

Michigan State Police Retirement System

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 State Police Retirement System

This report is in compliance with Public Act 314 of 1965, as amended. The contents came from the complete Michigan State Police Retirement System 2014 Comprehensive Annual Financial Report (CAFR), an existing public data source available on our website at www.michigan.gov/orsmsp, and additional analysis performed after September 30, 2015.

The Michigan State Police Retirement System serves 2,987 retirees receiving monthly benefits, and 1,852 active members. State police 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 Police 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 Police 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 this system are enlisted Michigan State Police officers. Membership in the plan is automatic when officers complete recruit school and subscribe to the constitutional oath of office.

Members also include officers participating in the Deferred Retirement Option Plan (DROP) and receiving employee wages.

Employees who work for the Michigan State Police but are not enlisted officers are not members of this plan.

Plan Membership and Retirement Allowances as of September 30, 2015	
Membership	FY 2015
Retirees and Beneficiaries Currently Receiving Benefits	
Regular Benefits	2,303
Survivor Benefits	489
Disability Benefits	195
Total	2,987
Current Employees	
Vested	975
Non-vested	541
Total	1,516
DROP Participants	294
Inactive Employees	
Entitled to benefits and not yet receiving them	42
Total All Members	4,839
<i>Source: CAFR for the Fiscal Year ended September 30, 2015, p. 23.</i>	
Retirement Allowances	FY 2015
Average annual retirement allowance	\$ 37,260
Total annual retirement allowances being paid	\$ 111,294,786
<i>Source: Actuarial Valuation for the Fiscal Year ended September 30, 2015.</i>	

Benefit Structures

Michigan State Police troopers and sergeants enlisted before June 10, 2012, are in the Defined Benefit (DB) plan.

The Pension Plus retirement plan was introduced for troopers and sergeants enlisted on or after June 10, 2012. Pension Plus is a hybrid plan that contains a pension component with an employee contribution and a flexible and transferable defined contribution account.

Assets & Liabilities*

System total assets as of September 30, 2015, were \$1.4 billion and were mostly comprised of cash, investments, and contributions due from employers.

Total liabilities as of September 30, 2015, were \$80.5 million and were comprised of warrants outstanding, account payable, other accrued liabilities and obligations under securities lending.

System assets exceeded its liabilities at the close of fiscal year 2015 by \$1.3 billion. Total net assets held in trust for pension and Other Post-Employment Benefits (OPEB) increased \$344 thousand from the previous year, primarily due to modest investment income and employer contributions.**

Assets & Liabilities (in thousands) <i>(combined pension and healthcare)</i>			
Assets	FY 2015*		FY 2014**
Cash	\$	4,666	\$ 14,125
Receivables		7,710	7,155
Securities Lending Collateral		78,493	88,398
Investments		1,317,815	1,311,794
Total Assets	\$	1,408,684	\$ 1,421,472
Liabilities	FY 2015*		FY 2014**
Accounts Payable and Other Liabilities	\$	2,027	\$ 2,159
Obligations Under Securities Lending		78,481	91,481
Total Liabilities	\$	80,508	\$ 93,640
Net Assets	\$	1,328,176	\$ 1,327,832

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

* 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

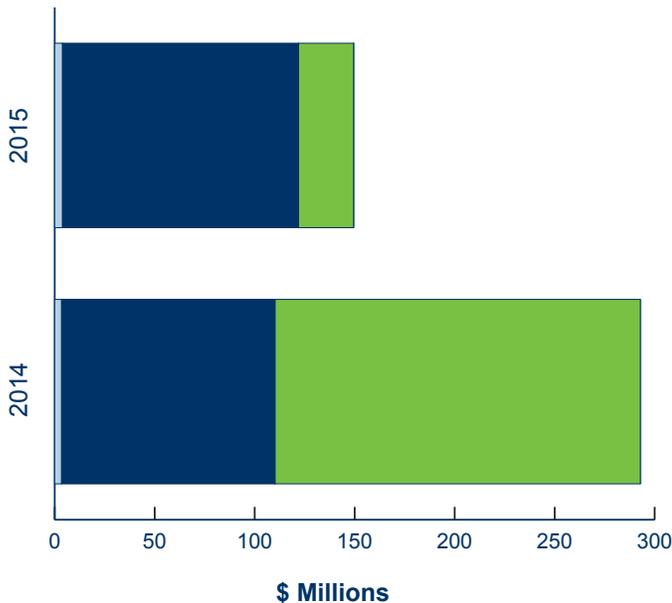
The reserves needed to finance pension and OPEB are accumulated through the collection of employer and employee contributions and through earnings on investments. Contributions and net investment income for fiscal year 2015 totaled \$149.5 million.

