



**MICHIGAN OFFICE OF
RETIREMENT SERVICES**
Big Plans. Small Steps.



Summary Annual Report

for The Michigan Military Retirement Provisions,
a Pension Trust Fund of the State of Michigan
Fiscal Year Ended September 30, 2017

Prepared By
Office of Retirement Services
Department of Technology, Management and Budget

A Message from the Director



Director Kerrie Vanden Bosch

The Office of Retirement Services (ORS) is pleased to present the Summary Annual Report for the Michigan Military Retirement Provisions (MMRP) for the fiscal year ending September 30, 2017.

ORS assumed administration of MMRP in 2015, and we are proud to provide this benefit to those who have served our state. Beginning in 2016, the State began prefunding this benefit, as opposed to being “pay-as-you-go.” This aligns with best practices in the retirement industry, and these efforts will help ensure the security of this benefit for current and future generations of Michigan National Guard retirees. The MMRP is expected to be 100% funded by 2036.

Accomplishments

Assumed Rate of Return Reduction

The retirement board and the Department of Technology, Management and Budget (DTMB) director approved lowering the assumed rate of return (AROR) on investments from 8.00 percent to 7.50 percent beginning with the September 30, 2016, actuarial valuation. By adopting a lower AROR, ORS is protecting the long-term security of the benefit. This also follows industry best practices. National Association of State Retirement Administrators data shows the median AROR nationwide has been trending downward and is currently 7.50 percent. In addition to lowering the AROR, the DTMB director and the retirement board adopted a dedicated gains policy. The policy uses investment returns above the current AROR to reduce the rate further. These decisions have a profound impact on plans that have been pre-funded for many years. Since the MMRP began pre-funding in fiscal year 2016, the impacts are small, but will grow over time.

About the Michigan Military Retirement Provisions

This report is in compliance with the Public Employee Retirement System Investment Act, 1965 PA 314, as amended. The contents come from the complete MMRP 2017 Comprehensive Annual Financial Report (CAFR), available on our website at michigan.gov/orsmilitary, the Annual Actuarial Valuation as of September 30, 2016, and additional analysis performed after September 30, 2017.

The MMRP serves 4,325 retirees receiving monthly benefits, and 10,144 active defined benefit plan members. Military pensions are protected by Michigan's Constitution. The MMRP'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 MMRP pursuant to state law.

Executive Summary

Prior to the 2016 fiscal year the MMRP was funded on a pay-as-you-go basis and the Present Value of Assets reported in the valuation was \$0. Beginning with the 2016 fiscal year the MMRP is being funded on a prefunding basis. The Actuarial Value of Assets reported in the annual actuarial valuation is expected to grow over time.

The Present Value of Assets in the MMRP pension plan as of September 30, 2016, was \$3.7 million and the total Actuarial Accrued Liability (AAL) was \$49.7 million resulting in a total Unfunded Actuarial Accrued Liability (UAAL) of \$46.0 million. The MMRP plan is expected to be 100% funded by 2036.

Statement of Assets and Liabilities	
FY 2016	Pension*
Actuarial Accrued Liability	\$ 49,674,928
Present Value of Assets	\$ 3,696,232
Unfunded Actuarial Accrued Liability	\$ 45,978,696
Funding Ratio	7.44%
FY 2015	Pension**
Actuarial Accrued Liability	\$ 47,311,896
Present Value of Assets	\$ 0
Unfunded Actuarial Accrued Liability	\$ 47,311,896
Funding Ratio	0.00%

*Source: Pension Actuarial Valuation for the fiscal year ended Sept. 30, 2016, p. B-1
 **Source: Pension Actuarial Valuation for the fiscal year ended Sept. 30, 2015, p. B-1

Membership

The MMRP plan membership is comprised of former members of the Michigan National Guard (Army or Air) who have served a minimum of 19 years, 6 months, and 1 day of active National Guard service in the State Defense Forces and Michigan National Guard.

