



**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 Sept. 30, 2018

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

A Message From The Director



Director Kerrie Vanden Bosch

The Department of Technology, Management and Budget (DTMB) Office of Retirement Services (ORS) is pleased to present the Summary Annual Report for the Michigan Military Retirement Provisions (MMRP), for the fiscal year ended Sept. 30, 2018.

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 pre-funding this benefit, as opposed to being pay as you go. This aligns with retirement industry best practices and these efforts will help ensure the security of this benefit for current and future generations of Michigan National Guard retirees.

Accomplishments

Call Center Upgrade

ORS is modernizing its toll-free phone service from a dial-tone system to a modern voice over internet solution. This effort involved a sweeping overhaul of the existing software and hardware to ensure optimum performance, a redesign and rewrite of the call routing software, and improved security. Customers will reach a call agent more quickly because of streamlined menus and more automatic methods for authenticating the caller. ORS will have more flexibility in the way new menu options and associated queues are used for seasonal business topics. In total, the new system is more secure, more stable, provides a better

experience for customers and gives ORS ways to adapt to changes in demand.

Imaging Enhancements

The ORS team depends on images of customer correspondence. These images are carefully indexed and stored in a way that call agents and processors can access them quickly and easily. This year, significant upgrades of both the hardware and the software applications for document storage and retrieval were completed and will ensure that this system is stable and secure for years to come. A pivotal change was a move away from a complex, custom-built solution to more standardized tools that are easier to maintain.

About The Michigan Military Retirement Provisions

This report is issued in compliance with the Public Employee Retirement System Investment Act, 1965 Public Act (PA) 314, as amended. The contents come from the complete MMRP 2018 CAFR, available on our website at michigan.gov/orsmilitary, the annual actuarial valuation as of Sept. 30, 2018, and additional analysis performed after Sept. 30, 2018.

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 pre-funding basis, which capitalizes on investment earnings on employer contributions to help fund the plan. Supplemental employer contributions made in fiscal year 2018 significantly increased the actuarial value of assets from the prior year and improved the funded ratio.

The present value of assets in the MMRP pension plan as of Sept. 30, 2018, was \$17.2 million and the total Actuarial Accrued Liability (AAL) was \$56.8 million resulting in a total Unfunded Actuarial Accrued Liability (UAAL) of \$39.6 million.

PA 618 of 2018 appropriated an additional \$35.8 million contribution to the MMRP in the 2019 fiscal year. This additional contribution could bring the plan's funded ratio to 100% when the Sept. 30, 2019 actuarial valuation is produced.

Statement of Assets and Liabilities

FY 2018	Pension ¹
AAL	\$56,801,686
Actuarial Value of Assets	\$17,213,520
UAAL	\$39,588,166
Funding Ratio	30.31%
FY 2017	Pension ²
AAL	\$49,950,120
Actuarial Value of Assets	\$4,602,232
UAAL	\$45,347,888
Funding Ratio	9.21%

1. 2018 MMRP Pension Actuarial Valuation, Page B-1.
 2. 2017 MMRP Pension Actuarial Valuation, Page 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, six months, and one day of active National Guard service in the State Defense Forces and Michigan National Guard.

Plan Membership and Retirement Allowances as of Sept. 30, 2018

Membership¹

Active plan members	10,558
Inactive plan members or their beneficiaries currently receiving benefits	4,453
Inactive plan members entitled to but not yet receiving benefits	922
Total All Members	15,933

1. CAFR for the fiscal year ended Sept. 30, 2018, Page 20.

Retirement Allowances

Average annual retirement allowance ²	
Non-Special Duty Members	\$584
Special Duty Members	\$53,210
Total annual retirement allowances being paid³	\$3,939,098

2. MMRP Pension Actuarial Valuation for the fiscal year ended Sept. 30, 2018, Page D-2. Special duty members are adjutants general and assistant adjutants general of the Michigan National Guard.

3. MMRP Pension Actuarial Valuation for the fiscal year ended Sept. 30, 2018, Page C-2.

Assets And Liabilities

The MMRP's total assets on a market basis as of Sept. 30, 2018, were \$17.7 million, mostly composed of cash and investments.

Total liabilities as of Sept. 30, 2018, were \$740,000 and include warrants outstanding, accounts payable, unearned revenue, and obligations under securities lending.

Total net assets held in trust for pension increased \$12.6 million from the previous year.