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.*

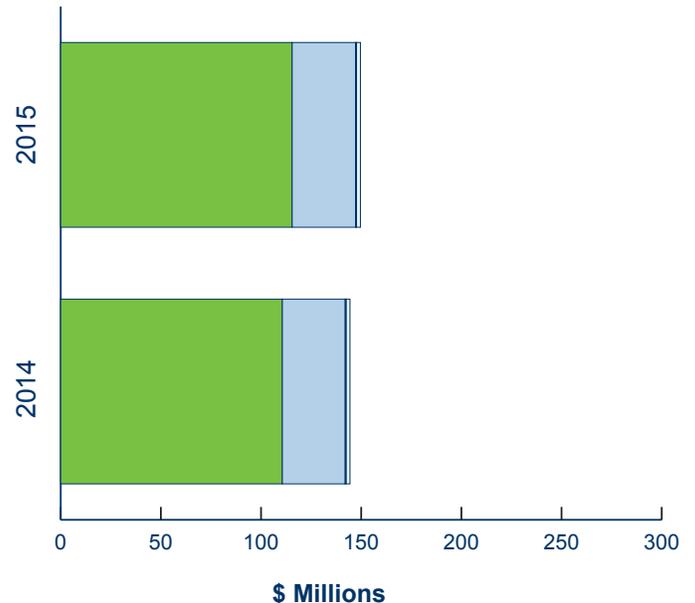
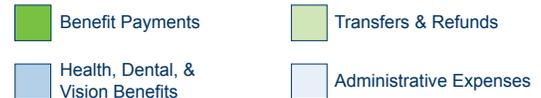
Additions & Deductions (in thousands) (combined pension and healthcare)				
Additions	FY 2015*		FY 2014**	
Member Contributions	\$	3,807	\$	3,373
Employer Contributions		118,073		106,764
Net Investment Income (loss)		27,562		182,722
Transfers and Misc. Income		12		0
Total Additions	\$	149,454	\$	292,858
Deductions	FY 2015*		FY 2014**	
Benefit Payments	\$	115,465	\$	110,543
Health, Dental, & Vision Benefits		31,697		31,374
Transfers & Refunds		3		8
Administrative Expenses		1,945***		1,985***
Total Deductions	\$	149,110	\$	143,909
Beginning of Year Assets	\$	1,327,832	\$	1,178,884
End of Year Net Assets	\$	1,328,176	\$	1,327,832

* Source: CAFR for the Fiscal Year ended September 30, 2015, p. 22.
 ** Source: CAFR for the Fiscal Year ended September 30, 2014, p. 22.
 *** Reflects participation in federal programs that provide a federal subsidy for eligible healthcare claims, producing a net overall savings to the System.