Plan Membership and Retirement Allowances

Membership as of September 30, 2017

Active Plan members	10,144
Inactive Plan members or their beneficiaries currently receiving benefits	4,325
Inactive Plan members entitled to but not yet receiving benefits	602
Total All Members	15,071

Source: CAFR for the fiscal year ended Sept. 30, 2017, p. 20

Retirement Allowances as of September 30, 2016

Average annual retirement allowance - Non-Special Duty Members*	\$	584
Average annual retirement allowance - Special Duty Members*		58,368
Total annual retirement allowances being paid (in thousands)**	\$	3,590,196

*Source: Pension Actuarial Valuation for the fiscal year ended Sept. 30, 2016, p. D-2

** Source: Pension Actuarial Valuation for the fiscal year ended Sept. 30, 2016, p. C-2

Note: Special duty members are adjutants general and assistant adjutants general of the Michigan National Guard.

Assets and Liabilities

The MMRP's total assets on a market basis as of September 30, 2017, were \$4.8 million, mostly composed of cash and investments. Total liabilities as of September 30, 2017, were \$405,000 and include warrants outstanding, accounts payable, unearned revenue, and obligations under securities lending. Total net assets held in trust for pension increased \$758,000 from the previous year.

Assets and Liabilities (in thousands)

Assets	FY 2016		FY 2017	
Equity in Common Cash	\$	3,718	\$	12
Receivables		62		6
Investments		0		4,446
Security Lending Collateral		0		290
Total Assets	\$	3,780	\$	4,754
Liabilities	FY 2016		FY 2017	
Accounts Payable and Other Liabilities	\$	189	\$	5
Amounts Due to Other Funds		0		110
Obligations Under Securities Lending		0		290
Total Liabilities	\$	189	\$	405
Net Assets	\$	3,591	\$	4,349

Note: Liabilities in this context are exclusive of Actuarial Accrued Liabilities (AAL) for pension and OPEB.
Source: CAFR for the fiscal year ended Sept. 30, 2017, p.15

Revenue and Expenditures, Change in Net Assets

The reserves needed to finance pension benefits are accumulated through the collection of employer contributions including earnings on investments. Contributions and net investment income for fiscal year 2017 totaled \$5.3 million. The primary expenses of the MMRP include the payment of pension benefits to members and beneficiaries, and the cost of administering its benefits.

Additions and Deductions (in thousands)				
Additions	FY 2016		FY 2017	
Member Contributions	\$	0	\$	0
Employer Contributions		6,790		5,245
Net Investment Income (Loss)		11		78
Transfers and Misc.		1		7
Total Additions	\$	6,802	\$	5,329
Deductions	FY 2016		FY 2017	
Benefits Payments	\$	2,961	\$	4,090
Administrative and Other Expenses		250		482
Total Deductions	\$	3,211	\$	4,571
Net Position	FY 2016		FY 2017	
Net Increase (decrease) in Net Position	\$	3,591	\$	758
Beginning of Year		0		3,591
End of Year	\$	3,591	\$	4,349

Source: CAFR for the fiscal year ended Sept. 30, 2017, p.16



2017 Plan Expenditures

Plan Expenses for Fiscal Year Ended September 30, 2017*

Administrative and Other Expenses		Dollars
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.		
Personnel Services		
Staff Salaries	\$	161,074
Retirement and Social Security		6,715
Other Fringe Benefits		2,460
Subtotal	\$	170,249
Professional Services		
Accounting	\$	0
Actuarial		151,258
Attorney General		44,983
Audit		88,114
Consulting		4,706
Medical		0
Subtotal	\$	289,061
Building and Equipment		
Building Rentals	\$	1,267
Equipment Purchase, Maintenance, and Rentals		64
Subtotal	\$	1,330
Miscellaneous		
Travel & Board Meetings (Excluding Travel & Education for Board Members)	\$	38
Office Supplies		44
Postage, Telephone, and Other		2,341
Printing		1,589
Technological Support		16,953
Subtotal	\$	20,965
Travel and Education for Board Members		
Total Administrative and Other Expenses	\$	481,605
Investment Expenses		Dollars
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.		
Real Estate Operating Expenses	\$	2,480
Securities Lending Expenses		0
Other Investment Expenses		
ORS-Investment Expenses		0
Custody Fees		9
Management Fees		2,103
Research Fees		20
Total Investment Expenses	\$	4,612
Benefits Paid to Members		Dollars
These are the projected retirement benefits paid to members of the retirement system.		
Retirement Benefits	\$	4,089,801
Total Payments to Members	\$	4,089,801
Soft Dollar Expenses**		Dollars
These expenditures are for research provided by the retirement system's service providers and are incorporated into the brokerage fees and commissions.		
Bass Trading Int'l Group (BTIG)		
Macro Mavens Newsletter	\$	2.35
High Tech Strategist		0.01
Total Soft Dollar Expenditures	\$	2.36
Total of All Sections Above	\$	4,576,020