Assets and Liabilities¹ (Dollars In Thousands) (Combined Pension and OPEB)

Assets	FY 2017	FY 2018
Equity in Common Cash	\$ 12	\$ 559
Receivables	6	1
Investments	4,446	16,400
Securities Lending Collateral	290	730
Total Assets	\$ 4,754	\$ 17,690
Liabilities	FY 2017	FY 2018
Accounts Payable and Other Liabilities	\$ 5	\$ 10
Amounts Due to Other Funds	110	-
Obligations Under Securities Lending	290	730
Total Liabilities	405	740
Net Assets	\$ 4,349	\$ 16,950

1. CAFR for the fiscal year ended Sept. 30, 2018, Pages 15. Liabilities in this context are exclusive of AAL for pension.

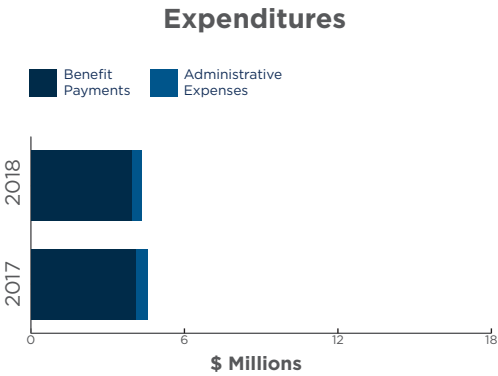
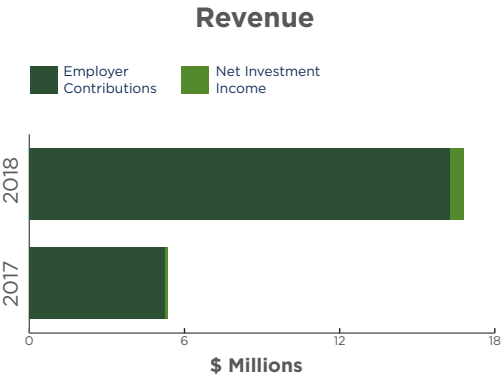
Revenue And Expenditures, Change In Net Assets

The reserves needed to finance pension benefits are accumulated through the collection of employer and employee contributions including earnings on investments.

Contributions and net investment income for fiscal year 2018 totaled \$16.9 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 Deductions¹ (Dollars In Thousands)			
Additions		FY 2017	FY 2018
Member Contributions	\$	-	\$ -
Employer Contributions		5,245	16,245
Net Investment Income (Loss)		78	569
Transfers and Miscellaneous		7	123
Total Additions	\$	5,329	\$ 16,936
Deductions		FY 2017	FY 2018
Pension Payments	\$	4,090	\$ 3,939
Administrative and Other Expenses		482	396
Total Deductions	\$	4,571	\$ 4,335
Net Position		FY 2017	FY 2018
Net Increase (Decrease) in Net Position	\$	758	\$ 12,601
Beginning of Year		3,591	4,349
End of Year	\$	4,349	\$ 16,950

1. CAFR for the fiscal year ended Sept. 30, 2018, Page 16.



2018 Plan Expenditures

Plan Expenses for Fiscal Year Ended Sept. 30, 2018¹

Pension Plan 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	\$	101,903
Retirement and Social Security		57,487
Other Fringe Benefits		19,678
Subtotal	\$	179,068

Professional Services

Accounting	\$	-
Actuarial		106,479
Attorney General		49,691
Audit		34,080
Consulting		1,632
Medical		-
Subtotal	\$	191,882

Building and Equipment

Building Rentals	\$	2,053
Equipment Purchase, Maintenance, and Rentals		65
Subtotal	\$	2,117

Miscellaneous

Travel and Board Meetings (Excluding Travel and Education for Board Members)	\$	37
Office Supplies		20
Postage, Telephone, and Other		6,558
Printing		1,409
Technological Support		15,202
Subtotal		23,226

Travel and Education for Board Members		-
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Total Administrative and Other Expenses	\$	396,293
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2018 Plan Expenditures, Continued

Investment Expenses	Dollars	
These expenditures are related to the Department of Treasury's Bureau of Investments for managing the retirement system's assets and are paid from the retirement system's trust fund.		
Real Estate Operating Expenses	\$	289
Securities Lending Expenses		15,661
Other Investment Expenses		
ORS-Investment Expenses		-
Custody Fees		174
Management Fees		20,525
Research Fees		455
Total Investment Expenses	\$	37,104
Benefits Paid to Members	Dollars	
These were the retirement benefits paid to members of the retirement system during the 2018 fiscal year.		
Pension Benefits	\$	3,939,098
Total Payments to Members	\$	3,939,098
Soft Dollar Expenses ²	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 International Group (BTIG)		
MacroMavens Newsletter	\$	4
High Tech Strategist		-
Total Soft Dollar Expenditures	\$	4
Total of All Sections	\$	4,372,499
^{1.} DTMB-Financial Services report. ^{2.} Department of Treasury, Bureau of Investments report.		