Revenue



Expenditures

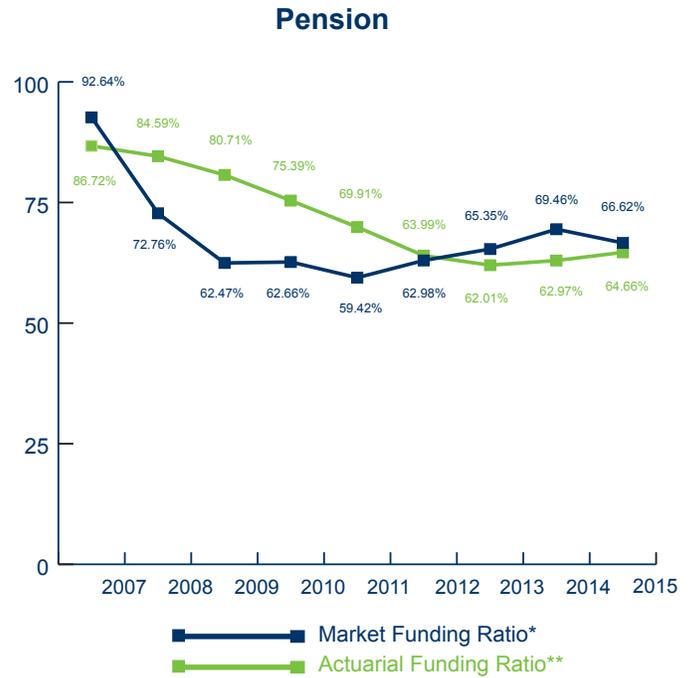


* Source: CAFR for the Fiscal Year ended September 30, 2015, p. 18.

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.

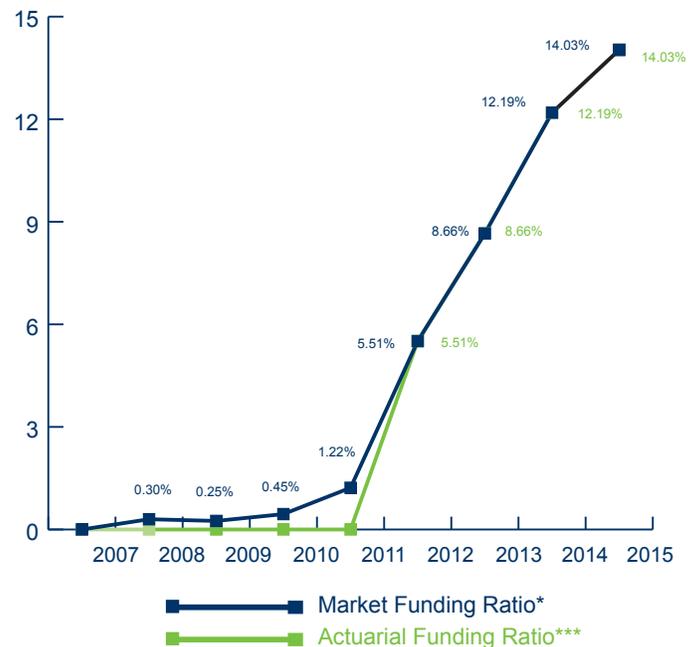


Retiree Healthcare

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. Many states do not pre-fund. This reform puts Michigan on the leading edge of retirement funding practices.

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.

Retiree Healthcare



*Calculated on Market Value of Assets.

**SPRS 2015 Annual Actuarial Valuation Report

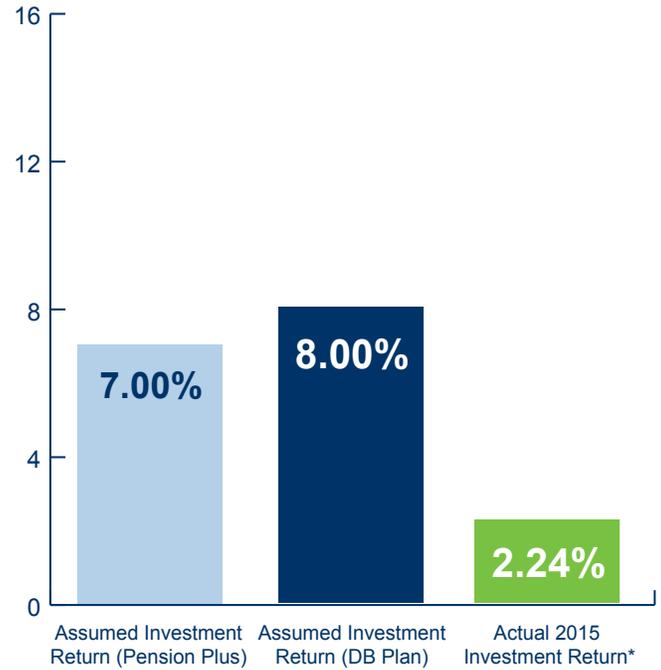
***SPRS 2015 Retiree Health Benefits Annual Actuarial Valuation Report

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.