*Source: DTMB Financial Services report

**Source: Treasury Bureau of Investments

2018 Budget for Plan Expenditures

Budget for Plan Expenses for Fiscal Year Ending September 30, 2018*

Administrative and Other Expenses		Dollars
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.		
Personnel Services		
Staff Salaries	\$	210,838
Retirement and Social Security		7,550
Other Fringe Benefits		2,751
Subtotal	\$	221,139
Professional Services		
Accounting	\$	0
Actuarial		69,618
Attorney General		76,021
Audit		34,100
Consulting		0
Medical		0
Subtotal	\$	179,739
Building and Equipment		
Building Rentals	\$	1,373
Equipment Purchase, Maintenance, and Rentals		215
Subtotal	\$	1,588
Miscellaneous		
Travel & Board Meetings (Excluding Travel & Education for Board Members)	\$	49
Office Supplies		34
Postage, Telephone, and Other		2,415
Printing		2,140
Technological Support		14,754
Subtotal	\$	19,392
Travel and Education for Board Members		
Total Administrative and Other Expenses	\$	421,858
Investment Expenses		Dollars
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.		
Real Estate Operating Expenses	\$	0
Securities Lending Expenses		25,000
Other Investment Expenses		
ORS-Investment Expenses		0
Custody Fees		100
Management Fees		20,000
Research Fees		200
Total Investment Expenses	\$	45,300
Benefits Paid to Members		Dollars
These are the projected retirement benefits paid to members of the retirement system.		
Retirement Benefits	\$	4,253,393
Total Payments to Members	\$	4,253,393
Soft Dollar Expenses**		Dollars
These expenditures are for research provided by the retirement system's service providers and are incorporated into the brokerage fees and commissions.		
Bass Trading Int'l Group (BTIG)		
Macro Mavens Newsletter	\$	2.35
High Tech Strategist		0.01
Total Soft Dollar Expenditures	\$	2.36
Total of All Sections Above	\$	4,720,554

*Source: DTMB Financial Services report

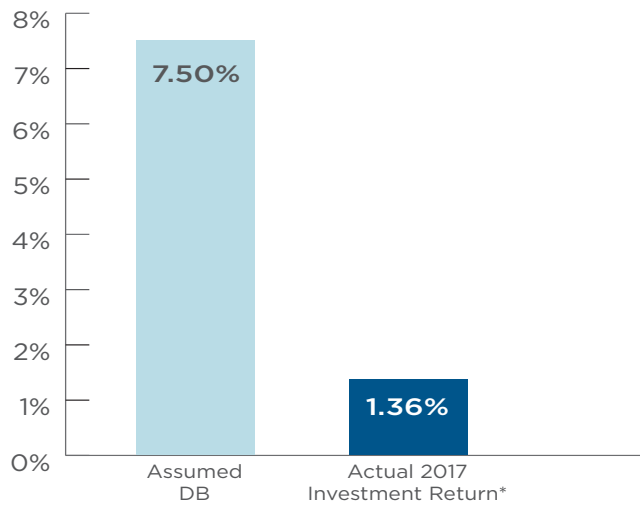
**Source: Treasury Bureau of Investments

Assumed and Actual Investment Returns

The state treasurer administers all of the MMRP'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.

