Dollars	% of Total
<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>		
Personnel Services		
Staff Salaries	\$ 1,549,490	0.08428%
Retirement and Social Security	774,654	0.04213%
Other Fringe Benefits	259,076	0.01409%
Total	\$ 2,583,220	0.14050%
Professional Services		
Accounting	\$ 272,090	0.01480%
Actuarial	163,248	0.00888%
Attorney General	291,382	0.01585%
Audit	61,500	0.00335%
Consulting	19,782	0.00108%
Medical	210,093	0.01143%
Total	\$ 1,018,095	0.05537%
Building and Equipment		
Building Rentals	\$ 158,927	0.00864%
Equipment Purchase, Maintenance, and Rentals	73,671	0.00401%
Total	\$ 232,598	0.01265%
Miscellaneous		
Travel and Board Meetings (Excluding Travel and Education for Board Members)	\$ 7,401	0.00040%
Office Supplies	9,692	0.00053%
Postage, Telephone, and Other	447,175	0.02432%
Printing	56,636	0.00308%
Technological Support	1,872,829	0.10186%
Subtotal	\$ 2,393,733	0.13020%
Travel and Education for Board Members	101	0.00001%
Total	\$ 2,393,834	0.13021%
Total Administrative and Other Expenses	\$ 6,227,747	0.33873%
Health, Dental & Vision Fees	Dollars	% of Total
<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	\$ 471,991	0.02567%
Health Fees	22,161,326	1.20536%
Dental Fees	1,889,530	0.10277%
Vision Fees	232,090	0.01262%
Total Health, Dental & Vision Fees	\$ 24,754,937	1.34643%
Investment Expenses	Dollars	% of Total
<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	\$ 242,347	0.01318%
Securities Lending Expenses	6,026,756	0.32780%
Other Investment Expenses		
ORS-Investment Expenses	3,458,431	0.18810%
Custody Fees	252,906	0.01376%
Management Fees	30,719,576	1.67085%
Research Fees	747,706	0.04067%
Total Investment Expenses	\$ 41,447,722	2.25435%
Benefits Paid to Members	Dollars	% of Total
<i>These are the projected retirement benefits paid to members of the retirement system.</i>		
Retirement Benefits	\$ 1,265,335,477	68.82191%
Health Benefits	453,617,812	24.67239%
Dental/Vision Benefits	42,083,828	2.28895%
Personal Healthcare Fund	4,893,957	0.26618%
Health Reimbursement Account	33,959	0.00185%
Refunds of Member Contributions	161,516	0.00878%
Total Payments to Members	\$ 1,766,126,549	96.06006%
Soft Dollar Expenses	Dollars	% of Total
<i>These expenditures are for research provided by the retirement system's service providers and are incorporated into the brokerage fees and commissions.</i>		
Bass Trading Int'l Group (BTIG)		
Macro Mavens Newsletter	\$ 6,536	0.00036%
Welling on Wall Street	1,401	0.00008%
Total Soft Dollar Expenditures	\$ 7,937	0.00043%

*Source: CAFR for the Fiscal Year ended September 30, 2015, 48-50.