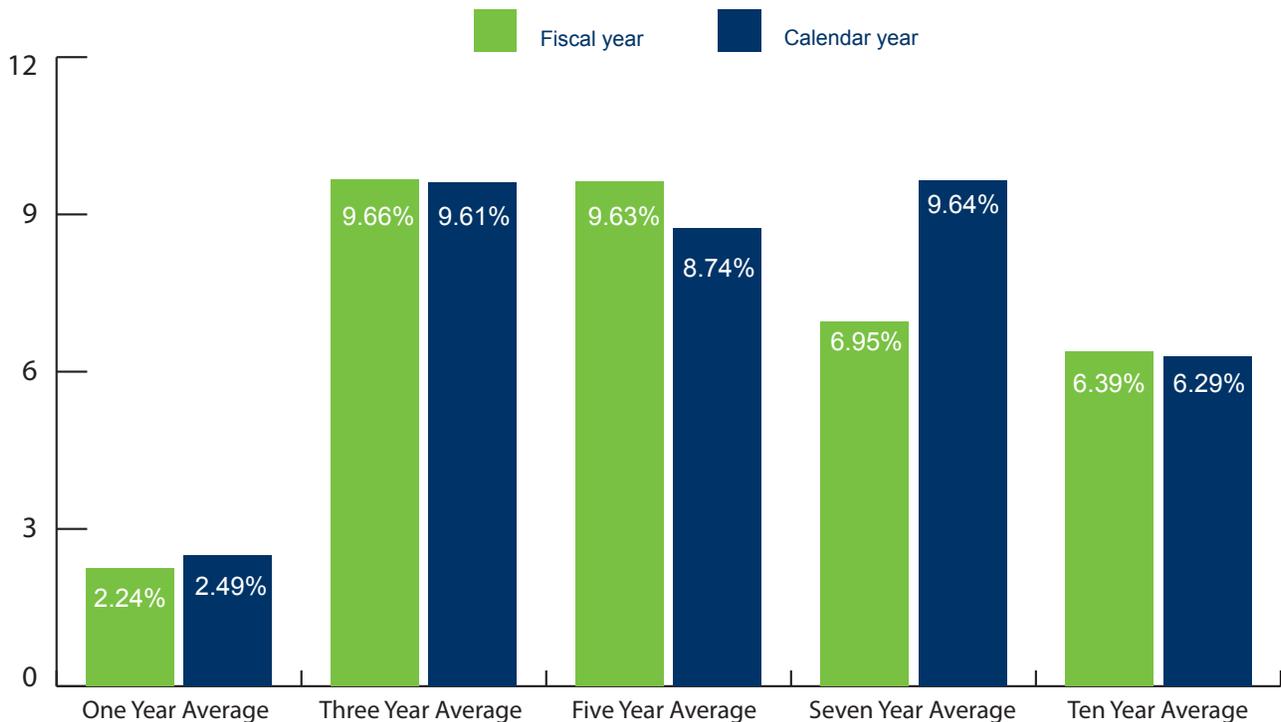
Contribution rates are determined by actuaries based in part on an assumed investment return each year. When investments do not exceed the assumed rates of return, as they did in 2015, this results in a loss for the System. The actual rate of investment return in FY 2015 was 2.24 percent*, which is less 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.