The assumed rate of investment return is a key assumption used by the plan actuary in determining the employer contributions each year. The assumed rate of return for the MMRP pension plan is 7.50 percent. The actual rate of investment return for fiscal year 2017 was 1.36 percent. Because the MMRP began prefunding in fiscal year 2016, three-year, five-year, seven-year, and ten-year investment results are not available. As the MMRP gains investment experience, these elements will be included in future editions of this report.

Investment Returns



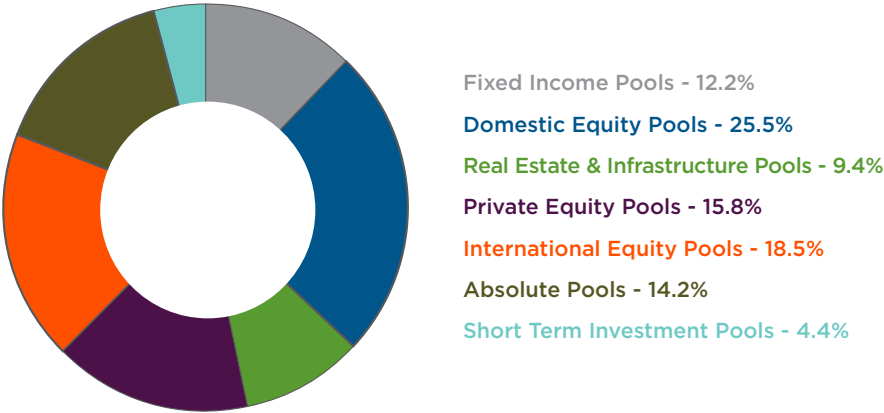
*Source: CAFR for the fiscal year ended Sept. 30, 2017, p. 40.

Investments and Earnings

A key function of the investment fiduciary is to ensure the retirement system’s investment portfolio is diversified. Having a diverse portfolio helps to maximize investment income responsibly while minimizing risk. Even though market performance may fluctuate, the long-term performance of the MMRP’s portfolio is stable.

Investments and Earnings*			
	Market Value		Total Investment and Interest Income
Fixed Income Pools	\$	546,071	\$ (534)
Domestic Equity Pools		1,134,758	23,074
Real Estate & Infrastructure Pools		419,008	3,147
Private Equity Pools		704,929	6,090
International Equity Pools		824,482	13,602
Absolute Return Pools		632,053	2,927
Short Term Investment Pools		197,199	30,655
Market Value and Net Investment Gain	\$	4,458,500	\$ 78,961

Investment Classes*



*Source: CAFR for the fiscal year ended Sept. 30, 2017, p. 59.

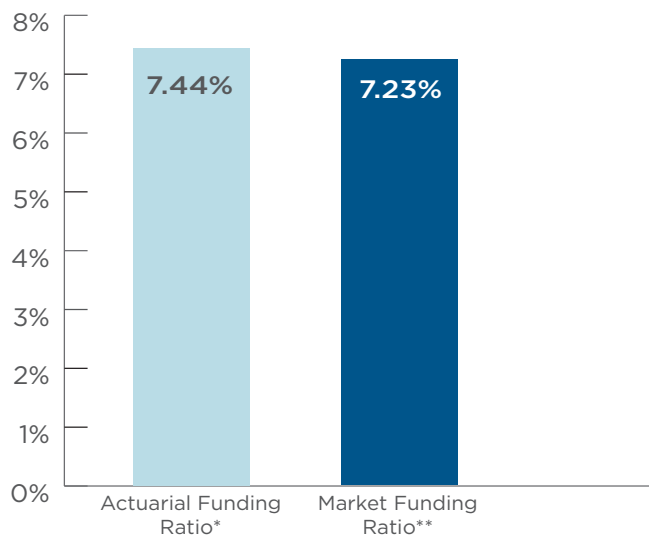
Market and Actuarial Funding Ratios

Pension

The market funding ratio is based on the market value of assets at fiscal year-end. The actuarial funding ratio is the best practice used by all pension plans nationwide. It incorporates a five-year “smoothing” period, which minimizes volatility in a pension system’s funding requirements.