2019 Budget For Plan Expenditures

Budget for Plan Expenses for Fiscal Year Ending Sept. 30, 2019¹

Pension Plan 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	\$	89,329
Retirement and Social Security		80,827
Other Fringe Benefits		30,027
Subtotal	\$	200,183

Professional Services

Accounting	\$	-
Actuarial		51,000
Attorney General		54,660
Audit		34,100
Consulting		376
Medical		-
Subtotal	\$	140,136

Building and Equipment

Building Rentals	\$	1,450
Equipment Purchase, Maintenance, and Rentals		123
Subtotal	\$	1,574

Miscellaneous

Travel and Board Meetings (Excluding Travel and Education for Board Members)	\$	96
Office Supplies		23
Postage, Telephone, and Other		53,187
Printing		2,071
Technological Support		17,401
Subtotal		72,779

Travel and Education for Board Members		-
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Total Administrative and Other Expenses	\$	414,671
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2019 Budget, Continued

Investment Expenses		Dollars
These expenditures are related to the Department of Treasury's Bureau of Investments for managing the retirement system's assets and are paid from the retirement system's trust fund.		
Real Estate Operating Expenses	\$	338
Securities Lending Expenses		18,323
Other Investment Expenses		
ORS-Investment Expenses		-
Custody Fees		204
Management Fees		24,014
Research Fees		532
Total Investment Expenses	\$	43,412
Benefits Paid to Members		Dollars
These are the projected retirement benefits paid to members of the retirement system.		
Pension Benefits	\$	3,781,534
Total Payments to Members	\$	3,781,534
Soft Dollar Expenses²		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 International Group (BTIG)		
MacroMavens Newsletter	\$	4
High Tech Strategist		-
Total Soft Dollar Expenditures	\$	4
Total of All Sections	\$	4,239,621
^{1.} DTMB-Financial Services report. ^{2.} Department of Treasury, Bureau of Investments report.		

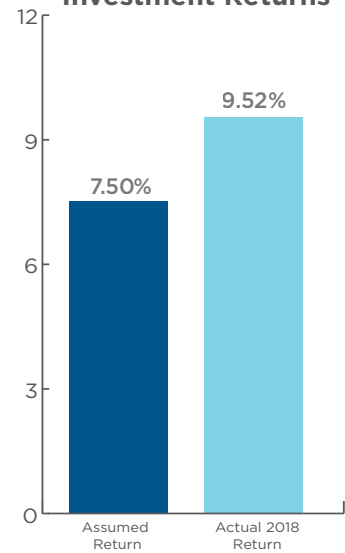
Assumed And Actual Investment Returns

The state treasurer administers all MMRP's investments in accordance with the Public Employee Retirement System Investment Act, PA 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 return (AROR) is a key assumption used by the plan actuary in determining the employer contribution rates each year. In 2018, the retirement board and the DTMB director reduced the AROR for the MMRP pension plan from 7.50% to 6.75% with the adoption of the most recent actuarial experience study.

The actual rate of investment return for the pension plan in fiscal year 2018 was 9.52%. Because the MMRP began pre-funding in fiscal year 2016, long-term investment results are not available. As the MMRP gains investment experience, these elements will be included in future reports.

Assumed and Actual Investment Returns¹



1. CAFR for the fiscal year ended Sept. 30, 2018, Page 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 Earnings¹			
		Market Value (Dollars)	Total Investment And Interest Income (Dollars)
Fixed Income Pools	\$	1,995,615	\$ 6,289
Domestic Equity Pools		4,442,400	266,223
Real Estate and Infrastructure Pools		1,726,383	69,561
Private Equity Pools		2,726,608	148,281
International Equity Pools		2,874,329	21,082
Absolute Return Pools		2,422,570	68,986
Short-Term Investment Pools		770,994	5,696
Market Value and Net Investment Gain	\$	16,958,898	\$ 586,118



- Fixed Income Pools - 11.8%**
- Domestic Equity Pools - 26.2%**
- Real Estate and Infrastructure Pools - 10.2%**
- Private Equity Pools - 16.1%**
- International Equity Pools - 16.9%**
- Absolute Pools - 14.3%**
- Short-Term Investment Pools - 4.5%**