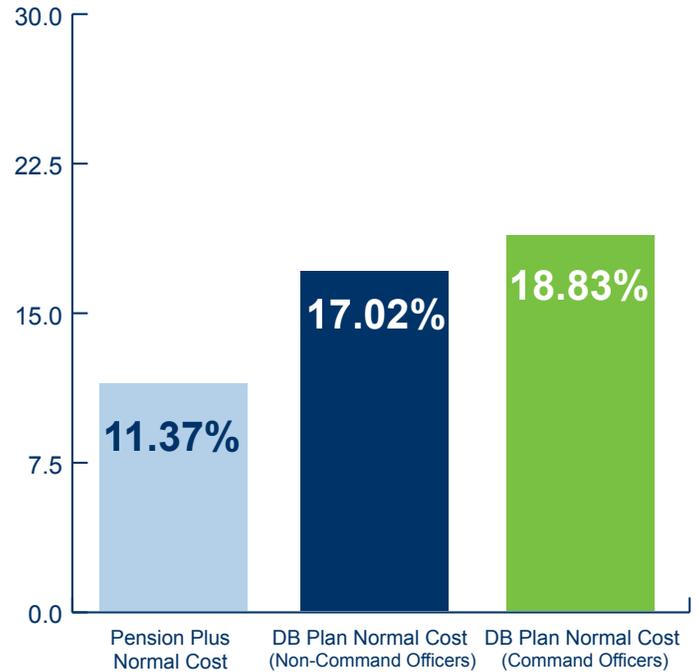
Member and Employer Contributions

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*



* Based on 2013 Actuarial Valuation

Member and Employer Pension Contributions	
Member Contributions	Based on FY 2015 Actuarial Valuation
Weighted Average	
Pension Plus	4.00%
Defined Benefit (DB) Plan	1.72%
Employer Contributions	Based on FY 2015 Actuarial Valuation
Computed Normal Cost of benefits expressed as a percentage of valuation payroll	
Pension Plus	9.11%
Defined Benefit (DB) Plan	16.34%
UAAL contribution rate expressed as a percentage of valuation payroll	
Pension Plus	40.12%
Defined Benefit (DB) Plan	40.12%
Valuation Payroll	\$ 116,046,907

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	\$ 150,300	0.09779%
Retirement and Social Security	46,028	0.02995%
Other Fringe Benefits	15,394	0.01002%
Total	\$ 211,722	0.13775%
Professional Services		
Accounting	\$ 16,397	0.01067%
Actuarial	97,743	0.06359%
Attorney General	20,449	0.01330%
Audit	50,700	0.03299%
Consulting	4,996	0.00325%
Medical	5,421	0.00353%
Total	\$ 195,706	0.12733%
Building and Equipment		
Building Rentals	\$ 9,703	0.00631%
Equipment Purchase, Maintenance, and Rentals	4,377	0.00285%
Total	\$ 14,080	0.00916%
Miscellaneous		
Travel and Board Meetings (Excluding Travel and Education for Board Members)	\$ 573	0.00037%
Office Supplies	569	0.00037%
Postage, Telephone, and Other	23,167	0.01507%
Printing	3,931	0.00256%
Technological Support	111,278	0.07240%
Subtotal	\$ 139,518	0.09077%
Travel and Education for Board Members	94	0.00010%
Total	\$ 139,612	0.09083%
Total Administrative and Other Expenses	\$ 561,120	0.36508%
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	\$ 103,197	0.06714%
Health Fees	1,173,205	0.76332%
Dental Fees	95,395	0.06207%
Vision Fees	11,720	0.00763%
Total Health and Dental Fees	\$ 1,383,517	0.90015%
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	\$ 26,817	0.01745%
Securities Lending Expenses	666,413	0.43358%
Other Investment Expenses		
ORS-Investment Expenses	385,054	0.25053%
Custody Fees	28,086	0.01827%
Management Fees	3,397,425	2.21045%
Research Fees	83,360	0.05424%
Total Investment Expenses	\$ 4,587,155	2.98451%
Benefits Paid to Members	Dollars	% of Total
<i>These are the actual retirement benefits paid to members of the retirement system.</i>		
Retirement Benefits	\$ 115,466,146	75.12508%
Health Benefits	29,110,087	18.93973%
Dental/Vision Benefits	2,586,656	1.68294%
Refunds of Member Contributions	2,935	0.00191%
Total Payments to Members	\$ 147,165,824	95.74966%
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	\$ 755	0.00049%
Welling on Wall Street	162	0.00011%
Total Soft Dollar Expenditures	\$ 917	0.00060%

*Source: CAFR for the Fiscal Year ended September 30, 2015, p. 46-49.