The MMRP began prefunding in fiscal year 2016. As of September 30, 2016, there were \$3.7 million in actuarial assets available to offset the liabilities of the plan. This amount represents a 7.44 percent actuarial funding ratio. There were \$3.6 million in net assets on a market basis as of September 30, 2016. This represents a 7.23 percent market funding ratio.

Actuarial and Market Funding Ratios



*Source: Pension actuarial valuation for the fiscal year ended Sept. 30, 2016, p. B-1.

**Source: Pension actuarial valuation for the fiscal year ended Sept. 30, 2016, p. C-1.

Member and Employer Contributions

Employer Contributions

The statute requires the employer to contribute to finance 100 percent of the benefits of plan members. These employer contributions are determined annually by the MMRP’s actuary and are based upon level-dollar funding principles, so the contributions remain stable.

Employer Pension Contributions	
Employer Contributions	
Normal cost of benefits	\$ 451,446
Unfunded Actuarial Accrued Liability Contribution (UAAL)*	\$ 3,970,245
Valuation Payroll**	\$ 465,680

*Source: Pension Actuarial Valuation for the fiscal year ended Sept. 30, 2016, p. A-1
**Source: Calculated on the market value of assets of the actuarial valuation for the fiscal year ended Sept. 30, 2016, p. D-3
Note: Valuation Payroll represents only special duty member's payroll

Definition of Normal Cost and UAAL

The 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. The UAAL contribution is the cost of gradually bringing the plan’s funding level to 100 percent over the amortization period. The State pays 100 percent of both the Normal Cost and the UAAL contribution.

Actuarial Assumptions

The production of the pension plan’s actuarial valuations involves 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 and investment performance.

Actuarial Assumptions for Fiscal Year Ended September 30, 2016

Actuarial Cost Method	Entry Age, Normal
Amortization Method - Pension	Level Dollar
Amortization Period	Closed Period, Ending Sept. 30, 2036
Asset Valuation Method	N/A
Inflation Rate	2.50%
Wage Inflation Rate	3.50%
Investment Rate of Return - Open Plan	7.50%

Source: CAFR for the fiscal year ended Sept. 30, 2017, p. 26.

Investment 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.

Advent International Corp	Capri Capital Partners
AEW Capital Management	Carlyle Group, LP
Affinity Equity Partners	Carlyle Investment Management
Ancora Advisors, LLC	Castle Harlan, Inc
Aon Hewitt	CCMP Capital Advisors, LLC
Apax Partners Worldwide LLP	Centerbridge Capital
Apollo Capital Management	Cerberus Capital Management, LP
Apollo Global Management	Charlesbank Capital Partners
Arboretum Ventures	CIE Management - BC Partners
Arclight Capital Partners Ardian	CIM Investment Advisors
Ares Management, LLC	Citigroup Global Markets
ARK Investment Management, LLC	Clarion Partners
Asana Partners	Clarkston Capital Partners, LLC
Attucks Asset Management, LLC	Coller Capital
Avanath Capital Management	Columbia Management Investment Advisors, LLC
Axiom Asia Private Capital	CoStar Realty Information Inc
Bank of Montreal	Cowen & Co
Barclays Capital Barings	Credit Suisse
Basalt Infrastructure Partners	Crescent Capital Group
BB&T Capital Markets	CVC Capital Partners
Beacon Capital Partners	Czech Asset Management
Bentall Kennedy	DA Davidson
Beringea	Dalmore Capital Limited
Berkshire Partners, LLC	Deutsche Bank
BGC Financial	Devon Self Storage
Bivium Capital Partners, LLC	DLJ Merchant Banking Partners
BlackRock Financial Management	Dodge & Cox
Blackstone Alternative Asset Management	Domain Capital Advisors
Blackstone Group	Drexel Hamilton
BMO Capital Markets	EDF Ventures
BNP Paribas	Effissimo Capital Management
BOA-Merrill Lynch	EnCap Investments, LP
Bridgepoint Capital	EnTrust Capital
Brookfield Asset Management Inc	Fidelity Institutional Asset Management
BTIG	FIMI Opportunity Funds
Cantor Fitzgerald	FirstMark Capital
Capital Institutional Services (CAPIS)	Fisher Investments, Inc