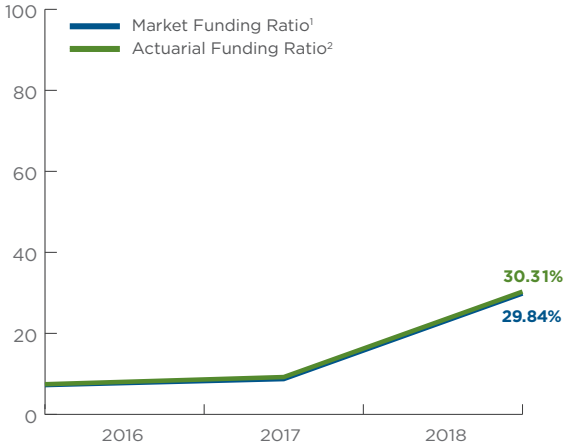
1. CAFR for the Fiscal Year ended Sept. 30, 2018, Page 60.

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 pre-funding in fiscal year 2016. As of Sept. 30, 2018, there were \$17.2 million in actuarial assets available to offset the liabilities of the plan. This amount represents a 30.31% actuarial funding ratio. There were \$17.0 million in net assets on a market basis as of Sept. 30, 2018. This represents a 29.84% market funding ratio.



1. Calculated on market value of assets.
2. MMRP Pension Actuarial Valuation for the fiscal year ended Sept. 30, 2018, Page C-2.

Member And Employer Contributions

Employer Contributions

Statute requires the employer to contribute to finance 100% 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.

Definition of Normal Cost and UAAL

Normal cost is the cost of the retirement benefit a member earns each year, and is set using the AROR in addition to other

Member and Employer Pension Contributions		
Employer Contributions		
Normal Cost of Benefits ¹	\$	654,665
UAAL Contribution ¹		2,438
Valuation Payroll ²	\$	348,259

1. MMRP Pension Actuarial Valuation for the fiscal year ended Sept. 30, 2018, Page A-1.
 2. MMRP Pension Actuarial Valuation for the fiscal year ended Sept. 30, 2018, Page D-3.
 Note: Valuation payroll represents only special duty member’s payroll.

actuarial assumptions. The UAAL contribution is the cost of gradually bringing the plan’s funding level to 100% over the amortization period. The state pays 100% of both the normal cost and the UAAL contribution.

Actuarial Assumptions

Actuarial valuations for the pension plan 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 Sept. 30, 2018 ¹		
Actuarial Cost Method		Entry Age, Normal
Amortization Method		Level-Dollar
Amortization Period		Closed Period, 18 Years Beginning Oct. 1, 2020
Asset Valuation Method		Fair Value
Wage Inflation Rate		2.75%
AROR—Open Plan		6.75%

1. MMRP Pension Actuarial Valuation for the fiscal year ended Sept. 30, 2018.

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.

5 AM Ventures	BroadRiver Asset Management	Fisher Investments
Accel Partners	Brookfield Asset Management Inc.	Five Star Realty Partners
Advent International Corp.	BTIG	Flagship Ventures
AEW Capital Management	Cantor Fitzgerald	Fortress Investment Group
Affinity Equity Partners	Capital Institutional Services	Fox Paine & Company LLC
Ancora Advisors	Capri Capital Partners	Freeman, Spogli & Co.
Aon Hewitt	Carlyle Group LP	FTN Financial
Apax Partners Worldwide LLP	Carlyle Investment Management	Gateway Capital
Apollo Capital Management	Centerbridge	Genstar LLC
Apollo Global Management	Centerbridge Capital	Goldman Sachs
Apollo-Stonetower	Cerberus Capital Management LP	Greenspring Associates
Arboretum Ventures	Charlesbank Capital Partners	Grosvenor Capital Management
Arclight Capital Partners	CIE Management-BC Partners	GSO Capital Partners
Ardian	CIM Investment Advisors	H.C. Wainwright
Ares Management LLC	Citigroup Global Markets	HarbourVest Partners LLC
Ark Investments	Clarion Partners	HarbourVest TOPE LLC
Asana Partners	Clarkston Capital Partners	Harvest Partners LLC
Attucks Asset Management	Coller Capital	Heitman Capital Management
Avanath Capital Management	Columbia Management	Highbridge Principal Strategies
Axiom Asia Private Capital	CoStar Realty Information Inc.	Hilltop Securities
Bank of Montreal	Cowen & Co.	Hopen Life Sciences Ventures
Barclays Capital	Credit Suisse	HPS Investment Partners III LLC
Barings	Credit Suisse-Commercial Paper	Huron Capital Partners LLC
Basalt Infrastructure Partners	Crescent Capital Group	ICG Advisors
BB&T Capital Markets	Crescent Direct Lending	InSight Venture Partners
BC Partners	CVC Capital Partners	Invesco Ltd.
Beacon Capital Partners	Czech Asset Management	Jana Partners
Bentall Kennedy	DA Davidson	JANA Special Situations Management
Beringea	Dalmore Capital Limited	JPMorgan
Berkshire Partners LLC	Deutsche Bank	JP Morgan Asset Management
BGC Financial	Dodge & Cox	JP Morgan Private Equity Fund Services
Bivium Capital Partners	Domain Capital Advisors	Kayne Anderson
Blackrock	Domain Mercury/Ploutos	KBS Realty Advisors
BlackRock Financial Management	Drexel Hamilton	Kelso & Company
Blackstone Alternative Asset Management	Effissimo	Kensington Realty Advisors
Blackstone Group	Elegantree Fund	Kevin Miller Financial Services
BMO Capital Markets	EnCap Investments LP	Khosla Ventures
BNP Paribas	EnTrust Capital	Kohlberg, Kravis, Roberts & Co.
BNY Convergenx	Fidelity Institutional Asset Management (fka Pyramis)	L&B Realty Advisors
BOA-Merrill Lynch	FIMI Opportunity Funds	Landmark Realty Advisors
Bridgepoint Capital	FirstMark Capital	LaSalle Investment Management
		Lazard Asset Management