2016 Budget for Pension Plan Expenditures

Budget for Pension Plan Expenses for Fiscal Year Ending September 30, 2016		
Administrative and Other Expenses	Dollars	% of Total
<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>		
Personnel Services		
Staff Salaries	\$ 1,659,504	0.08872%
Retirement and Social Security	751,703	0.04019%
Other Fringe Benefits	259,412	0.01387%
Total	\$ 2,670,619	0.14278%
Professional Services		
Accounting	\$ 316,359	0.01691%
Actuarial	160,000	0.00855%
Attorney General	256,581	0.01372%
Audit	62,000	0.00331%
Consulting	21,000	0.00112%
Medical	210,000	0.01123%
Total	\$ 1,025,940	0.05485%
Building and Equipment		
Building Rentals	\$ 160,105	0.00856%
Equipment Purchase, Maintenance, and Rentals	64,408	0.00344%
Total	\$ 224,513	0.01200%
Miscellaneous		
Travel and Board Meetings (Excluding Travel and Education for Board Members)	\$ 7,769	0.00042%
Office Supplies	9,882	0.00053%
Postage, Telephone, and Other	464,930	0.02486%
Printing	54,575	0.00292%
Technological Support	1,908,424	0.10203%
Subtotal	\$ 2,445,580	0.13075%
Travel and Education for Board Members	200	0.00001%
Total Administrative and Other Expenses	\$ 6,366,852	0.34040%
Health, Dental & Vision Fees	Dollars	% of Total
<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	\$ 505,502	0.02703%
Health Fees	24,067,200	1.28674%
Dental Fees	2,052,030	0.10971%
Vision Fees	252,050	0.01348%
Total Health, Dental & Vision Fees	\$ 26,876,782	1.43695%
Investment Expenses	Dollars	% of Total
<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	\$ 254,100	0.01359%
Securities Lending Expenses	6,328,350	0.33834%
Other Investment Expenses		
ORS-Investment Expenses	3,630,900	0.19412%
Custody Fees	265,650	0.01420%
Management Fees	32,256,000	1.72455%
Research Fees	785,400	0.04199%
Total Investment Expenses	\$ 43,520,400	2.32679%
Benefits Paid to Members	Dollars	% of Total
<i>These are the projected retirement benefits paid to members of the retirement system.</i>		
Retirement Benefits	\$ 1,289,267,698	68.92985%
Health Benefits	458,607,608	24.51916%
Dental/Vision Benefits	42,546,750	2.27473%
Personal Healthcare Fund	2,971,064	0.15885%
Health Reimbursement Account	46,314	0.00248%
Refunds of Member Contributions	193,952	0.01037%
Total Payments to Members	\$ 1,793,633,386	95.89544%
Soft Dollar Expenses	Dollars	% of Total
<i>These expenditures are for research provided by the retirement system's service providers and are incorporated into the brokerage fees and commissions.</i>		
Bass Trading Int'l Group (BTIG)		
Macro Mavens Newsletter	6,536	0.00035%
Welling on Wall Street	1,401	0.00007%
Total Soft Dollar Expenditures	\$ 7,937	0.00042%

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.

Actuarial Assumptions for Fiscal Year Ending September 30, 2015	
Valuation Date	9/30/2014
Actuarial Cost Method	Entry Age, Normal
Amortization Method - OPEB	Level Percent of Payroll, Closed
Remaining Amortization Period	22 Years ¹
Asset Valuation Method - OPEB	Market
Actuarial Assumptions FY 2015	
Wage Inflation Rate	3.5%
Investment Rate of Return - Pension	8.0%
Investment Rate of Return - OPEB	8.0%
Projected Salary Increases	3.5 - 12.5%
Cost-of-Living Pension Adjustments	3% Annual Non-Compounded with Maximum Annual Increase of \$300 for those eligible
Healthcare Cost Trend Rate	9.0% Year 1 graded to 3.5% Year 10
Mortality - Pension	RP - 2000 Male and Female Combined Healthy Life Mortality Tables, adjusted for mortality improvements to 2015 projections scale BB. For retirees, 100% of the table rates were used. For active members, 50% of the table rates were used for males and females.
Mortality - OPEB	RP - 2000 Combined Health Life Mortality Table, adjusted for mortality improvements to 2015 projections scale BB. For active members, 100% of the table rates were used. For active members, 50% of the table rates were used for males and females.
Other Assumptions OPEB Only² FY 2015	
Opt out Assumption	10% of eligible participants 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>¹ Based on the provision of GASB Statement Nos. 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>² Applies to individuals hired before January 1, 2012.</p>	
Source: CAFR for the Fiscal Year ended September 30, 2015, p. 35.	

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/orsstatedb

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Office of Retirement Services
Director Kerrie Vanden Bosch

Printed by authority of 1965 P.A. 314, as amended.