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	\$ 155,335	0.09980%
Retirement and Social Security	47,570	0.03056%
Other Fringe Benefits	16,416	0.01055%
Total	\$ 219,321	0.14091%
Professional Services		
Accounting	\$ 19,064	0.01225%
Actuarial	100,000	0.06425%
Attorney General	17,330	0.01113%
Audit	51,000	0.03277%
Consulting	6,000	0.00385%
Medical	6,000	0.00385%
Total	\$ 199,394	0.12811%
Building and Equipment		
Building Rentals	\$ 10,442	0.00671%
Equipment Purchase, Maintenance, and Rentals	4,096	0.00263%
Total	\$ 14,538	0.00934%
Miscellaneous		
Travel and Board Meetings (Excluding Travel and Education for Board Members)	\$ 938	0.00060%
Office Supplies	613	0.00039%
Postage, Telephone, and Other	25,227	0.01621%
Printing	4,416	0.00284%
Technological Support	120,772	0.07760%
Subtotal	\$ 151,966	0.09764%
Travel and Education for Board Members	100	0.00006%
Total Administrative and Other Expenses	\$ 585,319	0.37606%
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	\$ 106,654	0.06852%
Health Fees	1,274,101	0.81860%
Dental Fees	103,599	0.06656%
Vision Fees	12,728	0.00818%
Total Health and Dental Fees	\$ 1,497,082	0.96186%
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	\$ 28,350	0.01821%
Securities Lending Expenses	699,300	0.44929%
Other Investment Expenses		
ORS-Investment Expenses	404,250	0.25973%
Custody Fees	29,400	0.01889%
Management Fees	3,566,850	2.29167%
Research Fees	87,150	0.05599%
Total Investment Expenses	\$ 4,815,300	3.09379%
Benefits Paid to Members	Dollars	% of Total
<i>These are the projected retirement benefits paid to members of the retirement system.</i>		
Retirement Benefits	\$ 116,619,158	74.92691%
Health Benefits	29,476,874	18.93866%
Dental/Vision Benefits	2,619,248	1.68285%
Refunds of Member Contributions	30,000	0.01927%
Total Payments to Members	\$ 148,745,280	95.56769%
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	\$ 755	0.00049%
Welling on Wall Street	162	0.00010%
Total Soft Dollar Expenditures	\$ 917	0.00059%

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 - OPEB	22 Years
Asset Valuation Method - OPEB	Market
Actuarial Assumptions FY 2015	
Wage Inflation Rate	3.5%
Investment Rate of Return - Pension	
Defined Benefit (DB) Plan	8.0%
Pension Plus Plan	7.0%
Investment Rate of Return - OPEB	8.0%
Projected Salary Increases	3.5 - 93.50% including wage inflation at 3.5%
Cost-of-Living Pension Adjustments	2% Annual Non-Compounded with Maximum Annual Increase of \$500 for those eligible ²
Healthcare Cost Trend Rate	9.0% Year 1 graded to 3.5% Year 10
Mortality - Pension and OPEB	RP - 2000 Male and Female Combined Healthy Life Mortality Table, adjusted for mortality improvements to 2030 for males and to 2015 for females, using projection scale BB. For retirees, 100% of the table rates were used. For active members, the table is adjusted for mortality improvements to 2030 for males and to 2020 for females, 50% of the table rates were used.
Other Assumptions OPEB Only² FY 2015	
Opt out Assumption	6% of eligible participants are assumed to opt out of the retiree health plan
Survivor Coverage	100% of male retirees and 100% of female retirees are assumed to have coverage continuing after the retiree's death when 2-person coverage was assumed to be elected
Coverage Election at Retirement	85% of male and 70% of female future retirees are assumed to elect coverage for 1 or more dependents
<small>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.</small>	
<small>2 Applies to individuals hired before June 10, 2012.</small>	
<small>Source: CAFR for the Fiscal Year ended September 30, 2015, p. 33.</small>	

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/orsmsp

Office of Retirement Services (ORS)

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www.michigan.gov/ors
www.michigan.gov/orsmiaccount

Office of Retirement Services
Director Kerrie Vanden Bosch

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