Investment Service Providers, continued

FirstMark Capital	Loomis Sayles & Co, LP
Fisher Investments, Inc	Los Angeles Capital Management
Five Star Realty Partners	Lowe Enterprises Investment Management
Flagship Ventures	Lubert-Adler Management Company
Fortress Investment Group	Marathon Asset Management, LLP
Fox Paine & Company, LLC	MarketAxess Corp
Freeman, Spogli & Co	Martin Currie, Inc
FTN Financial	Matlin Patterson Global Advisors
Gateway Capital	MBS Securities
Genstar, LLC	Mellon Capital Management Corp
Global Energy & Power	Menlo Management Partners
Goldman Sachs	Merit Energy
Grosvenor Capital Management	Meritech Capital Partners
GSO Capital Partners	Mesirow Financial
HarbourVest Partners, LLC	Metropolitan West Asset Management, LLC
Harvest Partners, LLC	MFR Securities
Heitman Capital Management	Mischler Financial Group
Highbridge Principal Strategies	Morgan Stanley
Hopen Life Sciences Ventures	MultiBank Securities, Inc
HPS Investment Partners III, LLC	Napier Park Global Capital
Huron Capital Partners, LLC	New Leaf Venture Partners
InSight Venture Partners	Nordic Capital
Invesco Ltd	NorthPointe Capital, LLC
Jana Partners	Oak Investment Partners
JP Morgan Asset Management	Oaktree Capital Management LLC
JP Morgan Investment Management	One Liberty Ventures
Kayne Anderson	Orchard Global Asset Management
KBS Realty Advisors	Orion Resource Partners
Kelso & Company	Pacific Investment Management Co, LLC
Kensington Realty Advisors	Paladin Realty Partners
Kevin Miller Financial Services	Parallel Resource Partners
Khosla Ventures	Parthenon Capital, Inc
Kohlberg Kravis Roberts & Co	Peninsula Capital Partners, LLC
L&B Realty Advisors	Piper Jaffray
Landmark Realty Advisors	Principal Real Estate Investors, LLC
LaSalle Investment Management	Principal Financial Group
Lazard Asset Management, LLC	Proprium Capital Partners
Leonard Green & Partners, LP	PGIM, Inc
LGT Capital Partners	Prudential Trust Co
Lightspeed Ventures	Public Pension Capital
Lion Capital	
Lombard International Life Assurance Company	
Lonestar	

Investment Service Providers, continued

Questor Management Company, LLC	TCW Group, Inc,
Raymond James	The TH Real Estate Limited
RBC Capital Markets	The John Buck Company
Renaissance Venture Capital	Thomas Bravo
Rhone Capital	TICP SMA Management, LLC
Rialto Capital	TPG Real Estate Advisors
Ridgewood Energy Riverside	TPG TSSP
RPEP SMRS Holdings, LLC	TPG, Inc
RW Baird	Tradition Securities
Science Media, LLC	Transwestern Investment Management
ScotiaBank	Trilantic Capital Management,LLC
Seizert Capital Partners, LLC	True North Management Group
Shamrock Capital Advisors	TSG Consumer Partners
Siguler, Guff & Co, LLC	Turnbridge Capital Management, LLC
Silver Lake	Venator Real Estate
Societe Generale	Veritas Capital Fund, LP
Sprott Resources	Victory Capital Management
Sprout Group	Visium Capital Management
State Street Global Advisors	Vista Equity Partners
State Street Bank and Trust Co	Warburg, Pincus LLC
Stockbridge Capital Group	Warwick Energy Group
Stonepeak Advisors LLC	Wayne Co
Stifel	Wellington Trust Company
Sycamore Partners	Wells Fargo
T Rowe Price Associates, Inc	Western National Group
T Rowe Price Trust Company	

Our website is available seven days a week, even when our office is closed:

michigan.gov/orsmilitary

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