Investment Service Providers, Continued

Lead Edge Capital	PIMCO	Thomas Bravo
Leonard Green & Partners LP	Piper Jaffray	TICP Fund
LGT Capital Partners	Pitchbook	TPG Real Estate Advisors
Lightspeed Ventures	Preqin	TPG TSSP
Lombard International Life Assurance Company	Principal CMBS	TPG Inc.
Lonestar	Principal Financial Group	Tradition Securities
Loomis Sayles & Company	Pritzker Group	Transwestern Investment Management
Los Angeles Capital Management	Proprium Capital Partners	Trilantic Capital Management LLC
Lubert-Adler Management Company	Prudential	True North Management Group
Marathon Asset Management	Prudential Fixed Income	Trusted Insight
Marathon London	Public Pension Capital	TSG Consumer Partners
MarketAxess Corporation	R.W. Baird	Turnbridge Capital Management LLC
Martin Currie	Raymond James	U.S. Bank
Matlin Patterson Global Advisors	RBC Capital Markets	Veritas Capital Fund Management LLC
MBS Securities	Renaissance Venture Capital	Vida Capital Inc.
Mellon Capital Management	Rhone Capital	Visium Capital Management
Menlo Management Partners	Rialto Capital	Vista Equity Partners
Merit Energy	Ridgewood Capital Management	Warburg, Pincus LLC
Meritech Capital Partners	Ridgewood Energy	Warwick Energy Group
Mesirow Financial	Riverside	Wayne Co.
Metropolitan West Asset Management	Rohatyn Group	Wellington Trust Company
MFR Securities	RPEP Energy & RPEP Holdings	Wells Fargo
MI Growth Capital Partners SBIC	Sanford C. Bernstein Co.	Western National Group
Mischler Financial Group	Science Media LLC	
Morgan Stanley	ScotiaBank	
Morgan Stanley Smith Barney LLC	Seizert Capital Partners	
Multi Bank Securities Inc.	Shamrock Capital Advisors	
Munder Capital Management AKA	Silver Lake	
Victory Capital Management	SJC Direct Lending & Onshore	
Napier Park Global Capital	SK Capital	
Natural Gas Partners	Societe Generale	
New Leaf Venture Partners	Southwest Securities	
Nordic Capital	Sprott Resources	
Northpointe Capital	State Street Bank	
Oak Investment Partners	State Street Global Advisors	
Oaktree Capital Management LLC	Stifel	
Oppenheimer	Stockbridge Capital Group	
Orchard Global Asset Management	Stonepeak Advisors LLC	
Orion Resource Partners	Sycamore Partners	
OTA Ltd Partnership	T. Rowe Price	
Paladin Realty Partners	T. Rowe Price Trust Company	
Parallel Resource Partners	Tahquamenon	
Parthenon Capital Inc.	TH Real Estate Limited	
Peninsula Capital Partners LLC	The John Buck Company	
Permira	The Riverside Company	
	The TCW Group Inc.	



Office of Retirement Services

Department of Technology, Management and Budget
Kerrie Vanden Bosch, director

Our Purpose

ORS is an innovative retirement organization driven to empower our customers for a successful today and a secure tomorrow.

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michigan.gov/orsmilitary

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